WELCOME TO CCC!

These brief notes are designed to help orientate you to our ICU routine. They include outlines of:

- **The Golden rules**
- **Handover and Ward rounds**
- **Internal and External admissions**
- **Patient discharges from CICU**
- **Patient deaths on CICU**
- **Joint ICU teaching program**
- **Study and Research days**
- **Annual leave**
- **Who's who?**

Golden Rules

1. *Please have a low threshold for asking questions if you are not sure about anything.*

2. *It is perfectly acceptable to say 'I don't know'… if you don't*

- The daytime CCC medical team consists of: the on call consultant, the support consultant, the long day SpR, the short day SpR (or CCC fellow) and the CCC/ECMO fellow.
- The nighttime CCC medical team consists of the on call consultant and the night SpR!

- The primary person to whom all patient related queries should be directed is the on call consultant.
- The person providing training and orientation on a day-to-day basis is the support consultant.

CCC WARD ROUNDS

There is a multi-disciplinary ward round at 07:30 each morning apart from Thursdays. The cardiac surgeons and cardiologists play a leading role in this round. The night SpR is expected to present the ICU patients, please refer to the **'CCC handover'** document (within the induction pack) for guidance. ICU day SpR's are currently not expected to attend this round, although they are welcome if they wish to attend for interest (This may change).

There is a morning teaching programme starting at 08:15 Monday Tuesday and Wednesday between handover and rounds with the clinical governance meeting on 0815 Friday.

The night SPR goes home AT LATEST BY 0930hrs.

A detailed **ICU business ward round** commences at 8:30 on CCC4 with the ICU medical team and nurse coordinator. CCC parents are generally asked to wait outside during the ward round.

A 2 minute presentation on each patient will be made by the SpR covering that patient. This should include a list of current problems, a short summary of the patient's history, and a brief systems review. Please use the patient summary sheets to help structure your presentation. These are kept on the K drive in a folder named 'CCC handover'. They are updated twice daily by the SpRs.

Each patient should be examined, assessed and have a **'plan for the day'** stored in Carevue. This plan must be documented in carevue during the am ward round. The SpR should take note of the plan and follow it up over the day.

A **debrief** will occur after the ward round to clarify the days' goals

X-rays will be reviewed with the Radiologist and the CICU team on Monday morning and Friday afternoon.

Afternoon ward rounds commence at 4:00 pm in CCC, commencing with a briefing. The short day person should leave at 6pm.

Please note at weekends on CICU there is no ECMO fellow and *both registrars are rostered for a long day.* Although one may leave early at the discretion of the on-call consulatant.

Currently handover night ward rounds commence at 8:30 pm in CCC, this should take place in the hot office with the fellow covering the unit at last not more than half an hour.

CCC WARD DUTIES

It is vital that all registrars familiarise themselves with essential equipment. For example all should be oriented to the unit crash trolleys. A basic knowledge of the ventilators is essential and you will be allocated times with a ventilator technician for this.

The short day SpR and the long day SpR (bleep 0542) divide the patients The ECMO fellow cares for ECMO patients during the daytime.

SpR responsibilities include:

The prescription of medications / fluids. All prescriptions must be written in accordance with the pharmacy bundle. The fluid prescription lasts for 1 week and must be re written weekly.

The SpR is responsible for recording admission notes. Also, any acute event *must* be described in the notes. Investigation results, new communications and procedures should be documented in the notes by the SpR. Daily progress notes are dictated by the consultant from Monday to Friday and the SpR does not need to write daily note on those days. The SpR is asked to write a daily progress note on Saturday and Sunday.

The ECMO patients' chart is written in a multidisciplinary care pathway. This is kept at the bedside. Please make all notes in this file, which will be placed in the hospital notes at discharge.

Haematology, Biochemistry and X-ray Requests:

Eamonn Connery the CICU clinicians assistant will be able to help with requests.

Include the date and time of blood sampling on the form, otherwise the biochemistry and haematology results do not come up on CareVue!

Daily bloods must be completed by 6:00 am to ensure the results are not delayed. Forms are generated on the PIMS system. Place hazard stickers on all suspected Hep B/HIV patients. Please read and observe the blood sampling protocol.

Please chase outstanding lab and microbiology results, and document them in the microbiology folder for easy access on the Tuesday and Thursday microbiology rounds.

CXR forms must be generated (by appropriately trained staff). Out of hours x-rays and CT scans are arranged by contacting the Radiographer-on-call (Bleep 0634). USS requests made after 8 am must be taken to X-ray reception. There is a portable US round which starts at 2 pm; requests must be received before this starts.

