PSNbM RECOMMENDATIONS ON NEWBORN DISCHARGE
(May 14, 2021)

The length of hospital stay of a newborn should be based on the unique characteristics of each mother-infant dyad, including the health of the mother, the health and stability of the infant, the ability and confidence of the mother to care for her infant, the adequacy of support systems at home, and access to appropriate follow-up care.[1] The decision about postpartum discharge must be made jointly by the mother and/or the family, pediatrician, and obstetrician, as perceptions of readiness often differ (Principle of Shared-decision making)

The Philippine Society of Newborn Medicine (PSNbM) recommends the following minimum criteria before discharge of a healthy term newborn (A),[1-2] and high-risk newborns (B),[2-4] as follows:

A. Healthy Term Newborn

Definition: Term newborn with uncomplicated antepartum, intrapartum and postpartum maternal course, weight appropriate for gestational age (AGA), 5-minute Apgar score >7.

1. Physiologic stability,
   - 1.1. The complete physical examination (including neurologic examination) of the newborn just prior to discharge should reveal no abnormalities that require monitoring and continued hospitalization. Every newborn should be seen at least 4 hours prior to leaving the institution.
   - 1.2. The newborn is alert and active and vital signs are normal and stable during the preceding 12 hours (RR <60/ min, CR 100-160 beats/min, axillary temperature 36.5°C -37.4°C).
   - 1.3. There is no evidence of significant jaundice in the first 24 hours of life.
   - 1.4. There should be urination that is regular and at least 1 stool passed spontaneously.
2. Unrestricted on-demand exclusive breastfeeding with completion of at least 2 successful observed swallowing and infant satiety. Appropriate time should be devoted to observe, support, reassure and counsel the mother on good breast position and attachment including discussion, as appropriate, for breastfeeding difficulties, nipple discomfort and other issues. Individualized approach is best applied,[3-4]
3. Administration of vaccines such as BCG and Hepatitis B birth dose based on the current immunization schedule,
4. Completion of neonatal screening such as expanded Newborn Screening (NBS), Neonatal hearing screen (NHS) and Pulse Oximeter Screening (POS) for Critical Congenital Heart Disease (CCHD) as per existing guidelines,
5. Educability and ability of the mother/family to care for their child to recognize signs of illness and 'danger sign,'
6. Availability of breastfeeding and social support and home suitability including patient's ability to adhere to home isolation recommendations,
7. Completion of Documents/Checklist and Discharge Instructions,
   - 7.1. Discharge instructions given and signed as understood by parent, which may include:
     - 7.1.1. Importance of exclusive breastfeeding and monitoring of feeding
     - 7.1.2. Written instruction on proper breastmilk hand expression and storage, cup feeding
     - 7.1.3. Hygiene, bathing and care of the umbilical cord/skin/genitalia
     - 7.1.4. Monitoring of urine and stool
     - 7.1.5. Sleep-wake patterns
     - 7.1.6. Changes in color, emergence or persistence of jaundice

7.1.7. List of "danger signs" that require immediate medical /hospital consultation – refusal to feed, no spontaneous movement, fast and difficulty of breathing, vomiting, abdominal distention, fever or low body temperature, severe jaundice

7.2. Information on support groups and access to the health care system and resources

8. Complete written follow-up recommendations based on results of neonatal screenings specially NBS,
9. Schedule and place of follow-up with the attending physician/caregiver nearest the locality,
   9.1. Assurance of neonatal care at home by parent/caregiver including an understanding of the importance of follow-up visit or emergency consultation

For newborns discharged before 24 hours after delivery, an appointment should be made for the infant to be examined by a health care practitioner within 24- 72 hours of discharge or any time if danger signs are observed.

The purposes[1] of the follow-up visit are to:

1. Assess the newborn's general health, hydration, and presence/degree of jaundice; weigh the patient; identify any breastfeeding issues and new problems; and obtain historical evidence of adequate urination and defecation patterns for the newborn;
2. Reinforce maternal or family education and support in newborn care, particularly regarding feeding;
3. Review feeding patterns and technique, including observation of breastfeeding for adequacy of position, latch, and swallowing;
4. Provide or make a referral for continuing lactation support if the foregoing evaluations are not reassuring;
5. Assess quality of mother-infant attachment and details of infant behavior;
6. Review results of outstanding laboratory tests performed before discharge;
7. Perform screening tests (NBS, NHS and POS) if not yet done and other tests that may be clinically indicated such as serum bilirubin;
8. Encourage compliance to recommended schedule of periodic follow-up and preventive care.

