

## PICU & NICU ORIENTATION GUIDELINES FOR REGISTRARS

Welcome to PICU & NICU. We hope that you enjoy your time here. These brief notes are designed to introduce you to our ICU routine. **Please** have a low threshold to ask questions if you are not sure about anything.

### PICU WHO'S WHO

#### P/NICU

##### Consultants:

Dr Joe Brierley  
Dr Paula Lister  
Dr Quen Mok  
Dr Mark Peters (Academic Lead)  
Dr Andy Petros (Clinical Unit Lead)  
Dr Christine Pierce  
Dr Sanjiv Sharma  
Dr Sophie Skellett

##### Modern Matron

Darren Darby

##### Office and Administration Manager Medical Secretary PICU/NICU

Carol Parkes ext 7950  
Paula Smith ext 8213

##### Family Liaison Admin Assistant Clinicians Assistant, PICU

Emma Harris  
Eugenia Abaleke

##### Operations Manager Business Manager

Sarah Metson  
Christopher Foster-McBride

##### SpR Rota Co-ordinator

Gabor Reder ext 0585

##### Senior Physiotherapist Senior Ventilator Technician PICU Pharmacist NICU Pharmacist (+TPN) Psychologist

Sarah Hines (sabbatical for 2010)  
Claire Beckwith  
Rachelle Booth  
Venetia Horn  
Harriett Conniff

#### CCC

##### Consultants:

Dr Kate Brown  
Dr Mike Broadhead  
Dr Troy Dominguez  
Dr Allan Goldman  
Dr Aparna Hoskote  
Dr Anne Karimova  
Dr Cho Ng (Clinical Unit Lead)  
Dr Tim Thiruchelvam (locum)  
Barbara Childs

##### Modern Matron

#### CATS

##### Consultants:

Dr Joe Brierley  
Dr Paula Lister  
Dr Daniel Lutman  
Dr Mary Montgomery  
Dr Mark Peters  
Dr Andy Petros (Director)  
Dr Padmanabhan Ramnarayan (Ram)

##### Senior Nurse, CATS Office Manager, CATS

Eithne Polke  
Mhairi Emery

## **NICU / PICU REGISTRAR ROLES & DUTIES**

### **General Duties:**

This is a **closed ITU**.

This means the ITU consultant has primary clinical responsibility for the patient while they are on the unit. However, many patients are cared for in partnership with the referring team/s, e.g. general surgery, neurosurgery. As in all partnerships, be courteous and diplomatic to the referring teams. However, all management decisions by the referring teams need to involve PICU. Similarly, major PICU decisions should also involve a courtesy phone call to the referring team.

### **HAVE A LOW THRESHOLD TO SPEAK TO THE ICU CONSULTANT:**

- IF YOU ARE NOT SURE ABOUT ANYTHING**
- IF THERE HAS BEEN A MAJOR CHANGE IN A PATIENT'S CONDITION**
- THE REFERRING TEAM WISH TO CHANGE THE TREATMENT**

### **The Daytime ITU Fellow & Long Day (LD) ICON Fellow:**

The ITU fellows are senior PICU trainees that rotate through PICU/NICU and ICON. The fellow is on service during the day (Monday to Friday, 8.15 – 18.00, for a week at a time) will lead the ward rounds, direct clinical care and will support the registrars and nursing staff.

The LD ICON fellow, if free of ward duties, will shadow the support consultant.

### **Long Day (LD) & Short Day (SD) registrar shifts:**

- The patients are divided between the registrars of each unit (3xPICU & 2xNICU). However; all registrars must have an overview of the other patients in their unit in case their colleague is off the unit for a period e.g. in CT scanner. Please ensure the nursing staff know which registrars are responsible for which patients – put your initials on the main white board next to your patient.
- **You are the responsible physician for your patients during your shift;** with all the professional attributes this invokes.
- It is your duty to undertake a daily full clinical examination with a review of laboratory results. This must be documented, legibly, in the medical record as a daily progress note.
- It is your responsibility to be certain you understand the patient's clinical management plans as discussed on the ward rounds. Ask if you are unsure. You must ensure that your patients' bedside nurses also clearly understand the management plan.
- The LD shift person carries the bleep.
- If you leave the ward, please let the nurse in charge know where you will be.
- Any acute event or procedure must be documented in the case notes.
- Review the IV fluid orders and prescribe the new orders as early as possible
- **TPN** needs to be ordered by 10.30 am (On Fridays please remember to order for the weekend). The Nutrition Support Team may come to NICU/PICU from 2 pm on Tuesdays to discuss the patients on TPN.
- Make all referrals to specialist teams (eg neurology, respiratory etc) and order special investigations (MRI, ultrasound, EEG) as soon as possible after the ward round. The clinicians' assistant will help with these requests. There is a portable US round which starts at 2:00 pm; requests must be received before this starts.
- Try to perform trials of extubation as early in the day as possible.
- Keep the handover sheet up-to-date and succinct on the K:Drive PICUNICU Handover Folder. Please save one am & pm version daily.

