

Revise the list of possible diagnoses as you integrate new data, excluding conditions that are not consistent with the facts and retaining those that are (Hirsch, 2020). Likely diagnoses are ranked in order of probability; as the aphorism goes: “If you hear hoofbeats, think horses, not zebras” (Hirsch, 2020). Occam’s Razor, a classic problem-solving principle, maintains that if there are several explanations for an occurrence, the simplest is most likely to be accurate. In other words, more assumptions or additional hypotheses can make your impressions less accurate.

Transfer and Referral

Hospital transfer is not a failure, but a change of plans necessitated by a change of condition. Although hospital transfer is often disappointing and anxiety-provoking for the mother, the family, and the midwife, it should not be an unanticipated event. Upon intake into a practice that offers community birth, the mother and any support people should be informed of the possibility of transfer and what the process might involve (Home Birth Summit, 2014). Seamless coordination of care during obstetric transfers improves outcomes and reduces stress for clients and providers alike.

The Chain of Support

Ideally, all participants in the birth form a chain of support which includes the mother and any support people, the midwife and any assistants, emergency medical personnel, local hospital personnel, and tertiary hospital personnel. Community birth involves the first two links in the chain. Participants should be prepared to access other links if complications arise.

A strong chain consists of strong links. Good candidates for community birth strive to keep themselves healthy and comply with recommendations from their providers. They are knowledgeable about their options and the risks and benefits of each choice. The midwife’s team forms the second link in the chain by bringing knowledge, support, perspective, and experience to the family. If a significant complication occurs, EMS can transport the mother and/or infant in a controlled environment with medical supervision—ideally, accompanied by the midwife. The local hospital stands ready to receive emergencies with helpful staff and physicians prepared to provide compassionate, expert intervention as needed—ideally, comanaged by the midwife or with the midwife present for support and advice. In the case of an emergency beyond the capabilities of the local hospital, a regional medical center provides the highest-level and most definitive medical interventions as needed. Good outcomes are more likely if all mothers and their support people are treated with respect, regardless of choice of birthplace, and the providers who manage their care work together in an atmosphere of professionalism, collaboration, and mutual regard (Davis-Floyd, 2003).

Communication in an Emergency

There is never a good time to give bad news. Critical information must be communicated immediately, regardless of the circumstances, but certain details and noncrucial decision-making can be deferred or discussed after the family has processed the initial emotional blow. Communicate sensitive information directly to the client, ideally in a private location without interruptions. Position yourself at the client’s level and make eye contact, giving nonverbal cues that communicate respect, concern, and empathy. Avoid discussing sensitive or emotionally charged matters when the client is undressed or otherwise in a physically or emotionally vulnerable situation.

In most cases, clear, empathetic communication and underlying trust increase the client’s acceptance of an often disappointing and unsettling change of plans. When preparing for

Table 3-2

Taking a History Using GOLDCART



Ask the client about

General situation and history—How many weeks pregnant are you? Do you have any pregnancy complications or other health issues? How many pregnancies and how many babies have you had?

Is the baby moving? Have you had an ultrasound? Have you had any cesarean sections or other uterine surgeries?

Onset—When did the problem start? What were you doing? Was the onset gradual or rapid? In what order did the symptoms occur?

Location—Where does it hurt? Did the pain start there or has it moved? Is it localized, or does it radiate?

Duration—How long have you had the symptoms? Do they come and go? Have you experienced them before? Frequency of the pains?

Characteristics—What is the quality of the pain? Is it sharp or dull? On a scale of 0–10, 10 being the worst pain you ever had and 0 being no pain at all, what number would you give this pain?

Associated symptoms—What other symptoms are you experiencing?

Relieving/aggravating factors—What makes your symptoms better? What makes them worse?

Treatment—Have you treated the symptoms (with medications, herbs, remedies, hot soaks, etc.)? Did the treatment help or make things worse?

transport, explain to the client why you think transfer is necessary and discuss the risks, benefits, and alternatives to your proposed management options. Answer any questions, and, if time permits, allow the family to discuss the matter privately. Discuss the expected course of events that will occur upon arrival at the hospital. For example, if the client is being transferred for a mentum-posterior face presentation, explain that a cesarean section is required for birth and discuss the usual process, which can include having blood drawn, continuous fetal monitoring, IV fluids, an infusion of antibiotics, insertion of a bladder catheter, and spinal anesthesia. Although shared decision-making is the optimal model in most circumstances, in emergencies the focus is on providing care first and discussing it afterwards (N. Tharpe, personal communication, February 25, 2018).

