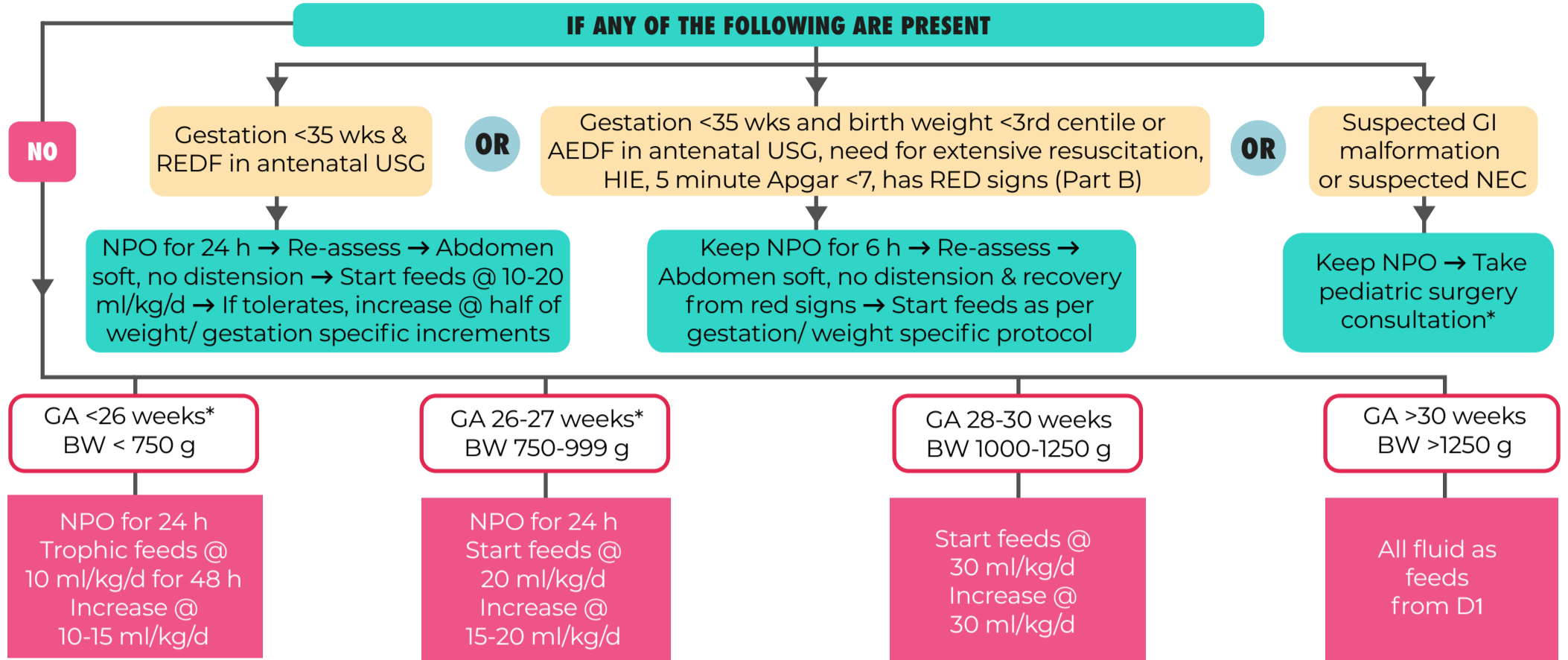




# Standard Treatment Workflow (STW) FEEDS & FLUIDS IN NEONATES ICD-10-R63.3

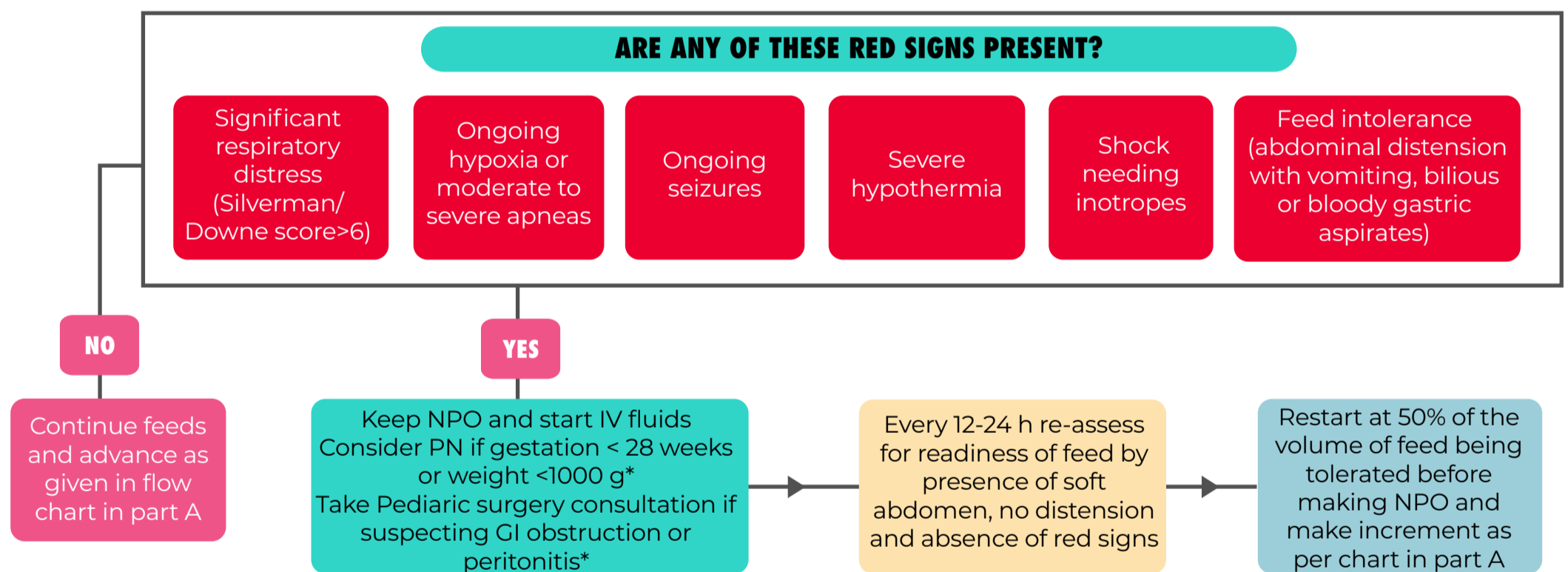
## PART A Nutritional plan for infants not on enteral feeds at admission



