

Neonatal Resuscitation

Clinical Bulletin: **Newborn Delivery Attendance Guidance**

The purpose of this document is to provide guidance for safe obstetrical delivery practices that focus on the initial management of newborns, providing evidence based and team-based care through the provision of expert neonatal resuscitation teams. This document defines and provides guidance for newborn delivery attendance and neonatal resuscitation teams for all facilities that provide OB services.

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Overview

Background

- » Many centers have developed systematic criteria and expectations for newborn resuscitation teams at deliveries. A comprehensive review and consolidation of evidence-based practices and recommendations professional societies were undertaken to establish enterprise-wide standards for care models.

Objective

- » This initiative aims to standardize our approach across all centers, significantly enhancing the quality and efficiency of care provided to our most vulnerable patients. This bulletin provides critical guidance for developing a local neonatal resuscitation team policy that includes the following:
 - Establish clear criteria for stratifying patients by varying risks
 - Identify care teams attending delivery based on risk level
 - Defining specific roles and responsibilities for each care team member
 - Creating a clear, effective communication and notification plan

Newborn Delivery Attendance Guidance

Purpose

To provide a mechanism to stratify patients of varying risk and provide prompt organized and skilled resuscitation for newborns in alignment to neonatal resuscitation program (NRP) guidelines established by the American Academy of Pediatrics (AAP).

Policy Development

Neonatal resuscitation is a complex teams-based procedure that requires specialized skills. Processes should be built around evidence-based approaches and recommendations. These processes and associated roles should be defined at the local level in alignment to any state issued requirements in conjunction with AAP guidelines and recommendations. Facilities must review their policy around newborn delivery attendance and ensure that the following components are incorporated and defined in their current policy. Essential components of safe newborn delivery attendance and resuscitation should include the following:

Establish clear criteria for stratification of patients with varying risks

- » According to NRP the following antepartum and intrapartum risk factors are recognized. These factors should be included in stratifying risk, but facilities may consider and define additional risk factors per local community standards¹.
- » Antepartum
 - Gestational age < 36 and 0/7 weeks
 - Gestational age \geq 41 weeks
 - Pre-eclampsia or eclampsia
 - Maternal hypertension
 - Multiple gestation-one team per baby
 - Fetal anemia
 - Polyhydramnios/Oligohydramnios
 - Fetal hydrops
 - Fetal macrosomia
 - Intrauterine growth restriction
 - Significant fetal malformations or anomalies
 - No prenatal care
- » Intrapartum
 - Emergency Cesarean section delivery
 - Vacuum or Forceps Assisted Delivery
 - Breech or other abnormal presentation
 - Category 2 or 3 fetal heart rate pattern
 - Maternal general anesthesia
 - Maternal magnesium therapy
 - Placenta abruptio
 - Intrapartum bleeding
 - Chorioamnionitis
 - Opioids administered to mother within four hours delivery
 - Shoulder dystocia
 - Meconium stained delivery
 - Prolapsed umbilical cord

Identify care teams attending delivery according to risk

- » Define delivery team (NRP certified individuals), associated competencies and ongoing competency expectations to include mock scenarios or simulation-based training.
- » According to NRP recommendations^{1(p16)}:
 - Every birth should be attended by at least one qualified (NRP certified) individual, skilled in the initial steps of newborn care and positive-pressure ventilation (PPV), who can initiate resuscitation and whose only responsibility is management of the newborn baby
 - If risk factors are present, at least two qualified individuals should be present solely to manage the baby. The number and qualifications of these individuals will be determined by the risk factors.
 - A qualified team with full resuscitation skills, including endotracheal intubation, chest compressions, emergency vascular access, and medication administration, should be identified and immediately available for every resuscitation. The fully qualified resuscitation team should be present at the time of birth if needed for the advanced resuscitation measures is anticipated. All supplies and equipment necessary for complete resuscitation must be readily available and functional for every birth.

Define roles for each care team member

- » Defining roles
 - Identify a team leader
 - Assign roles and responsibilities. Clear role assignment is important in large resuscitation teams to ensure clarity, efficiency, and to avoid duplication.
 - Delegate tasks (for example who is competent to manage the airway, who will document events as they occur)

Establish a clear communication and notification plan

- » Communication
 - Define and use consistent terminology for "at risk" deliveries and related procedures. Clearly outline who is responsible for initiating and managing communication at each stage of the delivery process. Establish protocols for documenting communications to ensure accountability and traceability.
 - Unit specific – establish communication practices for known “at risk” deliveries in shift reports, physician to physician consultations, safety huddles and multidisciplinary disciplinary rounds
 - Unit notifying the supporting clinical disciplines – establish communication practices for known “at risk” deliveries at the beginning of each shift to supporting clinical disciplines such as anesthesia, respiratory therapy and any other disciplines that may be needed for support at time of delivery (example to include C- section considerations)
- » Notification
 - Establish a notification process for impending “at risk” deliveries to ensure timely arrival of appropriate team members
 - Establish a notification process for neonatal codes and emergencies at or after delivery to ensure timely arrival of appropriate team members

References

1. Weiner GM, Zaichkin J (eds). *Textbook of Neonatal Resuscitation*. 8th ed. American Academy of Pediatrics (AAP); 2021:15.

Resources

- » Neonatal Delivery Attendance Sample Policy | *Mission Hospital* | [link](#)
- » Neonatal Delivery Attendance Sample Policy | *Medical City Arlington* | [link](#)
- » Neonatal Delivery Attendance Sample Policy | *Mountainview* | [link](#)
- » Knowledge Center Summary | *Clinical Evidence Surrounding Neonatal Intensive Care Unit (NICU) Resuscitation Team Activation Criteria* | [link](#)

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