### **Second PICU Short Day Shift (pSD2)**

In addition to the above duties this role also has the following responsibilities:

- Daily management of long term patients. This includes "housekeeping" roles e.g. weight charts, developmental assessments, interim summaries.
- Daily management of ONLY 1-2 other PICU patients as per role above, however, in a more in-depth fashion, with reading around the case.
- Provision of teaching "moments" on the afternoon round – 5 minutes of teaching about an issue thrown up by one of the clinical cases.

#### Night Time ICON Fellow:

The fellow will take handover from the daytime ICON fellow and will attend the CSP handover. The ICON fellow will then attend the hospital handover. The ICON fellow will meet with the PICU and NICU night registrars to discuss the patients and any potential problems. The ICON fellow is a resource for the night shift registrars on PICU and NICU and should be contacted for advice or support. In the event the ICON fellow is unable to attend due to duties elsewhere in hospital, then the night registrar should contact the consultant on call.

#### Night Shift Registrar (N):

- Undertake a ward round with the nurse-in-charge after your handover. This will clarify clinical management plans & familiarise you with the patients, identifying jobs and potential problems for the shift.
- Liaise with the night registrar on the other unit and work as a team. Provide assistance as needed.
- Document any acute events or procedure in the patient notes.
- Dictate discharge summaries for those patients likely to be extubated/discharged the following day.
- Order the daily bloods by 6:00 am to ensure the results are ready for the ward round. The bedside nurse will generate the forms on the PIMS system, take the bloods and will send them. If you have any specific request other than the usual FBC, U&Es and clotting screen, either tell the bedside nurse or print off the form yourself and give it to him/her.
- Order (place form in the tray and bleep radiographer) the portable x-rays by 8:00 am.
- Out of hours x-rays and CT scans are arranged by contacting the Radiographer on-call.
- Update the patient handover sheet and save a copy on the K Drive: PICU NICU Handover folder.
- Please let the nurse in charge know where you will be if you leave the ward to go to the hot office, coffee room etc. Please let the registrar across the floor know if you leave the unit to go to CT scan.
- Update the ICON Fellow with the patients you are most concerned about. He/she should be consulted prior to contacting the on-call consultant.

#### Research Registrar Role (R):

This occurs for one week in the 17 week rolling rota when possible.

The aim is to introduce you to research principles, to learn critical appraisal of the literature, to participate in ongoing research & audit projects and to design & run your own projects.

- Contact Mark Peters by email a few weeks before your research week to understand what will be required of you.
- On Monday you will contact Mark Peters (or Joe Brierley, Paula Lister in his absence) to discuss your objectives for the week. On Friday you will discuss your progress.
- On Monday you will meet with research fellows and nurses already running studies on the unit, to see how you might assist them. The fellows may be from different disciplines e.g. surgery.
- At the end of the week, run through the unit activity with the ward clinicians assistants ensuring that the speciality designation, source of referral and emergency/elective designation for each patient on the ward is correct.
- Undertake any presentations required at ITU or joint meetings (see list below). It is your duty to contact the responsible consultant a few weeks beforehand so your presentation is not last minute.
- Present in the journal club.

#### Zero – Hour Shifts:

The concept of these shifts comes from the EWTD. These are normal working days, at your place of work, on which you work zero hours. Therefore, once averaged out over the rota, you work <48hour week.

As these are normal working days, you are expected to be at your place of work in an emergency – for example a major incident or emergency cover for a sick colleague.