In a crisis, your words and actions will leave an indelible imprint. What you say and how you say it can remain with the client for life. Use clear language and assess for understanding. Be honest and direct, but do not overwhelm the client with too much information. Offer hope if there is any, but

not false hope lest you undermine your credibility and set them up for a harder fall later. You can tailor your discussion to their knowledge gaps by asking open-ended questions, such as, “What do you know about high blood pressure in pregnancy?”

A situational crisis is an unexpected event or situation that causes stress and disruption and overwhelms a client’s ability to cope. Even when an event is not inherently catastrophic, a client may perceive the situation as traumatic and experience a crisis response (Kavan et al., 2006). For example, the experience of a cesarean birth can be fulfilling for a mother who anticipates it or calamitous for a mother who had yearned for a low-intervention birth or who fears hospitals. Clients in crisis can become emotionally numb and have difficulty processing information. If they do not understand your explanations, you need to repeat them several different ways. Some people cope with crisis by focusing on data, identifying and solving problems, and forming a plan of



Organize your initial impressions using

FIRST THOUGHT, WORST THOUGHT:

What is the most likely cause?

What is the worst it could be?

Table 3-3
Danger Signs in Pregnancy and Possible Causes

Sudden gush of fluid	Prelabor rupture of membranes, urinary incontinence, vaginal infection.
Vaginal bleeding	Placenta previa, placental abruption, bloody show, polyps, ectropion, trauma, or lesions of the cervix or vagina. Sometimes a mother will spot after a recent vaginal examination or sexual intercourse.
Abdominal pain	Preterm labor (PTL), placental abruption, appendicitis, round-ligament pain, gallbladder inflammation, urinary tract infection (UTI), renal calculi, hydronephrosis, or pancreatitis.
Dizziness	Hypotension or hypertension, medications, hypoglycemia, hot environment, inner ear issues, or generalized illness..
Visual disturbances	Preeclampsia, stroke, retinal detachment, presyncope, migraine, ocular disorder.
Severe vomiting	Gastroenteritis, appendicitis, pyelonephritis, COVID-19 or other infective disorder; hyperemesis gravidarum head injury; anxiety; medication reaction; or other condition.
Edema of hands, feet, or face	Preeclampsia. (Mild pedal edema is often normal in pregnancy.)
Severe headache	Can be related to preeclampsia or can result from tension, migraine, head injury, brain tumor, or other causes.
Severe leg pain	Thrombophlebitis, leg cramps, or trauma.
Seizure	Eclampsia, preexisting seizure disorder, or head injury.
Epigastric pain	Preeclampsia, gallbladder inflammation, or heartburn.
Reduced urine output	Preeclampsia, poor fluid intake, or renal dysfunction.
Painful urination	UTI or vaginal or vulvar infection.
Absence of or decrease in fetal movement	Fetal compromise or death, maternal distraction, drug effects, or abnormalities in amniotic fluid level.
Preterm contractions	Preterm labor; can also be triggered by UTI, dehydration, or uterine irritability.
Elevated temperature, chills	Viral or bacterial infection.

action. Others process information emotionally and seek solutions that “feel” right. Tune into your client’s coping strategies and provide appropriate guidance and support.

Families involved in emergencies often experience various stages of grief (Baker, 2020; Collini, Parker, & Oliver, 2021). Initially they might have trouble believing that there is truly an emergency. Next, they might feel guilty or think that they have somehow failed. They may assume they are somehow responsible or, conversely, blame others. They might talk about the situation at every opportunity or withdraw and remain silent. Sometimes anger, depression, or harsh self-judgment set in. They can feel cheated. Often, they feel as if they were the only ones who ever had to face this circumstance. Sometimes the family holds the provider responsible for the outcome or harbor justified or unjustified resentment and hostility. Often clients become bitter toward themselves, family members, God, the universe, or Fate.

It can be difficult when angry clients reject emotionally invested midwives, and it can be difficult to remain kind and supportive in the face of hostility. In this situation, your response should be an authentic expression of who you want to be in that moment, not a reflexive reaction to anger

or rejection (N. Tharpe, personal communication, February 25, 2018). Antepartum discussions can be instrumental in helping families understand that adverse outcomes can occur and can cultivate adaptability in working with unexpected situations (N. Tharpe, personal communication, February 25, 2018).

