South Australian Perinatal Practice Guidelines

Perinatal advice and emergency transport

Helpful telephone numbers

Women' and Children's Hospital (WCH) – Maternal (08) 8161 7000, Neonatal (08) 8161 7821

Flinders Medical Centre (FMC) – Maternal (08) 8204 5511, Neonatal (08) 8204 5230

Lyell McEwin Health Service (LMHS) – Maternal (08) 8182 9000, Neonatal (non- retrieval) (08) 8182 9101

Emergency Retrieval / Maternal Aero-Medical Consultant – (08) 8222 4222

Ambulance communications – (08) 8394 7043

Introduction

The following concepts underlie the principles of perinatal networking:

1. The outcome for neonates who need specific treatment is better when they are born where that treatment is available than when they are transferred there after birth
2. Some services can only be provided in specialized centres. Women and babies who need such services should be moved to them as needed

- When planning an antenatal transfer, the required level of care for the mother and fetus as well as the capacity of tertiary resources and facilities should be considered in order to determine the most appropriate destination hospital
- Pregnant women should not be transported if they are likely to give birth in transit

Definitions

- *Referring* site: hospital or practitioner from where the woman / baby is sent
- *Referral* hospital: hospital to which the referring hospital or practitioner wishes to send the woman / baby and to whom the first enquiry is directed
- *Destination* hospital: the hospital where the woman / baby eventually arrives. This is usually the same as the referral hospital but may be different due to lack of beds, geographical issues or need for specific facilities
- *Transfer*: transport of either women or babies by ambulance or Royal Flying Doctor Service (RFDS) after discussion between the referring hospital and the referral hospital
- *Retrieval:* the provision of emergency care and transport by a specialist team that travels to the referring hospital to provide a service and / or transport the woman or baby to the destination hospital.
    - *Maternal retrieval*: in case of antepartum, intrapartum or postpartum problems (as well as maternal conditions)
    - *Neonatal retrieval*: to stabilise the neonate and transport it to the destination hospital

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Referral centres

- The three major obstetric referral centres in South Australia are the Lyell McEwin Health Service, Flinders Medical Centre and the Women's and Children's Hospital. Maternal and neonatal services differ among these institutions
- The Lyell McEwin Health Service and Flinders Medical Centre have 24 hours Adult Intensive Care facilities and the Women's and Children's Hospital has 24 hour Adult High Dependency facilities
- Flinders Medical Centre and the Women's and Children's Hospital have level III facilities for neonates and the Lyell McEwin Health Service has level II facilities (suitable for gestations greater than 32 weeks)

Mechanism of phone advice, referral, transfer or retrieval

Maternal

- In the first instance *referring practitioner* contacts the hospital to which he or she wishes to refer the pregnant woman (may be the regional or nearest hospital according to required level of care / facilities). The hospital's switchboard will bring the *referring practitioner* in contact with the *obstetric registrar on call*. Details will be taken and the registrar will either make a decision (depending on seniority, experience and the nature of the problem) or contact the *obstetrician on call for 'perinatal advice and retrieval'* and request him or her to contact the *referring practitioner* directly
- Each hospital should have a system of formal documentation for all phone advice, referral, transfer or retrieval

- In every case, the registrar will notify the *obstetrician on call for 'perinatal advice and retrieval'* of the impending transfer and of any advice given to the *referring practitioner*. The obstetrician can then contact the *referring practitioner* to confirm arrangements if necessary. *Referring practitioners* can contact the switchboard at any time (see contact numbers below) to ask for the *obstetrician on call for 'perinatal advice and retrieval'* if they feel the need to do so
- If the matter is straightforward and the referral hospital accepts the transfer, the *referring practitioner* contacts Ambulance communications (phone: 8394 7043) to

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arrange transport. If plans change or the expected transport is not available, the ambulance communications has the facilities to call the *obstetrician on call for 'perinatal advice and retrieval'* into a conference call with the *referring practitioner* to discuss the issues. Other conference call options may include the State Aero-Medical Consultant and the Royal Flying Doctor Service (RFDS) flight nurse

- If an obstetric retrieval team is required, the *obstetrician on call* should contact the State Aero-Medical Consultant on emergency phone 8222 4222
- The Royal Flying Doctor Service (RFDS) flight nurse is usually also a qualified midwife
- In the rare event that the referring practitioner needs to rapidly expedite intensivist retrieval, he or she may directly contact the State Aero-Medical Consultant

Neonatal

- In the first instance the *referring practitioner* contacts the hospital to which he or she wishes to refer the baby (may be regional or nearest hospital according to required level of care / facilities). The contact number accesses the Neonatal Intensive Care Unit or Special Care Baby Unit (Lyell McEwin Health Service) where the *referring practitioner* will be brought in contact with the neonatal registrar / extended practice nurse / neonatal nurse practitioner on duty. Details will be taken and the registrar / extended practice nurse / neonatal nurse practitioner will make a decision, contact the *neonatal consultant on call* and request him or her to contact the *referring practitioner* directly
- Each hospital should have a system of formal documentation for all phone advice, referral, transfer or retrieval

