

Policy

Clinical Guideline

South Australian Perinatal Practice Guidelines – Perinatal Advice and Emergency Transport

Policy developed by: SA Maternal & Neonatal Clinical Network

Approved SA Health Safety & Quality Strategic Governance Committee on:

8 October 2013

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Summary Guideline for the management of perinatal advice and emergency transport.

Keywords Referral, transfer, retrieval , emergency, unstable, critical, consultation, Perinatal Practice Guidelines, Perinatal Advice and Emergency Transport, clinical guideline

Policy history Is this a new policy? **N**
Does this policy amend or update an existing policy? **Y**
Does this policy replace an existing policy? **Y**
If so, which policies? Perinatal advice and emergency transport

Applies to All SA Health Portfolio
All Department for Health and Ageing Divisions
All Health Networks
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS
Other

Staff impact All Clinical, Medical, Nursing, Allied Health, Emergency, Dental, Mental Health, Pathology

PDS reference CG115

Version control and change history

Version	Date from	Date to	Amendment
1.0	31/01/2006	23/09/2013	Original version
2.0	23/09/2013	Current	Reviewed

South Australian Perinatal Practice Guidelines

perinatal advice and emergency transport

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Note

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

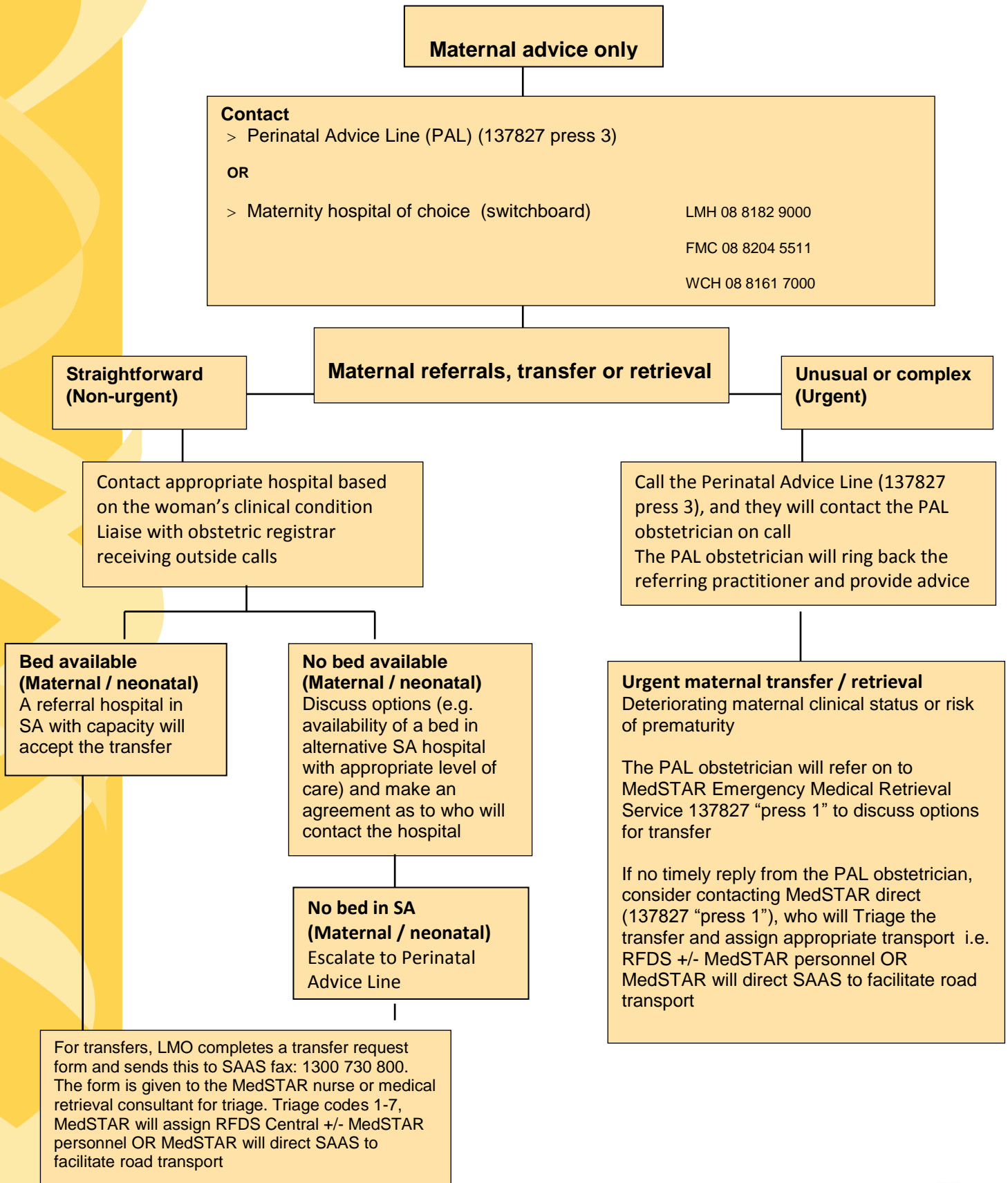
- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