## **ICU / PICU WARD ROUNDS**

### *Day team:*

On service consultant, supporting consultant (weekdays), LD & SD SpR NICU, LD & SD & pSD2 SpR PICU, Research Registrar, ITU fellow, ICON Fellow

### *Night team:*

On service consultant, night SpR's NICU & PICU, ICON Fellow

- The ward round starts on NICU at 8:15 am and continues on PICU, initially as a sit-down round then a walk- round the patients. The night registrars stay until the end of the PICU sit-down round. This must be completed by 9:30 am so that the night SpRs stay within EWTD hours.
- All the day registrars are expected to attend both ward rounds (NICU & PICU). The SD NICU person may occasionally miss the PICU round if there are urgent matters to be dealt with on NICU after the NICU round.
- Parents will be asked to wait outside during the morning rounds.
- In the morning, a brief presentation on each patient will be made by the night registrar. Please refer to "Handover Guidelines" for advice. The presentation must include a reason for admission, brief history if necessary, progress and plan for the day. **It must be succinct.**
- Please "face" your audience so everyone can hear you.
- Use the patient handover sheets to help structure your presentation. These are kept on computer hard drive and updated twice daily. The hand over folders are stored on the GOSH system K drive and are labelled according to the unit and date.
- The patient handover sheets contain patient-identifiable, confidential information. They **must** be disposed of in confidential waste bins available on both wards. Please do not leave them lying around. Please do not print more copies than are required.
- The general surgeons join us on the NICU ward round daily. Thursday is the Surgical Grand Round so it tends to be larger.
- Afternoon ward rounds commence at 16:00 pm in the PICU followed by NICU at 17:00.
- The handover on the evening round is led by the bedside nurse, discussing progress against the clinical management plan. The responsible registrar will provide additional information regarding investigation results, other medical team consultations or any other relevant information.
- The short day shift leaves after the afternoon ward round on weekdays. On the weekend, the short shift may aim to handover to the long shift at 14:00 *if the unit is quiet*. This is a bonus - NOT a matter of routine.
- Evening handover to the night shift begins at 20:30 on each unit. The day registrars must leave by 21:15. The night registrars then liaise with the nurses in charge for an informal ward round to consolidate plans for the night.
- At both morning and evening ward rounds a checklist is used to ensure all aspects of patient management have been discussed and a plan made: DEFAULT, D – DNAR status, E – ET tube, length, securing and cuff, F – Fluid management, A – Analgesia and sedation, U – Ulcer prophylaxis/management (skin and gut), L – Lines, T – Tidal volumes <7ml/kg

## **REGULAR CLINICAL MEETINGS**

The weekly meetings are clinical meetings with other medical teams about current ITU patients and take place on the unit. It is the duty of the day staff to attend, present relevant patient information and to document any discussion outcomes in the notes.

<b>Dates</b>		<b>Meeting</b>
Monday afternoon	Weekly	Informal microbiology drop-in
Monday 14:00	Weekly	Joint Neurology, Neuroradiology, ethics and ITU in PACS room
Tuesday 14:00	Weekly	Joint ID, Microbiology & ITU round
Wednesday 11:00	Weekly	Radiology Review in PACS room
Thursday 08:15	Weekly	Surgical - NICU Grand Round
Thursday 12:30	Weekly	Reflective Practice (for SpRs on service)
Thursday 14:00	Weekly	Nutrition round
Thursday 14:30	Weekly	Joint ID, Microbiology & ITU round
Friday 14:00	Weekly	Radiology Review in PACS room
Friday afternoon	Weekly	Informal microbiology drop-in

For additional meetings and training opportunities please see **Education and Training** guide.

## **OTHER ISSUES**

### **Professional attitudes:**

The unit can become very busy. Particularly at these times, all requests from bedside nurses will be channelled through the nurse in charge. This will limit the sheer number of interruptions that you may have. She will manage those requests that do not need your immediate attention. You should not feel like you are struggling! Please call for help from your colleagues or consultants.

### **Cardiorespiratory Arrests:**

Know what the ICU arrest bell sounds like. Familiarise yourself with the equipment on the intubation/crash trolleys. There are regular scenario and defibrillation training sessions on ICU and weekly simulator training sessions.

You **do not** attend arrests on the wards. There is a medical emergency team including ICON, CSPs and anaesthetists that fulfil this role.

### **Prescribing:**

We have adopted a “zero tolerance” approach to prescription errors to minimise risk and harm. You **MUST** use the prescription desk to prescribe all your drugs and infusions. The nursing staff know that they should not interrupt you while you are at this desk unless it is an emergency. Please prescribe in CAPITALS and write your name legibly in CAPITALS. Medications need to be charted on the **ICU** drug charts only and only ITU medical staff are authorised to prescribe on ITU drug charts. Nursing staff have been told not to administer any drug with an incomplete, illegible or incorrect prescription.

Most drugs can be found on the monthly rough guides. Consult the Orange GOS Antibiotic Guideline booklet and the GOSH intranet for anti-microbial prescriptions

Prescription errors are monitored and you will receive a monthly update on error rates and common errors for that month.