B. High-Risk Newborn

Definition: Newborn with birthweight < 2.5 kgs and preterm <37 weeks, with high-risk nature of the maternal/perinatal history or events at birth, May be **asymptomatic** or **symptomatic**.

1. All of the criteria for normal newborn (A) should be met plus:
   1.1. Stable vital signs in room temperature or in "kangaroo" position for low birth weight (LBW) neonates,
   1.2. Stable respiratory condition with or without minimal, inhaled oxygen support bronchopulmonary dysplasia (BPD)/chronic lung disease (CLD),
   1.3. Weight gain demonstrated to be consistent with physiologic expectations, on the enteral feeding,
   1.4. Other neonatal screening procedures which apply to high-risk conditions such as Retinopathy of Prematurity (ROP) screen and cranial ultrasound for preterm neonates,
   1.5. Completion of medications or home instructions,
   1.6. Guidance on kangaroo care for preterm and small babies,
   1.7. Guidance on vitamin and mineral supplementation as needed, and
   1.8. Availability of human milk. Note: If breastfeeding is not possible and expressed breast milk or mother's own milk is not available for any reason, pasteurized milk from human milk banks should be used. Milk sharing is not recommended
   1.9. Available community support services for emergency care with open communication lines between hospital and home

2. Document/Checklist completion is the same as in normal newborn (A) plus:
    2.1. Special instructions for continuation of medications (if any), stimulation and feeding procedures/precautions, clearly written and signed as understood by the parent/caregiver,
    2.2. Close follow-up schedule (including neurodevelopmental schedule, ROP follow-up, CLD check-up) that should be sooner and more frequent for the specific high risk condition,
    2.3. Completion of records and/or insurance documents as required by the hospital

Special Considerations: SARS-CoV-2/COVID-19 Pandemic

In exceptional circumstances such as during a pandemic (COVID-19), the decision regarding postpartum discharge must be aligned with current guidance[3] to ensure safety and protection of the mother, newborn, and other home caregivers.

1. COVID-19 negative mothers
    - In most centers, discharge prior to usual practice with the intent to reduce risk of COVID-19 infection provides no advantage to the newborn or family. Early discharge may place additional burdens on families. In-person post- discharge visits are the preferred means to provide timely newborn screening, bilirubin testing, feeding and weight assessments.

2. COVID-19 positive mothers
    2.1. If newborn SARS-CoV-2 testing is positive
        - If the newborn is asymptomatic or mildly symptomatic, discharge with mother who does not require hospitalization may be done. The mother has observe hand and respiratory hygiene, cough or sneeze into a tissue then dispose to proper bin, disinfect surfaces she has touched like cellular phone, door knob, switches, etc. A plan for frequent outpatient follow-up must be done (either by phone, telemedicine, or in-office) **through 14 days after birth.**
        - During this period, precautions should be taken to prevent spread from newborn to caregivers by using masks, gloves (as available) and hand hygiene in the home environment and by healthcare staff in the outpatient office practice.

    2.2. If newborn SARS-CoV-2 testing is negative
        - The newborn may likewise be discharged with mother, with above precautions.

    2.3. If the newborn cannot be tested
        - If asymptomatic or mildly symptomatic, the newborn may still be discharged with the mother but must be treated **as if virus-positive for the 14-day period** of observation.[1,6]

In the event that the mother is moderately/severely ill or still admitted at the hospital, the newborn is discharged to another caregiver of the family's choice. The caregiver shall exercise same precautions (respiratory and hand hygiene).

