## Speed and risks of hospital transfer

### Why transfer speed matters in birth care

Hospital transfer in birth care is usually intended to match a person's clinical needs with the safest available resources. A transfer may be needed for continuous fetal monitoring, operative birth, blood products, anesthesia, adult intensive care, or NICU admission for the newborn. In many situations, transfer is precautionary rather than catastrophic. However, when hemorrhage, severe hypertension, suspected sepsis, cord prolapse, placental abruption, uterine rupture, maternal respiratory compromise, or fetal heart rate abnormality is present, delayed movement to definitive care can rapidly narrow the margin of safety.

Evidence from broader inter-hospital transfer research is relevant because it highlights a consistent safety principle: delays are not neutral. Reports have found that transfers may exceed recommended time windows, and delays can contribute to preventable harm when the sending facility cannot provide the needed level of care. In trauma and critical illness systems, a commonly discussed benchmark is rapid transfer within a defined window, yet real-world transfer times may be substantially longer because of bed availability, ambulance access, acceptance delays, and incomplete information exchange.

In obstetrics, the clock can be equally unforgiving. Postpartum hemorrhage can progress from heavy bleeding to shock; severe preeclampsia can evolve into seizure, stroke, pulmonary edema, or organ dysfunction; infection can become sepsis; fetal compromise can worsen if intrauterine resuscitation fails. The key is not panic, but readiness. A team that recognizes deterioration early, activates transport promptly, and communicates clearly gives the receiving hospital time to prepare an operating room, blood bank support, neonatal team, or critical-care bed.

**The risk is not only the drive: what can go wrong during transfer**

Families often imagine transfer risk as the distance between two locations. Distance matters, but many hazards occur before the vehicle moves or after arrival. A transfer can be delayed while clinicians search for an accepting hospital, clarify whether the receiving service has capacity, arrange an ambulance with the right skill level, copy records, or transmit imaging and laboratory results. During this interval, the patient’s condition may change.

Transport itself also has clinical limitations. Monitoring may be less comprehensive than in a labor room, operating suite, emergency department, or intensive care unit. Medication access may be limited. Positioning, intravenous access, oxygen delivery, fetal monitoring, and neonatal support require planning. If birth is imminent, ambulance transport during labor may need a crew prepared for delivery en route and immediate newborn assessment. If the postpartum patient is unstable, the transport team must understand bleeding risk, blood pressure status, airway concerns, and the possibility of rapid decompensation.

Miscommunication is a major preventable risk. Patient safety frameworks for inter-hospital transfer emphasize standardized handoff templates, clear transporter responsibilities, centralized transfer processes, and quality metrics for near-misses and adverse events. In maternity care, the minimum handoff should include gestational age, parity, relevant diagnoses, allergies, medications, vital signs, fetal status if applicable, estimated blood loss, intravenous access, laboratory data, blood type and antibody status, treatments already given, and the reason transfer is needed now. A receiving team cannot prepare effectively for an emergency cesarean, hemorrhage protocol, magnesium therapy, antibiotics, or neonatal resuscitation if the story arrives incomplete.

## Balancing rapid departure with stabilization

A common misconception is that the safest transfer is always the fastest possible departure. Sometimes that is true: for example, if a birth setting cannot provide surgical delivery and there is persistent severe fetal compromise, delay may be dangerous. But in other situations, a brief period of stabilization before transport can be lifesaving. Stabilization does not mean unnecessary waiting; it means addressing reversible threats before moving into a less controlled environment.

Examples include securing intravenous access, starting fluid or blood product protocols when indicated, giving medications ordered by clinicians, improving oxygenation, treating severe-range blood pressure, positioning the patient to reduce aortocaval compression, administering uterotonic therapy for hemorrhage, or initiating antibiotics when infection is strongly suspected. In a newborn transfer, stabilization may include warming, glucose management, respiratory support, and communication with a neonatal team.

The challenge is clinical judgment. A sending team must decide what can be done quickly and safely on site, what must not delay definitive care, and what resources the transport team can continue en route. This is why transfer criteria should be explicit before an emergency occurs. Birth centers, home birth teams, rural hospitals, and smaller maternity units should have written pathways for common high-risk scenarios, including hemorrhage, hypertensive emergency, shoulder dystocia aftermath, retained placenta, maternal collapse, preterm labor, ruptured membranes with concern for infection, and nonreassuring fetal status.

For families, it is reasonable to ask in advance: "What situations trigger transfer?" "Who calls the ambulance or receiving hospital?" "Which hospital would accept us?" and "What care can be provided while we are waiting?" These questions are not confrontational; they are part of shared safety planning.