- For total daily fluid requirement see table 1. Remaining fluid requirement after accounting for feed volume, should be given as IV fluids and if feasible as PN in neonates born at less than 28 weeks or 1000 g\*
- IV fluids can be stopped once infant is tolerating feeds @ 120 mL/kg/d, if blood glucose is maintained.
- Preferred mode of feeding: < 32 weeks: Oro-Gastric tube; 32-34 weeks: Spoon/Paladai; and ≥ 35weeks: Breast feeds
- Choice of milk in order of preference: Expressed breast milk (EBM) >> pasteurized donor human milk >> formula milk
- Frequency of feeds: q 2 h if PMA < 32 weeks/ weight <1500g and q 3 h if ≥ 32weeks/ weight ≥1500g
- Add supplements as per Table 2

\*Indicates conditions which need admission/referral to tertiary care health facility

## PART B Nutritional plan for infants on partial or full enteral feeds at admission



**TABLE 1**

Maintenance volume (Enteral + IV, mL/kg/d) and type of IV fluids

BIRTH WEIGHT	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
<1000 g or Gestation <28 weeks	80-100	Advance strictly as per clinical and lab hydration status					
1000-1250g 28 to 30 weeks	80	100	120	140	150	150-160	150-160
>1250 g >30 weeks	60	80	100	120	140	150	150-160
Type of IV fluids	Start with D10 Titrate dextrose concentration as per blood glucose		N/5 in D10 with KCl				

**TABLE 2**

Supplements

- Start when infant is on 100ml/kg/day of enteral feeds
- Start Iron at 2 weeks of age
- Weight <1800 gram or Gestation <35 weeks**
  - If on EBM Or Donor Milk: HMF + Iron + Vitamin D3
  - If on Breastfeeds: Iron + Calcium + Phosphorus + Multivitamins + Vitamin D3
  - If on Preterm Formula: Iron and Vitamin D3
- Weight ≥1800 gram and Gestation ≥35 weeks**
  - Vitamin D 3 and Iron (only for gestation <37 weeks)

**Dose**

Iron: 2mg/kg/day  
Vit -D3: 400 IU to 800 IU/day  
Calcium: 120mg/kg/day  
Phosphorus: 60mg/kg/day

**Duration**

Iron and Vit-D3: till 1 year  
Calcium and Phosphorus: till term PMA  
Multivitamins: till 6 months

- Table 1 is a general guide and daily increments may be based on daily weight change, urine output, serum sodium and co-morbidities such as PDA or sepsis
- Daily increments of feed should be based on tolerance and weight gain.
- Monitor growth by regular measurement of weight and head circumference. Once full feeds have been achieved, preterm neonates are expected to gain weight @ 10-20 g/kg/day. Plot the growth parameters on intergrowth 21st postnatal charts for preterm neonates
- If not gaining weight adequately on exclusive enteral feeds, after 2 weeks of life, feed volume may be increased gradually upto 200-250 mL/kg/d as per tolerance

### ABBREVIATIONS

**AEDF:** Absent end diastolic flow  
**HIE:** Hypoxic ischemic encephalopathy  
**HMF:** Human milk fortifiers

**NEC:** Necrotizing enterocolitis  
**PDA:** Patent ductus arteriosus  
**PMA:** Post menstrual age

**PN:** Parenteral nutrition  
**REDF:** Reversed end diastolic flow

### 👉 EARLY AND AGGRESSIVE ENTERAL FEEDING BY BREASTMILK DECREASES MORTALITY AND MORBIDITY

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: ([stw.icmr.org.in](http://stw.icmr.org.in)) for more information.  
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