TPN needs to be ordered by 11:00 am (remember to also order for the weekend on Fridays). New referrals for TPN must be made as early as possible to the TPN pharmacist by filing the TPN order form and sent to the TPN pharmacy.

Prescribing: Most drugs are in the CCC formulary, theBNF for children, or the GOS formulary, which is available on the hospital intranet. You *must* familiarise yourselves with the **Pharmacy and prescribing bundle** *prior* to starting on CICU.

Cardiac arrest team: The on-call *CSP is the team leader for the cardiac unit arrest team. Bleep 0542 is the arrest bleep and must be carried at all times*. The team includes the anaesthetic SpR, cardiac surgery SpR and the clinical site practitioner. The areas to which you may be called include: Ladybird ward level 5, Cardiac Day ward level 3 and the cath lab level 2.

The PICU anaesthetic machine may be borrowed for appropriate clinical situations and used by appropriately trained CICU staff. It may only be used by those with anaesthesia training and should be checked before use.

Communication: There is a list of the medical teams and their bleep numbers at the CCC main desks. Main switchboard number is 5000. To bleep: - dial 76 - their bleep no - your extension - wait for voice, hang-up and wait to be called back.

HAVE A LOW THRESHOLD FOR SPEAKING TO THE CCC 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

There is a written protocol folder behind the nurses' station on CCC4, an electronic version of which is saved on the 'K:' drive under CCC4 guidelines. In addition to this there is a folder of laminated 'short notes on common surgical lesions' kept in the same place. You should already have received a copy of the CCC 'Rough Guide'; if not it can be printed as a PDF from the CCC handover folder.

EXTERNAL CCC ADMISSIONS

Referrals to CCC admissions are usually routed via the Childrens' Acute Transport Service (CATS). A call may come directly to the Unit from a caller who is unaware of the CATS service or from a physician who wishes to make an ECMO referral. Please discuss any such call with the duty CCC consultant.

If may be appropriate to refer on to CATS on ext 4850.

Offer advice regarding resuscitation if you feel competent to do so. If you are not sure about: bed availability, appropriateness of the referral, or are unable to give advice about the condition, explain this to the referring doctor. Tell him/her that we will return their call within 10 minutes.

Discuss the admission with the duty Consultant who is available at all times to supply additional advice regarding the referral. A patient should never be refused without discussion with the duty consultant. Any referral should be documented in the ECMO and non-ECMO folder as appropriate.

INTERNAL EMERGENCY CICU ADMISSIONS

All calls and discussions regarding potential emergency CCC admissions should be fed back at the earliest possible opportunity to the duty CCC Consultant.

For emergency referrals from the ward, assess the patient in order that immediate life-threatening problems may be addressed. If extra hands are needed urgently for resuscitation, the clinical emergency team 2 may be contacted. If cardiology or cardiac surgery input is required these SpR s may be mobilised urgently.

A patient should never be refused admission without discussion with the duty consultant.

CCC DISCHARGES

A discharge summary must be completed for CCC patients with medical problems. This must be completed prior to discharge in order to be countersigned and dispatched within 2 working days. Cardiac surgical cases have summaries dictated by the surgical SPR and ECMO patients by the ECMO fellow. **Summaries will be required for internal transfers to ward and external discharges and deaths if they are not covered by ECMO or cardiac surgery**. A copy of the summary will be sent to the patient's GP and referring physician so please ensure adequate detail is included. The night registrar types summaries for patients being discharged the following day.

If the patient is being discharged to a GOS ward, telephone the ward SHO from the team accepting the patient to hand the medical care details. The usual team to call is the cardiology team and the cardiology SHO is the appropriate person to handover to. A discharge sticker must be completed and placed in the notes. Handovers should be done before noon unless a later time is unavoidable. Tracheal/airway patients commonly remain under ICU care even when they no longer require mechanical ventilation.

If the patient is going back to the referring hospital, notify the team at the referring hospital in addition to the GOS teams so that the relevant GOS follow up can be arranged before the patient leaves. Try and obtain an image disk from radiology a day in advance.

CCC DEATHS
When a patient dies in CCC:

Discuss the relevant issues / paperwork: (death certificate, organ donation and post mortem consent) with the duty consultant. Co-ordination of matters relating to a death is one of the roles of the support consultant, who may require your help. Matters relating to the coroner and PM may be quite complicated and it is vital that confusion is avoided at what is always a very difficult time.
There is a 'death locker' in CCC3, which contains all the relevant forms, certificates and information booklets.