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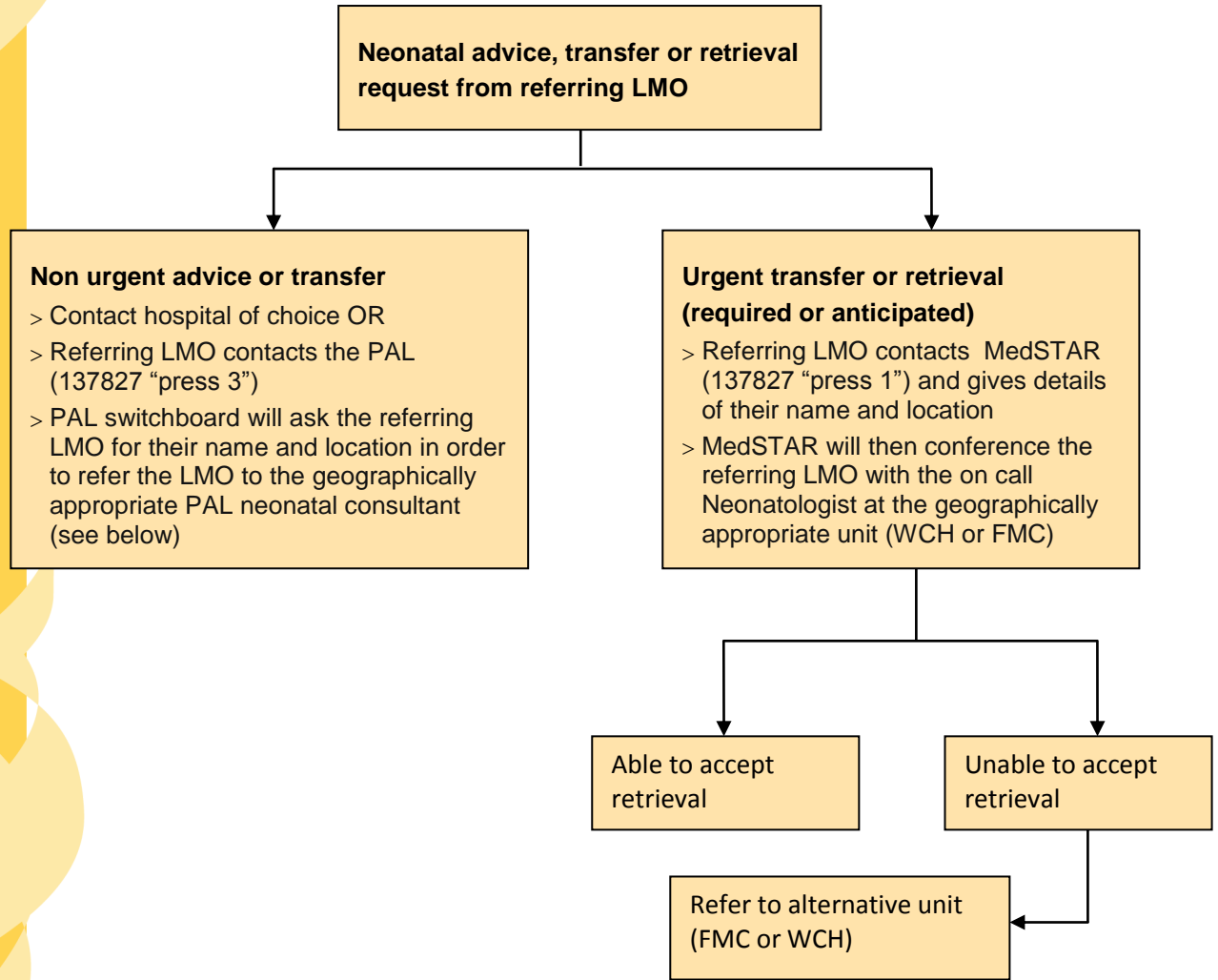
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1. Maternal advice, referral, transfer or retrieval flow chart