Every effort should be taken to provide infection-prevention and control education to all caregivers of the newborn, which includes both **written education and verbal education in person, via telephone or virtually.**

While challenging in the home environment, mother should use a mask and practice hand-hygiene when directly caring for her newborn, until:
- she has been afebrile for 24 hours without use of antipyretics
- at least 10 days have passed since her symptoms first appeared (or, in the case of asymptomatic women identified only by obstetric screening test or at least 10 days have passed since the positive test), and
- symptoms have improved.

The CDC[5] released a media statement: *'There have been more than 15 international and U.S.-based studies recently published looking at length of infection, duration of viral shed, asymptomatic spread and risk of spread among various patient groups. Researchers have found that the amount of live virus in the nose and throat drops significantly soon after COVID-19 symptoms develop. Additionally, the duration of infectiousness in most people with COVID-19 is no longer than 10 days after symptoms begin and no longer than 20 days in people with severe illness or those who are severely immunocompromised.' Thus, discontinuation of isolation is safe at* ***ten days for the mild to moderate cases*** *and up to* ***20 days for the severe to critical cases.***

The **symptom-based strategy** renders the discontinuation of transmission-based precautionary measures in the following types of patients: CDC[5] cautions that meeting the criteria for discontinuation of Transmission-Based Precautions is NOT a prerequisite for discharge from a healthcare facility. The test-based strategy is no longer generally recommended because it often results in prolonged hospital stay of patients who continue to shed detectable SARS-CoV-2 RNA but are no longer infectious.

1. Patients who are not severely immunocompromised and were asymptomatic:
    - 1.1. At least 10 days and up to 20 days have passed since the date of their first positive viral diagnostic test.
    - 1.2. At least 24 hours have passed since last fever without the use of antipyretics and
    - 1.3. Symptoms (e.g., cough, difficulty of breathing) have improved
2. Patients who are severely immunocompromised but were asymptomatic:
    - 2.1. At least 10 days and up to 20 days have passed since the date of their first positive viral diagnostic test.
    - 2.2. At least 24 hours have passed since last fever without the use of antipyretics and
    - 2.3. Symptoms (e.g., cough, difficulty of breathing) have improved
3. Patients with mild to moderate illness who are not severely immunocompromised:
    - 3.1. At least 10 days have passed since symptoms first appeared and
    - 3.2. At least 24 hours have passed since last fever without the use of fever-reducing medications and
    - 3.3. Symptoms (e.g., cough, difficulty of breathing) have improved
4. Patients with severe to critical illness or who are severely immunocompromised:
    - 4.1. At least 10 days and up to 20 days have passed since symptoms first appeared and
    - 4.2. At least 24 hours have passed since last fever without the use of fever-reducing medications and
    - 4.3. Symptoms (e.g., cough, difficulty of breathing) have improved
    - 4.4. Consider consultation with infection control experts

Note: Should Transmission-Based Precautions still be required, the mother-baby dyad should go to a community quarantine facility with an ability to adhere to infection prevention and control recommendations for the care of residents with SARS-CoV-2 infection. Preferably, the mother-baby dyad should be placed in a location designated to care for residents with SARS-CoV-2 infection.

The Philippine Society of Newborn Medicine (PSNbM) recommends the above guidance for discharge of a healthy term newborn.[1-2] For newborns discharged before 24 hours after delivery, an appointment should be made for the infant to be examined by a health care practitioner within 24- 72 hours of discharge or any time if danger signs are observed. . (Level of evidence: Strong, Low grade)

The Philippine Society of Newborn Medicine (PSNbM) recommends the above-mentioned guidance for discharge of a high-risk newborn.[2] (Level of evidence: Strong, Low grade)

Philippine Society of Newborn Medicine recommends the above guidance regarding COVID-19 cases. There is no specific benefit for infants born to mothers who are either COVID-19 (-) or (+) that results from discharge earlier than usual center practice. (Level of evidence: Strong, Low grade)

Philippine Society of Newborn Medicine (PSNbM) recommends WHO guidance that mothers with suspected or confirmed COVID-19 should be encouraged to initiate and continue breastfeeding. From the available evidence, mothers should be counseled that the benefits of breastfeeding substantially outweigh the potential risks of transmission. (Level of evidence: Strong, High grade)

Of note, recommendations during a pandemic shall be revised according to evolving research and scientific findings.

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