Timely Transport

Whenever a client is transferred from a community setting to higher level care, time is lost through transportation and initiating care in the hospital. If transfer is emergent, delays can (rarely) be deadly. Delays can occur at any of three stages in transfer: in the decision to transport, in reaching an appropriate facility, and in receiving adequate care at that facility (Pacagnella, Cecatti, Osis, & Souza, 2012). Delays can also occur if a midwife fails to recognize a problem, is slow to initiate an intervention, or fails to assess the effectiveness of the intervention (N. Tharpe, personal communication, February 25, 2018).

Getting the client to the hospital often involves arranging transportation or stabilizing the client in an ambulance. Travel time can be affected by distance, traffic, weather, and law-enforcement operations. At the hospital, certain procedures and processes can delay definitive care. For example, preparing a client for an urgent cesarean section usually includes gowning, signing consent forms, starting electronic fetal monitoring, placing IV and bladder catheters, taking blood samples, readying the operating suite,

convening a multidisciplinary surgical team, initiating anesthesia, giving medications, and disinfecting and

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draping the abdomen. Treatment can be further delayed by waiting for the arrival of key personnel taking call from home. The interval from problem onset to birth can also depend on obstetricians' willingness to act on the information provided by midwives.

The time delay between decision to transport and obtaining definitive care at the hospital can be significant and varies by location. In most cases, these delays do not appear to affect outcomes (Grigg, Tracy, Tracy, Schmied, & Monk, 2015). A study of 11,869 planned home births in Ontario, Canada, found no increased risk of adverse outcomes when births occurred more than 30 min from a hospital (Darling, Lawford, Wilson, Kryzanas, & Bourgeault, 2019).

Certain rare, time-sensitive emergencies can have worse outcomes when they occur in a community setting (Grünebaum et al., 2019). An emergency involving anoxia (such as umbilical cord prolapse with compromised oxygenation) can result in irreversible damage or death with even a short delay before cesarean birth (Boehm, 2012; Caughey & Cheyney, 2019). Wong and colleagues (2021) found that when cord prolapse results in fetal bradycardia, cord arterial pH deteriorates rapidly (0.009/min); the risk of significant acidosis (pH below 7) is 80% when bradycardia-to-birth interval is longer than 20 min, and 17.2% when the interval is shorter. When clients plan to give birth in settings that are remote from a hospital, the midwife should explain if an unforeseen catastrophic complication occurs, mother or infant might be less likely to survive (Declercq & Stotland, 2024).

Guidelines for care in a hospital typically recommend 30-min decision-to-incision intervals for emergent cesarean births—but this standard is unsupported by evidence and was arbitrary in origin (Grobman et al., 2018; Mooney, Ogrinc, & Steadman, 2007; Nageotte, 2014; Nasrallah et al., 2004). In fact, Bousleiman et al. (2022) found that overall, the best outcomes for emergent cesarean births occurred over a wide range of intervals from 21 to greater than 50 min. Some fetuses with abnormal heart rate tracings appear to benefit from delays in decision-to-incision; these delays can

provide time for the implementation of intrauterine resuscitation measures which allow the fetus to stabilize before birth (Boehm, 2012). Conversely, some obstetric emergencies, such as ruptured vasa previa, can unavoidably result in adverse outcomes regardless of the interval (de Regt, Marks, Joseph, & Malmgren, 2009). With other problems, such as a fetal malpresentation in latent labor, moderate delays sometimes neither increase nor decrease risk. Some hospitals, such as small rural ones with surgical teams that take call from home, have difficulty meeting the 30-min standard (de Regt et al., 2009; Mooney et al., 2007).

A midwife attending a healthy client two blocks from a tertiary hospital can feel justified in adopting a wait-and-see attitude when minor deviations from normal arise. The same midwife may opt to transfer at the earliest sign of a problem if the hospital is more than 15–20 min from the planned birthplace, if environmental conditions such as flooding or snowfall increase transport time, or if the client's issues hold the potential for severe compromise. When roads are impassable, as in a blizzard or flood, the midwife may decide to divert all labors to a hospital rather than risk encountering an emergency with no ability to transfer.