Neonatal registrar / extended practice nurse / neonatal nurse practitioner duties (neonatal intensive care)

- Determines clinical details and gives treatment advice
- Site: establishes location of baby and telephone number of hospital
- Baby: establishes name of baby and home address (town, suburb)
- Referring doctor: establishes name, telephone number and wishes of referring doctor
- Gives interim advice then confirms with neonatal consultant
- If retrieval is needed confirms team will come
- Guarantees the coordinator will call back to confirm advice and gives an estimated time of arrival, etc

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- Updates relative occupancy in neonatal or paediatric intensive care
- Telephones coordinator

Neonatal Coordinator (identified from roster kept in respective WCH / FMC NICUs)

- Assesses the problem and the advice given and determines whether transfer or retrieval is necessary
- Checks WCH and FMC unit occupancies
- Selects WCH or FMC as the receiving neonatal intensive care unit (NICU) and informs the appropriate unit consultant
- Negotiates transport with Ambulance Communication
- Arranges mobilisation of appropriate neonatal retrieval team from WCH or FMC
- Contacts the referring doctor with an estimated time of arrival and acts as the direct line consultant source for further management / problems until arrival of the retrieval team

Neonatal retrieval team leader

- Leads team to the referring hospital
- Assesses and stabilises the baby
- Telephones the receiving NICU with a report on the baby and estimated time of arrival at destination hospital
- Ensures the retrieval coordinator is aware of progress
- Usually the retrieval team is led by a consultant. Occasionally a neonatal registrar / extended practice nurse or neonatal nurse practitioner leads the team. Occasionally a neonatal nurse leads the team but only at the discretion of the consultant and never outside the metropolitan area
- If the consultant leads the team, he or she telephones the consultant on call for the respective neonatal intensive care unit. The consultant then informs the NICU of progress, estimated time of arrival, etc

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- It is important to enable the mother to travel with her baby or facilitate transport as soon as possible afterwards
- If there are recent or relevant X- rays or ultrasounds, they should be transported with the woman / baby

Maternal retrieval

Transport team composition

- The staff required for each obstetric retrieval will depend on the woman's condition and on factors at both the referring and the referral sites
- It is the responsibility of the *Aero-Medical Consultant on call* to determine the composition of the obstetric retrieval team. This will be done after consultation with the referring doctor, the transport provider (Ambulance or RFDS) a neonatal consultant and the obstetrician on call for 'perinatal advice and retrieval'. This may be best achieved via a conference call organised by the South Australian Ambulance Service (SAAS) communications.

- The factors to be considered in determining the type of transport and the composition of the team will include:
  - Nature of the problem
  - Transport availability
  - Available resources at the referring hospital (including anaesthesia services)
  - Whether caesarean section is likely to be required
  - Whether neonatal support is also likely to be required
- In any retrieval after birth, it is important to ensure that the placenta (fresh with no additives) and any other specimens are transported with the woman and / or baby and send for histological examination
- The degree of risk of being born in transit should be discussed with the obstetrician on call. If a preterm baby is likely to be born in transit, the woman should not be transferred

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- When there is a risk of preterm birth in transit, a registered midwife or doctor must travel with the woman
- It is important to facilitate transport to the destination hospital for significant family members as soon as possible after the woman and / or baby is transferred or retrieved to the destination hospital

Obstetric registrar

- Records clinical information, woman's and referring doctor's details
- Checks the bed occupancy of the neonatal unit
- Contacts the obstetrician on call for perinatal advice and retrieval

Obstetrician on-call for perinatal advice and retrieval

- Decides whether to initiate a 'retrieval' or 'transfer' after further discussion with the referring doctor
- Discussion with the Neonatal Consultant and the Aero-Medical Consultant will be necessary

Documentation

- All relevant case notes and results at the referring hospital should be photocopied and transferred with the woman to the destination hospital
- If there are recent or relevant X- rays or ultrasounds, they should be transported with the woman / baby
- After arrival at the destination hospital the midwife (transfer or retrieval team) must ensure the documentation is complete
- If a midwife does not accompany the transfer / retrieval team, it is the responsibility of the medical officer to ensure documentation is complete

Follow up

- Feedback to the referring practitioner of the outcome of the transport is initially the responsibility of the obstetric consultant involved. Written clinical summaries will be forwarded both during the woman / baby's time in hospital and after discharge
- Each episode of retrieval is reviewed by the service director and any problems (e.g. equipment, organisation, clinical) identified are documented and addressed

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Down Transfers

- A down transfer is an inter-hospital transfer to a hospital closer to the woman's home that provides a lower level of care for the mother and / or her newborn. This may be either a level I or level II hospital
- Transport systems for the mother to return to her community include:
  - Ambulance service
  - Royal Flying Doctor Service
  - Volunteer car service (refer to hospital for details)
  - Private transport

Version control and change history

PDS reference: OCE use only

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1.0	31 Jan 06	current	Original version

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