## Higher-risk clinical scenarios

Some diagnoses carry particularly high risk during inter-hospital transfer. In a large study of transferred patients, sepsis, respiratory failure, and cardiac

arrest were among the diagnoses most associated with early mortality. Although that research was not limited to obstetrics, the categories are highly relevant to pregnancy and postpartum care. Pregnancy changes cardiovascular, respiratory, and immune physiology, and postpartum deterioration can be subtle at first.

Postpartum sepsis warning signs may include fever or low temperature, rigors, severe abdominal or pelvic pain, foul-smelling discharge, rapid heart rate, low blood pressure, confusion, worsening weakness, or feeling profoundly unwell. Respiratory symptoms require equal caution. Difficulty breathing in pregnancy or after birth can reflect benign causes, but it can also signal pulmonary embolism, severe anemia, pulmonary edema from preeclampsia, pneumonia, asthma exacerbation, cardiomyopathy, or anaphylaxis. Heavy bleeding, dizziness, fainting, chest pain, seizure, severe headache with visual symptoms, and one-sided weakness should be treated as urgent.

Transfer decisions can also involve the fetus or newborn. A facility may transfer a pregnant patient because preterm birth appears likely and the baby may need higher-level neonatal support. Whenever possible, antenatal transfer before delivery is often preferable to neonatal transfer after birth, because the uterus is a protective transport environment and the neonatal team can be ready at delivery. That said, urgent maternal indications may override ideal timing, and decisions must be individualized by the clinical team.

Hemorrhage deserves special mention. A person with ongoing heavy bleeding may require uterotonics, tranexamic acid, uterine procedures, surgery, interventional radiology, or blood loss requiring transfusion. If these resources are not available locally, transfer planning must account for the risk of deterioration en route and the need for rapid blood bank activation on arrival.

### Communication, consent, and goals of care

Good transfer care includes more than logistics; it includes informed communication. Studies of inter-hospital transfer have identified a troubling gap in documented goals-of-care discussions before transfer. In birth care, the phrase "goals of care" does not apply only to end-of-life decisions. It also means understanding what the patient values, what interventions may become

necessary, what alternatives exist, and what trade-offs are being made because of time or resource constraints.

In an emergency, consent may be abbreviated because immediate action is needed to prevent serious harm. Even then, clinicians should communicate plainly: what is happening, why transfer is recommended, what the main risks are if transfer is delayed, what may happen during transport, and who will receive the patient. When time allows, discussion should include pain control, support person policies, fetal monitoring, likelihood of cesarean or operative delivery, neonatal team involvement, and whether personal preferences can still be honored.

Standardized information exchange reduces error. Ideally, the sending clinician gives a direct verbal handoff to the accepting clinician, not only to an administrative coordinator. Documentation should travel with the patient or be transmitted electronically, including prenatal records when relevant. Radiology images, laboratory results, medication administration times, cultures, operative notes, and estimated arrival time can change immediate management. A centralized transfer center can help, but it should not replace clinician-to-clinician communication for unstable patients.

Families can support communication by keeping a concise medical summary available, especially when planning birth outside a tertiary hospital. Useful details include due date, major pregnancy complications, prior cesarean or uterine surgery, medications, allergies, blood type if known, group B streptococcus status if known, and emergency contacts. This does not make the family responsible for the system; it simply adds redundancy when minutes matter.

## Planning before labor or before discharge

A hospital transport plan for labor is most valuable when it is specific. "We will transfer if needed" is not enough. A stronger plan names the destination hospital, backup destination, expected travel time, who activates transport, whether private car is ever appropriate, when emergency services should be used, and what records or supplies accompany the patient. It should also address after-hours entrances, rural weather or traffic barriers, childcare for other children, and how the support person will travel if they cannot ride in

the ambulance.

For planned community birth, ask how often the practice transfers, for what reasons, and how collaborative relationships work with local hospitals. For smaller hospitals, ask which conditions require transfer to a higher-level center, whether obstetric anesthesia is continuously available, how blood products are accessed, and what neonatal capabilities exist. These questions are especially important for people with prior cesarean birth, placenta concerns, hypertensive disorders, diabetes requiring medication, multiple pregnancy, fetal growth restriction, preterm labor risk, significant anemia, or complex cardiac, respiratory, neurologic, or clotting conditions.

Postpartum planning is just as important. Many severe complications occur after discharge, when families may be tired and unsure whether symptoms are normal recovery. Discharge instructions should clearly state when to call the maternity unit, when to seek same-day urgent hospital assessment in pregnancy or postpartum care, and when to call emergency services. A patient who is deteriorating should not be asked to navigate multiple phone calls without clear escalation.

The goal of planning is not to make birth feel medicalized or fearful. It is to preserve calm by reducing uncertainty. When everyone knows the triggers, route, receiving facility, and communication pathway, transfer can be faster, safer, and less traumatic.