**Intubation:**

Two doctors **MUST** be present at each intubation. At night, the registrar on the other unit offers assistance. Each endotracheal intubation **MUST** be confirmed using end-tidal CO<sub>2</sub> monitoring. The ETCO<sub>2</sub> reading **MUST** be entered in the incident documentation.

**PICU Anaesthetic machine:**

This machine may only be used by anaesthetic staff trained in its use; it must not be used by paediatric trained staff without an anaesthetist present. The machine should be checked by the operator prior to use. There is a checklist attached to the machine.

Inhalational agents for top-up are kept in the lower, far right-hand cupboard in the drugs room.

**ADMISSIONS AND DISCHARGES****EXTERNAL PICU / NICU ADMISSIONS**

All calls regarding potential or actual PICU admissions from outside the hospital should be directed to CATS. Occasionally a call may come directly to NICU or PICU from a caller who is unaware of the CATS service. If it is a referral, and not simply a call for advice, refer to CATS on 0800 085 003.

DO NOT REFUSE AN ADMISSION WITHOUT FIRST DISCUSSING WITH A CONSULTANT.

**INTERNAL PICU / NICU ADMISSIONS (EMERGENCY AND BOOKED)****Booked**

Registrars from other teams wishing to book beds for elective admissions should be directed towards the nurse in charge. The consultants must be contacted to approve the admission. The patient details are entered into the designated internal referral sheet (located in the referrals folder at the main PICU/NICU desk).

**Emergency**

ITU registrars do not manage patients outside the PICU & NICU.

The protocol for the management of acutely unwell children in the Trust **MUST** be followed.

Acutely unwell children on the wards will be managed by ICON (Intensive care outreach network) and the CSP (clinical site practitioner). A care pathway for this is attached.

The PICU/NICU registrars **DO NOT** leave the units to attend patients on the ward. Requests to do so must be referred to the ICON consultant between 8am – 6pm, Monday – Friday and the duty ITU consultant at all other times. You may answer requests for telephone advice if it is within your level of competence; otherwise refer to the duty ITU consultant.

**ICU DISCHARGES (PICU and NICU Patients)**

The government target for hospital discharge summaries is 24 hours; we get fined if we do not achieve this! As a consequence we are reviewing our written discharge summary practice. Guidelines and templates are kept on the K Drive: PICU NICU handover: Discharge Summaries.

The current practice is the all patients must have a medical team-to-team discharge telephonically which details the ongoing clinical plan and outstanding investigations. The name of the doctor referred to must be recorded in the notes. Forward planning is essential and the night time registrar should dictate a summary for all those patients likely to be discharged in the next 24 hours. This should be done on the Winscribe digital recording system. Private patients discharged to Butterfly, Sky and Bumblebee wards will have two teams involved in their ongoing care – the specialist team (e.g. haem/onc) and the IPP doctor. Both require a telephonic handover. If you ask one of them to discuss the case with the other please document this in the notes.

All patients must have a completed discharge/death checklist sticker in the notes prior to discharge.

