Developmental Highlights: Infant (newborn–12 months)

ABC's of the infant

- CPR standard compressions to breaths ratio; at least 100 per minute; push hard and push fast.
  - 1 person CPR = 30:2 ratio
  - 2 person CPR = 15:2 ratio
- Airway: Newborn (NB) is obligatory nose breather so make sure nose/mouth is clear.
  - → If there is an obstruction, reposition and clear nasopharynx.
- Breathing respiratory rates:
  - Newborn – 3 months: 29-61/minute
  - 3 – 12 months: 24-51/minute
  - Note: Retractions and nasal flaring are signs of respiratory distress. **Grunting is a late sign of severe respiratory distress.**
- Circulation
  - Heart rate:
    - Newborn – 3 months: 110-150/minute
    - 3 – 12 months: 100-150/minute
    - May be higher if infant is crying or febrile.
  - Blood pressure:
    - 1 – 3 months: 60-80/37-64
    - 3 – 12 months: 80-100/41-68
    - BP will be elevated in heightened metabolic states.
    - **Blood pressure is the last vital sign to change** in a decompensating infant and should not be relied upon as the only indicator of deterioration. HR and RR are more reliable indicators of deterioration.

Bedside PEWS

- Vital signs measurements and assessment parameters should be used to calculate a Bedside Pediatric Early Warning System (Bedside PEWS) score.
- Use these scores and trends in the overall assessment of the patient's clinical status and determination of severity risk.

Physical characteristics

- Feeding: NB = breast feed every 2-3 hours, bottle feed 3-4 oz every 3-4 hrs; 6 month-old = breast feed every 4-6 hrs, bottle feed 6-8 oz 4 times per day.
- Breast milk label must be checked against the patient's ID band with 2 patient identifiers (name, birth date, and MRN for multiples) and scanned into the electronic health record. Use the workflow diagrams on the Clinical Resource Page → JITs and Quick References → Breast Milk to guide the process.
- Do not use a microwave oven to heat formula or breast milk.
- Monitor closely for hypoglycemia, especially when newborn is NPO and not receiving maintenance IV fluids.
- Fluid maintenance: 0–10 kg is 100 ml/kg/day. (If the child has increased metabolic needs, this amount won't be adequate.)
- Urine output should be approximately 1–2 ml/kg/hr.
- Lab draws should not exceed 3 ml/kg/day.
- Anterior fontanel may be used as an assessment for hydration (depressed if dehydrated) and neurological status (bulges with increased intracranial pressure).
- A young infant is at risk for hypothermia. Do not leave an infant exposed. Use a blanket to bundle.

Safety

- Keep side rails up and use safety straps for strollers, high chairs, and infant and car seats.
- Do not leave anything baby could eat (for example, medication, injection caps) within reach.
- Safe sleep
    - Screening: Ask family where the infant sleeps at home.
    - Remember ABCs: alone, on their back, in a crib.
    - Keep crib free of large blankets, stuffed animals, and clutter.

Social/Communication

- Enjoys face-to-face, soft music, singing. Younger infant likes objects closer to face. Older infant likes push/pull, brightly colored toys, things that make noise.
- Limit media exposure (TV, computers, or other technology).
- Engagement and disengagement: These are baby's cues to let you know interest in interacting. Pace care giving based on baby's cues.
- Infant states and modulation:
    - → Cluster care for all babies to ensure periods of rest.
    - → Avoid procedures during quiet sleep. Transition baby to drowsy state before leaving.

Hospital considerations/family centered care

- Create an age-appropriate Coping Plan (levels 1 – 4) with the family.
- Potential comfort measures
    - → Music, soft lights, comfortable temperature, swaddling, a pacifier with 24% sucrose solution
- Family centered care is critical to success. Be sure to collaborate with, respect, and support families.