Check whether the death should involve the Coroner and notify the Coroner if appropriate. Coroners PM is required for sudden or unexpected deaths, death where the cause is unknown, deaths where negligence may be a factor, deaths within 24 hours or surgery or anaesthesia or death that may have been hastened by a treatment or procedure.
If the death is not a Coroner's case, then post mortem consent will be discussed with the family before they leave. For cardiac surgery patients a limited PM of heart and great vessels may be adequate. This requires a special type of consent, which the CICU consultant will be able to explain. Consent for PM includes a discussion about organ retention and disposal.

A death certificate (MCCD) will be issued (unless a Coroner's PM is required). The choice of wording to write on the certificate should normally be discussed with the CICU consultant. When signing a MCCD you *must* also print your name and GMC number. The certificate will then be given to the family so that they can register the death. The liaison sisters may be available to register the death for the family if this presents logistic problems for them.

Ensure the family have details on how to arrange the funeral. The cardiac liaison sisters will be able to assist and advise regarding this if there are questions, which cannot be answered by the medical team. Most unusual circumstances are addressed by the booklet ' when a child dies' which is kept in the 'death locker'.

The family should be told that they should be contacted and offered bereavement counselling, usually around 6-8 weeks.

It is a joint medical and nursing responsibility to ensure that the telephone checklist is completed and stuck in the notes to confirm who has been contacted. This must include the relevant GOS teams, the GP, the health visitor and referring paediatrician (within 24-72 hours).

ICU TEACHING
The 'Program for Training – Induction' document describes the ITU modular training programme.

An individual training contract should be discussed between each trainee and their supervising mentor to identify appropriate educational goals. Every attempt will be made to protect the attendance of registrars to unit teaching sessions. If you wish to attend an ICU teaching session when you are on shift, please ask the consultant on call to assist you with this.

The ICU core curriculum is held on monthly teaching afternoons. These are mandatory protected sessions. The GOSH ICU curriculum teaching modules appear weekly and are stored on the O drive. There are 8 cardiac modules in addition to a comprehensive list of non-cardiac modules over the year.

Teaching sessions include:

Monday to Wednesday
0815-0830 teaching programme including journal club and case based discussion
Wednesday only 1400: ECHO teaching

Thursday
07:30 Joint Cardiac Conference JCC (Cardiac Conference Room Level 6, Old Nurses' Home).

Friday
08:15 Cardiothoracic Unit Clinical Governance Meeting (Cardiac Conference Room Level 6, Old Nurses' Home) - a mandatory protected session.
12:00 Teaching on CCC

Once a month CCC Journal Club - date & time to be announced. See Dr R Paget

Hospital Junior Staff Teaching: Tuesdays 13:00 in the Hospital Lecture Theatre.
Hospital Ground Round: Wednesdays 13:00 in the Hospital Lecture Theatre.

Registrars will be expected to contribute to case presentations, journal clubs and ICU teaching sessions.

RESEARCH
Study leave is incorporated into the rota with audit and research projects being allocated during your time here.
Discuss with your supervisor re proposed research projects as early as possible.
A list of CCC audit projects is available from Dr Kate Brown.

HOLIDAY AND ROTA REQUESTS
We wish to be as flexible as possible with annual and study leave, subject to maintaining adequate cover on the units. The core CCC team includes the long day registrar, short day registrar and the night registrar. These people must be present every day.

The rota is organised and written by Rebecca Hutchinson with local support from Dr Sophie Skellett and Dr Timothy Thiruchelvam. Annual leave entitlement is built into the rota. Specific annual leave requests may be accommodated by swapping shifts in advance. Any such swaps *MUST* be approved by Rebecca Hutchinson and the relevant ICU consulatant. Requests for study leave during the CCC rotation should be approved by Dr Timothy Thiruchelvam ro your educational supervisor. Any study or annual leave requests *MUST* be received at least *SIX WEEKS* in advance. You are entitled to five weeks annual leave per year (eight days for three month anaesthetic rotation). Study leave should be discussed with your mentor in advance and may be up to 30 days per year. Annual leave will not be approved in the first and last week of your post unless there are exceptional circumstances.

ICU WHO'S WHO

CCC Consultants:	Allan Goldman Cho Ng (Unit Lead) Kate Brown Ann Karimova Aparna Hoskote Mike Broadhead Troy Dominguez Richard Paget Timothy Thiruchelvam
PICU Consultants:	Andy Petros (Unit Lead) Quen Mok Christine Pierce Mark Peters Sophie Skellet Paula Lister Joe Brierley Sanjiv Sharma
CATS Consultants:	Andy Petros (acting director) Mark Peters Daniel Lutman Mary Montgomery David Inwald Padmanathan Ramnarayan Richard Paget
Clinical Director (CRACC):	Professor Martin Elliott
Directorate Manager:	Anne Layther
Secretary to PICU:	Paula Smith (ext 8213)
PA ECMO services and CICU	Lisa Sharman