**This is the responsibility of the medical staff.**

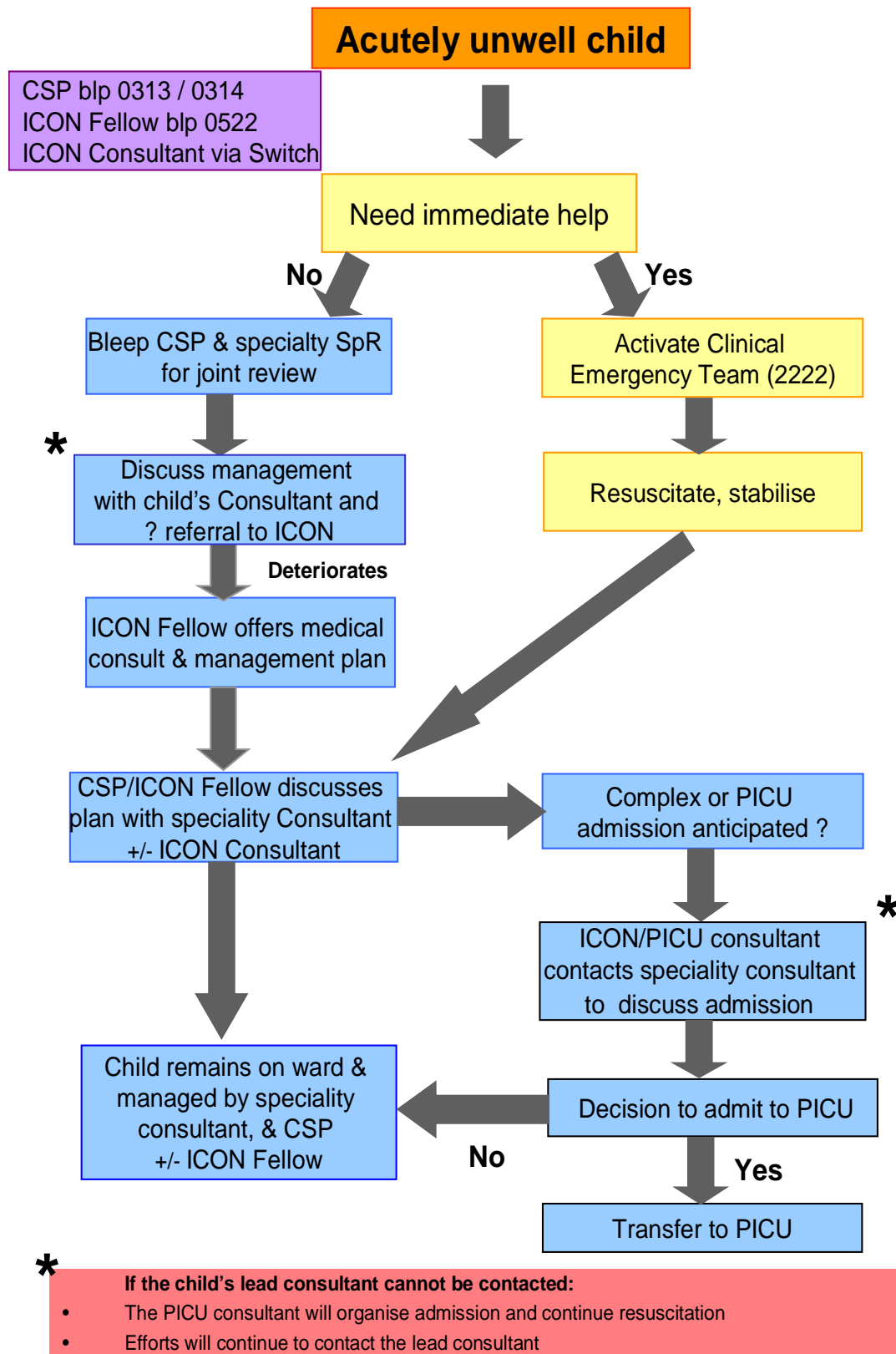
## PICU DEATHS

The Family Liaison Sisters and the senior nursing staff are experienced in managing deaths on ITU. Please approach them for advice.

We try to approach as many families as possible for organ donation. Please record if this was done by the consultants, and if not, what the reasons were for not considering it.

When a patient dies in ICU:

- Immediately inform the ITU consultant.
- Discuss the need for referral to the coroner:  
(There is a checklist within the Death Certificate Book cover)  
The deaths to be referred include:
  - sudden or unexpected deaths
  - cause of death is unknown & therefore a doctor is unable to issue a death certificate;
  - deaths due to, or thought to be due to, negligence. Always refer if the family are or are likely to complain.
  - all unnatural deaths (including accidents, suspected suicide, suspicious deaths & NAI);
  - deaths thought to be due to industrial disease;
  - deaths occurring within 24h of surgery or anaesthesia;
  - if the death may have been hastened or brought about by any form of treatment or procedure.
  - deaths in the first 28 days of life
- If the death is not a Coroner's case, then discuss the need for a hospital post mortem examination with the consultant FIRST. If desirable, then obtain consent from the parents before they leave. The Pathology Department will only perform a post mortem if the consent form is signed by the parents.
- Issue a death certificate (if not a Coroner's case) and give it to the family so that they can register the death. You must print your name and GMC number. The parents need to book an appointment at the Camden Registrars office.
- Ensure the family have details on how to arrange the funeral. The nursing staff will give the appropriate information.
- Inform the family that they will be contacted and offered bereavement counselling (usually around 6-8 weeks).
- Notify the relevant GOS teams, the GP and referring paediatrician within 12 hours.
- Make sure you complete the telephone checklist stuck in the notes on who has been contacted.
- **Complete a rapid death summary** (template on K Drive: PICU NICU Handover) BEFORE you leave your shift. Email to Paula Smith. Fax this to the Child Death Review Panel. Number on the form.
- Ensure a death checklist sticker has been completed and stuck in the notes.



Acutely Unwell Child Protocol Sept 2008