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2. Regionalised neonatal advice, referral or retrieval in South Australia flow chart



South	North
FMC 08 8204 5511	WCH 08 8161 7000
Flinders Private	Lyell McEwin
Ashford	Calvary
Mt Barker	Nth Eastern Community
Murray Bridge	Burnside
Berri / Riverland	Gawler
Kingscote	Tanunda
Victor Harbour	Clare
Naracoorte	Walleroo
Mt Gambier	Port Pirie
Port Lincoln	Port Augusta
Ceduna	Whyalla
Alice Springs	
Mildura	

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Helpful telephone numbers

- > FMC – Maternal (08) 8204 5511 (switchboard), Neonatal (08) 8204 5230
- > WCH – Maternal (08) 8161 7000 (switchboard), Neonatal (08) 8161 7821
- > LMH – Maternal (08) 8182 9000 (switchboard), Neonatal (08) 8182 9101
- > MedSTAR Emergency Medical Retrieval Service – 13 STAR (137827 press 1)
- > Perinatal Advice Line (PAL) –13STAR (137827 press 3)
- > South Australian Ambulance Service (SAAS) – (08) 8394 7043 or fax 1300730800
- > RFDS – (08) 8648 9555

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:** to stabilise the woman and transport her to the destination hospital in case of antepartum, intrapartum or postpartum problems (as well as maternal conditions) (up transfer)
- > **Neonatal retrieval:** to stabilise the neonate and transport it to the destination hospital (up transfer)

Referral centres

- > The three major obstetric referral centres in South Australia are Flinders Medical Centre, the Women's and Children's Hospital and the Lyell McEwin Hospital. Maternal and neonatal levels of care vary between institutions

Maternal:

- > Flinders Medical Centre has level 6 adult intensive care and 24 hour subspecialist medical (including cardiology) and surgical support
- > The Women's and Children's Hospital has 24 hour adult high dependency facilities and level 1 intensive care facilities for postpartum women
- > The Lyell McEwin Hospital has level 6 adult intensive care facilities and 24 hour subspecialist medical (including cardiology) and surgical support

Neonatal:

- > Flinders Medical Centre is a level 6 neonatal facility, with the ability to provide a full range of comprehensive care for most neonates
- > The Women's and Children's Hospital is a level 6 neonatal facility, and in addition, WCH provides services for the surgical care of neonates and neonates with congenital heart disease
- > Lyell McEwin Hospital is a level 5 neonatal facility. Lyell McEwin Hospital is suitable for singleton pregnancies $\geq 33^{+0}$ weeks gestation with an anticipated birth weight $> 1,500$ g and twin pregnancies $\geq 34^{+0}$ weeks gestation with an anticipated birth weight $> 1,500$ g.

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- > Mount Gambier and Port Augusta Hospitals are major country hospitals with level 4 neonatal facilities
 - > Level 4 hospitals are accredited to manage singleton pregnancies $\geq 33+0$ weeks gestation, with an anticipated birthweight $\geq 2,000$ g and twin pregnancies $\geq 35+0$ weeks gestation with an anticipated birthweight $\geq 2,000$ g

MedSTAR

- > MedSTAR provides triage for high level emergency medical support and care to critically ill and injured patients. The service provides this critical care transport using SA ambulance service and or RFDS / helicopter
- > MedSTAR will make the decision regarding the most appropriate service (MedSTAR, RFDS or SAAS) and mode of transport, depending on:
 - > Patient history / level of acuity
 - > Expertise of available crew (MedSTAR, SAAS, RFDS) on the day
 - > Location and distance to destination
- > In straightforward cases where an up transfer is indicated, the referring practitioner may contact an appropriate hospital (based on the woman's clinical condition), and liaise with the obstetric registrar receiving outside calls

Maternal advice, referral, transfer or retrieval

- > After an appropriate clinical assessment of the patient, the local clinician may request advice for management including maternal transfer or retrieval