Levels of Maternal and Neonatal Care Facilities

Mothers who experience major medical and obstetric complications and infants that are extremely preterm or otherwise compromised have better outcomes when they are born at a hospital with clinical expertise and specialized care (California Dept. of Public Health, 2011). Newborns can be transported to a higher-level facility if they require care beyond the capabilities of the local hospital. A hospital with level I neonatal care facilities can provide a basic level of care to neonates who are low-risk, perform neonatal resuscitation, care for preterm infants at 35 0/7–37 0/7 weeks of gestation who are physiologically stable, and stabilize newborns that are ill or who are less than 35 0/7 weeks of gestation until they can be transferred to a facility capable of specialty neonatal care (Committee on Fetus and Newborn [COFAN] et al., 2012). A hospital with a level II neonatal care facilities can generally provide care to stable or moderately ill neonates who are born at 32 0/7 weeks of gestation or greater or who weigh at least 4 lb 5 oz (1,500 g) at birth (COFAN et al., 2012). A level III facility offers the full range of maternal and neonatal services and can provide care for certain critically ill infants. Level IV units include the additional capabilities for managing the most complex and critically ill newborn infants, have pediatric specialty consultants always available, and the capability for surgical repair of complex conditions (COFAN et al., 2012).

In 2015, the ACOG and the Society for Maternal-Fetal Medicine jointly developed a consensus document, *Levels of Maternal Care*, that was endorsed by major obstetric and midwifery organizations in the United States (ACOG, 2019/2021). Notably, this system omits home birth. The attending midwife and the consulting physician can determine together which local and regional hospitals offer the services each client requires.

The following lists the levels for maternal care facilities, from low to high acuity (ACOG, 2019/2021):

Accredited birth center: Able to care for low-risk clients with uncomplicated singleton term vertex pregnancies who are expected to have uncomplicated births.

Level I facility: Can manage uncomplicated pregnancies and clients with higher risk conditions such as uncomplicated twin gestation, trial of labor after cesarean, uncomplicated cesarean birth, preeclampsia, or well-controlled gestational diabetes. Can also stabilize clients for transfer to a higher level of care.

Level II facility: Has all capabilities of a level I facility but can also manage moderate-to-high-risk antepartum, postpartum, or newborn conditions such as placenta previa with no prior uterine

surgery, anticipated complicated cesarean birth, and maternal medical conditions that require additional monitoring (e.g., pregestational diabetes, poorly controlled asthma, poorly controlled or complicated chronic hypertension).

Level III facility: Has all capabilities of a level II facility but can also manage more complex maternal conditions, obstetric complications, and fetal conditions such as moderate maternal heart disease, suspected placenta accreta or percreta, placenta previa with previous uterine surgery, acute respiratory distress syndrome or other conditions that require ventilatory support, acute fatty liver of pregnancy, coagulation disorders, complex hematologic or autoimmune disorders, or expectant management of preeclampsia with severe features remote from term.

Level IV facility: Has all capabilities of a level III facility but also provides onsite medical and surgical care for the most complex maternal conditions and critically ill mothers and fetuses throughout the antepartum, intrapartum, and postpartum period, such as severe maternal cardiac conditions, severe pulmonary hypertension, clients who require neurosurgery or cardiac surgery, or clients in unstable condition and in need of an organ transplant.

Initiating a Transfer

Every midwife should know whom to call and how to send client records in the case of hospital transfer. Ideally, the midwife accompanies the client during transport and provides skilled care *en route* within local EMS standards (ACNM, 2015). Failure to accompany the mother during transfer can constitute client abandonment (ACNM, 2015). If EMS guidelines prohibit midwives from accompanying the client, they can travel to the hospital by other means to transfer care and support the client (ACNM, 2015).

Ineffective care transitions can result in misunderstandings that can harm the client. Research has shown that more than two thirds of adverse events and serious errors involve poor communication during the handoff between health care providers (Barry, 2014; Joint Commission, 2012). Miscommunication is especially likely when the client transfers from one setting to another, such as from home to hospital.

The SBAR Tool

The SBAR (Situation, Background, Assessment, Recommendation) report is a standardized framework to guide the transfer of care from one provider to the next (Maine Center for Disease Control & Prevention, 2014). Originally developed by the United States Navy to improve communication on nuclear submarines, the SBAR format allows the provider to organize thoughts quickly and focus on key information (Stewart, 2016). To give an SBAR report, quickly organize the information into four elements: situation, background, assessment, and recommendations. In 8–12 sec, convey the level of urgency, stating the most serious problem first and your client's immediate needs. Fill in the relevant background and the events leading to the current issue. Conclude by making a recommendation for ongoing care to serve as a starting point to discuss solutions. Give the receiver the opportunity to ask questions and clarify information.

