OBJECTIVES

- To promote proactive obstetrical care planning decisions that are supported by the assessment and identification of maternal and fetal risk factors, communication between involved health care providers and obstetrical triage scoring.

- To enable access to the appropriate level of obstetrical care to support optimal outcomes for mother and baby.

PRINCIPLES

1. Early identification of high risk pregnancies and deliveries, including having an established planned place for birth during antenatal care, is crucial in minimizing the risk and need for intrapartum transfer.

2. High risk pregnancies and deliveries require consultation. This applies with or without transfer to obstetrical and/or neonatal care specialists.

3. Decision to transfer an obstetrical or neonatal patient to a higher level of care in an alternate facility, follows consultation between the most responsible health care practitioner and the consultant and is based on the assessment of risk factors for the mother, fetus or neonate, labor progress, and potential for delivery on route.

4. Decisions related to transportation are the result of team communication and collaboration between sending and receiving Physicians (consultant), Registered Nurses, and Emergency Medical Services (EMS) staff.
APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary) working in Acute Care.

ELEMENTS

1. Points of Emphasis

1.1 It is recognized that distance, weather and road conditions may make the goal of transferring the intrapartum patient who presents in active labor from a level 1A hospital to any higher level hospital within a thirty minute target unachievable. (See Appendix A: Service delivery model by level of hospital).

1.2 The Obstetrical Triage Assessment Scoring (OTAS) system may assist in timely assessment and determination of acuity.

1.3 Ideally, the appropriate hospital for birth will have been selected prior to the pregnant woman presenting to the hospital. In a situation where a woman presents to a hospital that does not have the resources to provide the level of intervention necessary, the hospital and health care professionals will respond in the same way as they would for any unexpected medical emergency.

1.4 When antenatal transfers are necessary, the needs and requirements of the mother and fetus as well as the capacity of local resources and facilities should be considered in order to determine the most appropriate birthing hospital.

1.5 Transferring a woman and fetus is preferable to neonatal transport and should be the primary goal. The reason for transport may be related to the woman, fetus, or both.

1.6 When pre-labor complications are anticipated, early consultation with or without transfer of care to the appropriate hospital is recommended. It is preferable to avoid emergency maternal transport, if possible.

1.7 Transport is indicated when, after assessment and consultation, it is determined that the woman and/or the fetus requires the advanced resources and skilled health care professionals at a hospital that provides a higher level of care such as specialized obstetrical and surgical care and/or specialized neonatal care (see Appendix A: Service delivery model by level of hospital and Appendix B: Obstetrical Transport Decision Tree).
2. **Appropriate Induction of Labor**

2.1 Medical induction of labor by oxytocin is not recommended at a level 1A hospital, unless the following circumstances, recognized to be conducive to a favorable outcome, exist:

a) Gestational age of greater than 38 weeks;
   
   (i) primipara (primip); or
   
   (ii) multipara (multip) with previous uncomplicated vaginal delivery.

b) singleton fetus;

c) Bishop Score of equal to or greater than six (6);

d) A low antepartum risk score;

e) a back-up plan has been established with a level 1B or higher hospital;

f) the patient understands the risks associated with induction of labor and there is documented informed consent.

**Note:** Membrane sweeping, cervical ripening by cervidil or prostaglandin gel, insertion of cervical balloon and augmentation of already established labor is not included in the description of induction in this document.

3. **Preterm Birth**

3.1 Preterm infants have unique medical and nursing needs that require the specialized services available within a hospital with a neonatal intensive care unit appropriate to gestational age. Presentation of the women at risk for preterm birth within a level 1A, 1B, or 1C hospital, requires consultation between most responsible health care practitioner at that hospital and the consultant at the referral hospital.

3.2 **Early Preterm Birth** is defined as gestational age between 22\(\text{0/7}\) and 31\(\text{6/7}\) weeks.

a) Gestational age between 22\(\text{0/7}\) and 29\(\text{6/7}\) weeks are to be transferred to a level three (3) Neonatal Intensive Care Unit (NICU).

b) Gestational age between 30\(\text{0/7}\) and 31\(\text{6/7}\) weeks may be transferred to a level two (2) NICU if no level three (3) NICU beds are available or accessible.

3.3 **Preterm Birth** is defined as a gestational age between 32\(\text{0/7}\) and 33\(\text{6/7}\) weeks. Consultation and transfer of care to a facility with any level NICU is required.

3.4 **Late Preterm Birth** is defined as a gestational age between 34\(\text{0/7}\) and 36\(\text{6/7}\) weeks.
a) Gestational age between 34⁰/⁷ and 34⁶/⁷ weeks are to be transferred to a level two (2) NICU.

b) Gestational age between 35⁰/⁷ and 36⁶/⁷ weeks may be transferred to level two (2) NICU following consultation between most responsible health care practitioner at level one (1) hospital and neonatal/pediatric consultant at referral hospital. This population is at high risk for readmission if not cared for in a NICU.

