

LOW BIRTH WEIGHT INFANTS

Realize and Revitalize:
Embracing Maternal and Child Health
June 25, 2025



Objectives

- ▶ Identify managements for Newborn Low Birth Weight (LBW) infants
- ▶ Discuss needs for LBW infants following birth
- ▶ Discuss discharge planning needs for LBW infants

Definitions

BIRTH WEIGHT DESCRIPTORS

- ▶ Low Birth Weight (LBW)
 - ▶ Birth weight less than 2500g
- ▶ Very Low Birth Weight (VLBW)
 - ▶ Birth weight less than 1500g
- ▶ Extremely Low Birth Weight (ELBW)
 - ▶ Birth weight less than 1000g

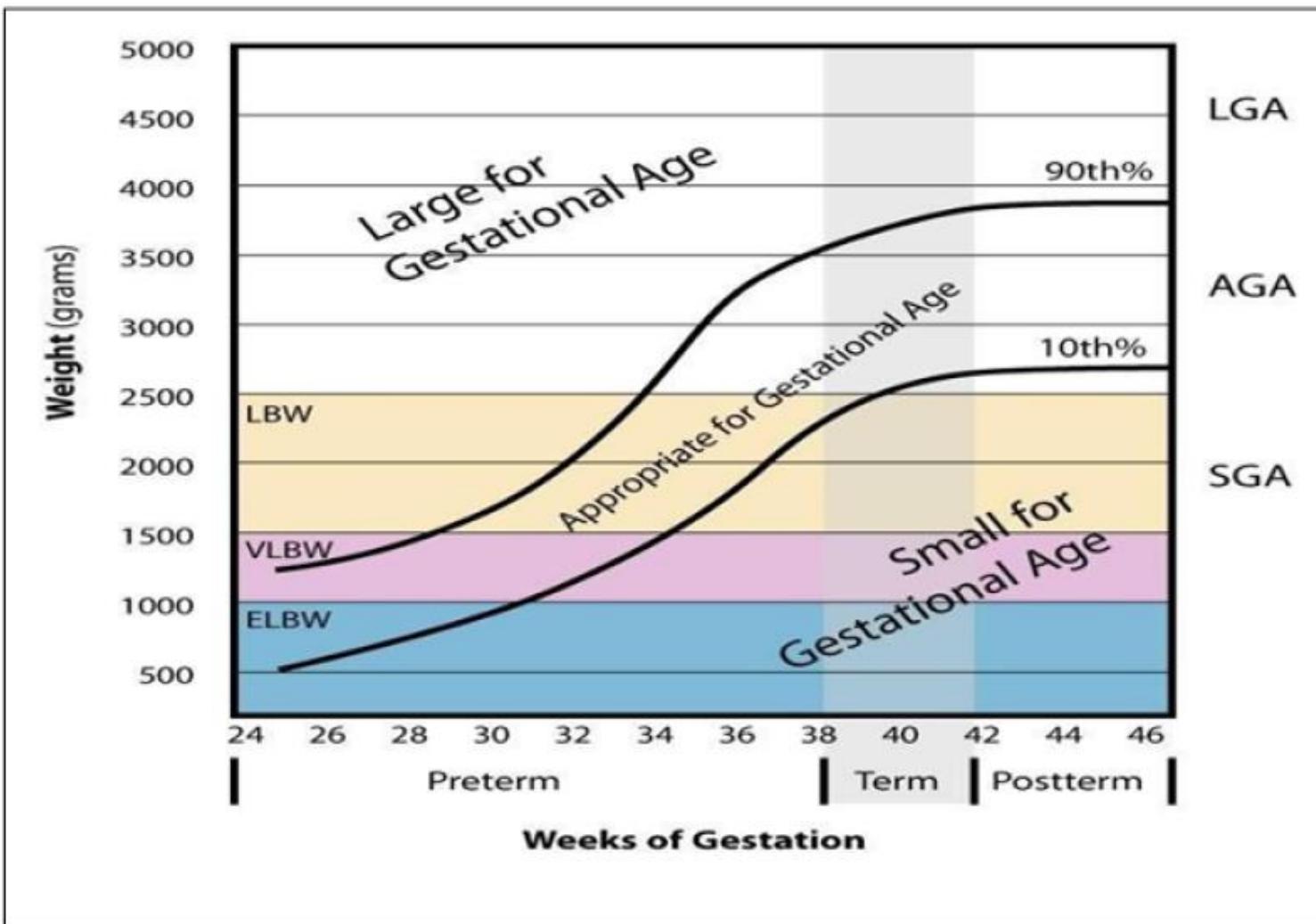
GESTATIONAL AGE ASSESSMENT

- ▶ Preterm: <37 wks
- ▶ Late Preterm (formerly Near Term): 34-36 6/7 wks
- ▶ Early Term: 37-38 wks
- ▶ Term: 39-41 wks
- ▶ Post Term: >41 wks

GROWTH ASSESSMENTS

- ▶ **Using Birth Weight:**
- ▶ Large for Gestational Age (LGA)
 - ▶ Greater than 90% tile
- ▶ Appropriate for Gestational Age (AGA)
 - ▶ 10-90% tile
- ▶ Small for Gestational Age (SGA)
 - ▶ Less than 10% tile
- ▶ **Using Fetal growth:**
 - ▶ Intrauterine Growth Restriction/Fetal Growth Restriction (IUGR/FGR)
 - ▶ Growth velocity starting at 22 wks gestation with subsequent decline

Newborn Assessments



LOW BIRTH WEIGHT (LBW)

- ▶ Results from **prematurity**, growth restriction or combination of both
- ▶ **In the United States, the majority of LBW infants are premature**
- ▶ Late preterm infants account for almost three quarters of preterm births
- ▶ Late preterm infants have significant in-hospital morbidity and a three to five fold higher mortality rate compared with term infants
- ▶ Coupled with **prematurity**, LBW represents a leading cause of infant mortality in Indiana

Managements

INITIAL MANAGEMENTS

- ▶ At delivery
 - ▶ Neonatal Resuscitation and Stabilization
 - ▶ Initial physical exam
 - ▶ Growth assessments
 - ▶ Initiation of family centered care