Perinatal advice only

- > Referring practitioners can contact the Perinatal Advice Line or the maternity hospital of their choice at any time (see contact numbers above)

Maternal referrals or transfers

Non-urgent

- > The referring practitioner may contact the appropriate hospital based on the clinical condition of the woman or her unborn fetus and ask to speak to the obstetric registrar who is receiving outside calls
- > A referral hospital, with capacity will accept the transfer. The local medical officer (LMO) completes a transfer request form and sends this to SAAS fax: 1300 730 800. The form is given to the MedSTAR nurse or medical retrieval consultant for triage. Triage codes 1-7, MedSTAR will assign RFDS Central +/- MedSTAR personnel OR MedSTAR will direct SAAS to facilitate road transport
- > If no maternal or neonatal bed is available at the referral hospital, discuss options (e.g. availability of a bed in another South Australian hospital with appropriate level of care facilities) and make an agreement as to who will contact the hospital to organise transfer
- > If no bed (maternal or neonatal) is available in South Australia, escalate to the Perinatal Advice Line

Urgent

- > For urgent transfers, the LMO should call the Perinatal Advice Line (137827 press 3), and they (PAL) will contact the PAL obstetrician on call
- > The PAL obstetrician will ring back the referring practitioner and provide advice
- > The PAL obstetrician will refer on to MedSTAR Emergency Medical Retrieval Service 137827 "press 1" to discuss options for transfer
- > If no timely reply from the PAL obstetrician, consider contacting MedSTAR direct (137827 "press 1"), who will Triage the transfer and assign appropriate transport i.e. RFDS +/- MedSTAR personnel OR MedSTAR will direct SAAS to facilitate road transport

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Maternal retrievals (Perinatal Advice Line [137827 press 3])

- > Call the 24 hour Perinatal Advice Line (PAL) (137827 press 3) to contact the PAL obstetrician on call. The PAL obstetrician will ring back the referring doctor, generally within 5-10 minutes
- > The PAL obstetrician will provide advice as
- > The PAL obstetrician will refer on to MedSTAR Emergency Medical Retrieval Service if urgent maternal and/or neonatal retrieval is required
- > If there is clinical deterioration and the referring practitioner needs to rapidly expedite intensivist retrieval, or the expected transport is not available, he or she may
 1. Directly contact MedSTAR Emergency Medical Retrieval Service on 137827 "press 1"
 2. Re-contact PAL obstetrician and re-negotiate the plan 137827 "press 3"
 3. PAL obstetrician will initiate obstetric retrieval via MedSTAR Emergency Medical Retrieval Service on 137827 "press 1"

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
- > The obstetrician / neonatologist / anaesthetist in discussion with the MedSTAR Emergency Medical Retrieval Service Aero-Medical Consultant on call will determine the composition of the obstetric retrieval team
- > The MedSTAR Emergency Medical Retrieval Central Coordination facility will coordinate a multiparty call including the referring doctor, the transport provider (Ambulance or RFDS) a neonatal consultant and the PAL obstetrician
- > 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 immediate postpartum retrieval, ensure that the placenta (fresh with no additives) and any other specimens (identified with the name and date of birth) are transported with the woman and / or baby and sent for histological or pathological examination at the referral (receiving) hospital
- > The risk of birth occurring during transit should be discussed with the obstetrician. If the risk is judged to be very high, transfer may need to be delayed
- > When there is a risk of preterm birth in transit, a registered midwife or doctor must travel with the woman
- > Tocolysis with nifedipine (see PPG: nifedipine for preterm labour recommendations) may be considered at any gestation to suppress labour for women who require transport to a tertiary centre
- > At times a MedSTAR kids team may be activated in case the mother delivers (see below). This team will only be responsible for the resuscitation and care of the neonate. A midwife, paramedic or obstetric trained medical officer must be provided to care for the mother
- > Facilitate transport to the referral (receiving) hospital for significant family members as soon as possible after the woman and / or baby is transferred or retrieved
- > Mental health advice is also available on 137827 or 13 STAR press 4. See SA Perinatal Mental Health Guidelines

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Home birth retrieval / transfer