3.5 Care of the late preterm infant is not recommended at a level 1A, 1B, 1C hospital without NICU support, unless the following circumstances, recognized to be conducive to a favorable outcome, exist:

a) Consultation with pediatric/neonatal specialist in higher level of care hospital.

b) The mother and infant is provided with dedicated nursing staff who have appropriate competency and access to resources to ensure enhanced monitoring and care of the late preterm infant.

(i) Appropriate competency for nursing staff required to care for a late preterm infant in a hospital without access to neonatal intensive care includes:

- current Neonatal Resuscitation Provider (NRP) certification;
- familiarity and access to the Acute Care of at-Risk Newborns (ACoRN) reference manual;
- health care provider indicates that they are skilled and confident to provide the appropriate care for the late preterm infant;
- approval and agreement of local manager; and
- late preterm infant specials needs have been discussed with the parent and documented informed consent to remain in the hospital without access to neonatal intensive care has been received.

c) There is a minimum mother and infant hospital stay of 72 hours. Prior to discharge the infant demonstrates effective:

(i) feeding;
(ii) respiratory;
(iii) thermoregulation;
(iv) gastrointestinal; and

(v) endocrine functioning.

### Summary of Recommended Care Locations

<table>
<thead>
<tr>
<th>Gestational Age (weeks)</th>
<th>Level 1A Hospital</th>
<th>Level 1B Hospital</th>
<th>Level 1C Hospital</th>
<th>Level 2 Hospital</th>
<th>Level 3 Hospital</th>
<th>Level 2 NICU</th>
<th>Level 3 NICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 0/7 to 29 6/7</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 0/7 to 31 6/7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 0/7 to 33 6/7</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 0/7 to 34 6/7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 0/7 to 36 6/7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4. Supporting Transfer

#### 4.1 The decision to transport a women and fetus, and/or neonate shall include (see Appendix B: Obstetrical Transport Decision Tree):

a) team collaboration including:

   (i) mother and family;

   (ii) sending hospital Physician;

   (iii) receiving hospital Physician;

   (iv) Referral, Access, Advice, Placement, Information & Destination (RAAPID);

   (v) EMS staff; and

   (vi) nursing staff from sending and receiving hospital.

b) ensuring that transport personnel have the appropriate expertise, technical skills, clinical judgment and equipment to provide proficient care for any emergency that may arise during transport; and

c) completion of cervical exam.

#### 4.2 Contraindications to woman, fetus and/or neonate transport include but are not limited to:

a) woman or fetus’ condition is unstable or threatening to deteriorate rapidly;

b) birth is imminent;
c) lack of attendants with necessary skills;

d) weather conditions are unsuitable for travel; or

e) risk of travel outweighs the risk of delivery at a level one (1) hospital.

4.3 Once decision to transport has been made, using Transport Decision Tree (Appendix B) and accessing RAAPID, effective communication must be established between sending and receiving health care providers.

a) The most responsible health care practitioner at the sending site must communicate with the most responsible health care practitioner who will be accepting care at the receiving site.

b) The most responsible health care practitioner at the sending site must ensure that the nurse supervisor on duty at the receiving site is aware of the patient’s expected time of arrival and condition upon transfer.

4.4 Health care providers involved in transport shall:

a) be able to monitor women, fetus and neonatal vital signs;

b) be able to assess and respond to changing conditions of the woman and fetus;

c) be able to perform neonatal resuscitation including cardiopulmonary resuscitation (CPR);

d) be able to initiate and administer intravenous (IV) therapy; and

e) be able to conduct an emergency birth.

4.5 Stabilize patient for transfer:

a) establish IV line;

b) administer medications as needed:

(i) antibiotics;

(ii) steroids (betamethasone);

(iii) tocolytic;

(iv) anti-hypertensive; and

(v) magnesium sulfate (MgSO4).
4.6 Complete Obstetrical Transfer Record:

   a) photocopy of prenatal record;
   b) ultrasound;
   c) prenatal lab results;
   d) current lab results;
   e) electronic fetal monitoring tracing;
   f) triage notes; and
   g) pertinent documents.

DEFINITIONS

Consultant means for the purpose of this document, Obstetrician, Neonatologist, Pediatrician or other obstetrical or neonatal specialist that has been requested to provide advice regarding the care of a patient(s).

Health care professional means an individual who is a member of a regulated health discipline, as defined by the Health Disciplines Act (Alberta) or the Health Professions Act (Alberta), and who practises within scope and role.

Health care provider means any person who provides goods or services to a patient, inclusive of health care professionals, staff, students, volunteers and other persons acting on behalf of or in conjunction with Alberta Health Services.