In many localities, the midwife will take the following steps to initiate transport (ACNM, 2015; Finn et al., 2015; Home Birth Summit, 2014; Midwives' Association of Washington State [MAWS], 2011; Vedam et al., 2014):

1. If the transfer is an emergency, call EMS, give a concise synopsis of the situation or SBAR report, and provide detailed instructions on how to reach your location. You can have a birth assistant or family member place the call. If the telephone is on speaker, you can give information while taking care of the client. Transfers for emergencies are usually to the nearest

hospital with the capacity to manage an obstetrical or neonatal emergency. Other transfers may bypass the nearest hospital to reach one with a level 4 NICU or a maternity department appropriate for managing high-risk clients, one where the referring midwife has privileges, or one of the client's choosing. Whenever possible, the midwife should collaborate with the EMS team to manage the client *en route* and address any emotional and social needs during transport (Finn et al., 2015).

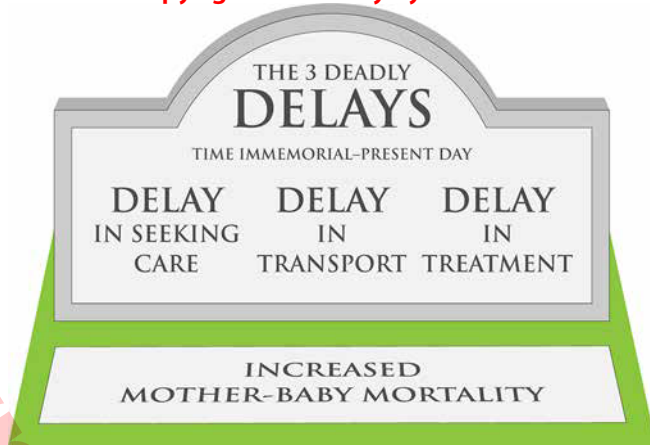


Figure 3-6. The Three Deadly Delays. Adapted from (1) "Overview of Maternal Mortality," by H. L. Brown and M. J. Small, 2022, in A. Chakrabarti (Ed.), *UpToDate*. Copyright by UpToDate. (2) "The Role of Delays in Severe Maternal Morbidity and Mortality: Expanding the Conceptual Framework," by R. C. Pacagnella, J. G. Cecatti, M. J. Osis, and J. P. Souza, 2012, *Reproductive Health Matters*, 20(39), pp. 155–163. Copyright by Reproductive Health Matters.

2. Call the receiving practitioner and state that you would like to transfer your client to their facility. If you do not know who the accepting provider will be, call the labor and delivery (L&D) unit and ask who is on duty and how to make contact. Some hospitals put all involved parties (community midwife, physician, charge nurse, neonatologist, hospital midwife, et al.) together on a conference call. Give an SBAR report, which includes the reason for transport, mode of transport, the client's condition, brief obstetrical history, brief medical and surgical history, ETA, and any other significant information that would help the hospital prepare for the transfer (Home Birth Summit, 2014). Identify what services might be required, for example neonatal intensive care or a medical translator. You can offer an anticipated management plan, for example, "She will probably need an epidural for pain management and exhaustion and oxytocin augmentation to strengthen ineffective contractions, but I believe she is still a good candidate for a vaginal birth." Ask whether the provider requires any more information before ending the call.
3. If not already addressed via conference call, contact the L&D department of the receiving hospital, state your name and that you have a client to transfer, and ask whom you should give report to—usually a triage or charge nurse. Give clear information about the client, including date of birth, reason for transfer, and ETA. Provide a concise overview of the situation and ask whether more information is required. If possible, fax prenatal and labor records to the receiving hospital.
4. The midwife should accompany the client into the hospital, records in hand, and give a professional, face-to-face report to the receiving providers. Sometimes midwives who have hospital privileges continue as primary maternity care providers in collaboration with the receiving physician. If the midwife does not have privileges or if the client's condition exceeds the midwife's scope of practice, care is transferred to the receiving provider and the hospital staff. Thereafter, the midwife's role changes from primary provider to companion or support person who may remain at the bedside if the mother chooses (Home Birth Summit, 2014; Washington State Perinatal Collaborative [WSPC], 2015).