- ▶ LBW infant specifics:
 - ▶ Golden Hour (postnatal stabilization)
 - ▶ Skin to skin positioning

NEWBORN NURSERY and NICU CARE

- ▶ Following delivery → Admission location
 - ▶ Monitoring
 - ▶ Identification of specific system issues (maternal history, delivery issues)
 - ▶ Nutritional/Feeding plan (breast feeding/milk/formula considerations)
- ▶ LBW infant specifics:
 - ▶ Increased insensible water loss/thermoregulation
 - ▶ Respiratory* support needs (supplemental support, monitoring for “events”)
 - ▶ Nutritional* support (oral motor feeding skills, caloric needs)
 - ▶ Need for “catch up growth”
 - ▶ Risk for neurodevelopmental* issues
 - ▶ Potential for acute and chronic illness

DISCHARGE PLANNING

- ▶ Safe sleep modeling
- ▶ Completion of mandatory NB screens (IDOH requirements)
- ▶ Establishment of and support for feeding plans
- ▶ Family participation in daily care
- ▶ “Rooming in”
- ▶ Scheduled PCP appointment, 1-2 days post discharge
- ▶ LBW infant specifics:
 - ▶ Family Care conferences
 - ▶ Car Seat Study
 - ▶ Developmental assessments

OUTPATIENT FOLLOW UP

- ▶ Recommended healthcare follow up timing
- ▶ Nutrition
- ▶ Developmental Follow Up
- ▶ Established caregiver engagement
- ▶ LBW infant specifics
 - ▶ Corrected Gestational Age
 - ▶ Catch up Growth
 - ▶ Developmental Follow up (First Steps, NICU F/up Clinics)

TAKE HOME POINTS

- ▶ Low Birth Weight infants require specialized care starting immediately after delivery.
- ▶ These managements are based on Gestational Age (GA), appropriateness of birth weight in relation to GA and recognition of system specific issues.
- ▶ Care for these infants must consistently include education and updates for caregivers (parents, extended family, adoption and fostering).
- ▶ **Caregivers require support.**

- ▶ Thank you!

Jo Ann Matory, MD

jmatory@iu.edu