Most responsible health care practitioner means the health practitioner who has responsibility and accountability for the specific treatment/procedure(s) provided to a patient and who is authorized by Alberta Health Services to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within the scope of his/her practice.

Patient means an adult or child who receives or has requested health care or services from Alberta Health Services and its health care providers or individuals authorized to act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

REFERENCES

- Appendix A - Service delivery model by level of hospital
- Appendix B - Obstetrical Transport Decision Tree

VERSION HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX A

### Service delivery model by level of hospital

- **Level 1 A Hospital** = hospital with no operating room capability
- **Level 1 B Hospital** = hospital with 24/7 Operating Room (OR) and Cesarean section capability
- **Level 1 C Hospital** = hospital with 24/7 OR plus obstetrical specialist
- **Level 2 Hospital** = hospital with full obstetrics, surgical and pediatric services including L2 NICU
- **Level 3 Hospital** = hospital with full obstetrics, surgical and neonatal services including L2 & 3 NICU

### Community and Rural Maternal Services Intrapartum Pathway for Planned Birth

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Level 1A</th>
<th>Level 1B</th>
<th>Level 1C</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average risk obstetrics</strong></td>
<td></td>
<td></td>
<td></td>
<td>L1A, 1B, 1C, 2 or 3</td>
<td></td>
</tr>
<tr>
<td>37 to 40 or greater weeks gestation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned induction</strong></td>
<td>L1A, 1B, 1C, 2 or 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gestation of 38 weeks or greater, multip, Bishop score of 6 or greater, established back up plan with referral hospital and patient consent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned caesarean</strong></td>
<td></td>
<td></td>
<td>L1B, 1C, 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of 39 weeks or greater gestation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned induction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of labor 37 weeks or greater gestation with medical indication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Women presents to hospital in labor at assessment/triage area</strong></td>
<td>Professional judgement is used to assess maternal risk and need for consult and/or transfer to appropriate level of care facility.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consider consultation:</strong></td>
<td></td>
<td></td>
<td>L1B, 1C, 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abnormal presentation, atypical or abnormal fetal heart, dystocia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consultation and possible transfer</strong></td>
<td></td>
<td></td>
<td>L1 C, 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal tachycardia, maternal hypertension, urine protein 2+, pyrexia, significant vaginal blood loss, positive group B strep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consultation and transfer</strong></td>
<td></td>
<td></td>
<td>L2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preterm labor, caesarean less than 37 weeks, rupture of membranes greater than 24 hours, non-labor pain with other risks, multiple fetuses, intrauterine growth restriction, macrosomia, oligohydramnios or polyhydramnios.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transfer-Preterm labor-</strong></td>
<td></td>
<td></td>
<td>L3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 22 and 30 weeks gestation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If any of the factors above are observed but birth is imminent, assess whether birth in the current location is preferable to transferring the woman to alternate level site. Consider need for neonatal transport. Any plan for transport to be preceded by cervical exam and discussion with the health care team and EMS to determine risk of on route delivery.
APPENDIX B

Obstetrical Transport Decision Tree

**Maternal /Neonatal Indicators**
(List not all inclusive)
- Preterm Labor
- Preterm Rupture of Membranes
- Severe hypertension
- Antepartum Hemorrhage
- Medical Complications of Pregnancy
- Multiple Gestation
- Intrauterine Growth Restriction
- Fetal abnormalities
- Evidence of fetal compromise
- Failure to Progress
- Fetal Malpresentation
- Vaginal Birth after caesarean Section with no available Operating Room
- Maternal trauma
- Post-Partum Hemorrhage

**Resource Indicators**
Anticipated intervention indicates the need for induction, augmentation, epidural, assisted delivery or Operating Room back-up or additional staff to care for late preterm baby and there are no resources on site to address this need.

1. **Contact RAAPID to arrange consult between referring and receiving physicians/sites**
2. **Consult with Obstetrician on Call at transfer facility** to share above assessment and determine interim treatment and/or urgency of transfer. The Obstetrician notifies nursing unit of transfer. If gestation 32 weeks or less, Obstetrician to discuss with Pediatrician/Neonatologist on call prior to transport.
3. Referring site to collaborate with RAAPID to establish appropriate mode of transport based on identified indicators.
4. Stabilize patient for transfer
   - Establish IV line (18 gauge no saline lock) Administer medications: antibiotics, steroids, tocolytic, anti-hypertensive, magnesium sulfate (MgSO4) as indicated.
5. **Complete Obstetrical Transfer Record**
   - Attach photocopy of prenatal record, partogram, ultrasound, prenatal lab results, current lab results and electronic fetal monitoring tracing, triage notes and other pertinent documents.
6. Contact receiving hospital to give ETA and further report as necessary.
7. Notify patient’s family as necessary.

Refer to Appendix A for appropriate level of referral site.