- > The mode of transport for retrieval or transfer of the woman and / or her baby to hospital depends on individual circumstances. In most cases SAAS will provide transport to the nearest hospital. If an additional level of service is required SAAS or the attending midwife may contact MedSTAR retrieval service to discuss either retrieval from the home or rendezvous at the nearest hospital to continue care and further transfer to an appropriate obstetric hospital

Documentation

- > All relevant case notes and results at the referring hospital should be photocopied and transferred with the woman to the destination hospital
- > All recent or relevant X- rays or ultrasounds (including all dating scans) should be transported with the woman / baby
- > After arrival at the referral (receiving) 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 MedSTAR Emergency Medical Retrieval Service management and any problems (e.g. equipment, organisation, clinical) identified are documented and addressed

Down transfers or 'back 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
- > MedSTAR provides nurse escorted down transfers for stable neonates in consultation with the tertiary hospitals.
- > Transport systems for the mother to return to her community include:
 - > Ambulance service (must have private ambulance cover)
 - > Royal Flying Doctor Service (must have private ambulance cover)
 - > Volunteer car service (refer to hospital for details)
 - > Private transport

Inter hospital transfer

- > If an adult patient requires an inter hospital up-transfer within the city of Adelaide (for medical or mental health complications) this can also be discussed with medSTAR but most of these transfers are done by SAAS

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Neonatal

- > Neonatal advice and retrieval services are regionalised, around services at the WCH (North) and FMC (South) ([see flow chart 2](#))
- > For advice, the referring LMO may contact their hospital of choice, or the PAL (137827 “press 3”). The switchboard will ask whether the LMO requires obstetric or neonatal advice. Switchboard will request details of their name and location in order to refer the LMO to the PAL neonatal consultant on call in the geographically appropriate unit
- > If a neonatal transfer or retrieval is required or anticipated the referring practitioner contacts MedSTAR Emergency Medical Retrieval Service on 137827 press 1. MedSTAR will then conference the referring LMO with the on call Neonatologist at the geographically appropriate unit (WCH or FMC)
- > Details will be taken and the Neonatologist will provide advice regarding management and make a decision about neonatal transfer / retrieval
- > Currently, the major determinant in the choice of the neonatal destination hospital is the geographic location of the referral hospital (regionalised neonatal retrieval plan) unless the baby requires surgical or cardiology input ([see flow chart 2](#))

MedSTAR central coordination

- > Immediately conferences referring practitioner with the relevant Neonatologist on-call
- > Site: establishes location of baby and telephone number of hospital
- > Baby: establishes name of baby and home address (town, suburb)
- > Referring doctor: establishes name and contact telephone number
- > If retrieval is needed facilitates activation of MedSTAR kids team
- > Calls referring facility back and gives an estimated time of team arrival when necessary
- > Coordinates conference calls between MedSTAR kids retrieval team and the Neonatologist at the destination unit
- > Notifies the destination unit of estimated time of arrival of retrieval team and baby and any change in clinical situation

Neonatologist on-call for advice

- > Identified from roster kept in respective WCH / FMC NICU as provided to Medstar

MedSTAR kids retrieval team

- > The composition of the MedSTAR kids retrieval team will depend on the acuity of the neonate, as determined by the Neonatologist on call. At times, a Neonatologist may accompany the team to the baby
- > Assesses and stabilises the baby
- > Telephones the receiving Neonatologist with a report on the baby and to discuss and receive clinical advice
- > Notifies MedSTAR central coordination of time of departure from referral hospital
- > Ensures the destination NICU is aware of baby’s clinical status and likely time of arrival
- > It is important to enable the mother to travel with her baby if at all possible or facilitate transport as soon as possible after transfer. The final decision to allow the mother to accompany the baby on fixed or rotary wing transports lies with the pilot. The RFDS midwife must be part of the discussion as they will be the primary care giver to the mother on any RFDS flight. On rotary wing travel the mother must have been discharged or medically cleared for travel
- > If there are recent or relevant X- rays or ultrasounds, they should be transported with the woman / baby

If a non urgent transfer or advice is required 137827 press 3 will ensure you get help or advice

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Abbreviations

FMC	Flinders Medical Centre
LMH	Lyell McEwin Hospital
MedSTAR	Emergency Medical Retrieval Service
NICU	Neonatal intensive care unit
RFDS	Royal Flying Doctor Service
SAAS	South Australian Ambulance Service
WCH	Women's and Children's Hospital