



UNIFIED COVID-19 ALGORITHMS

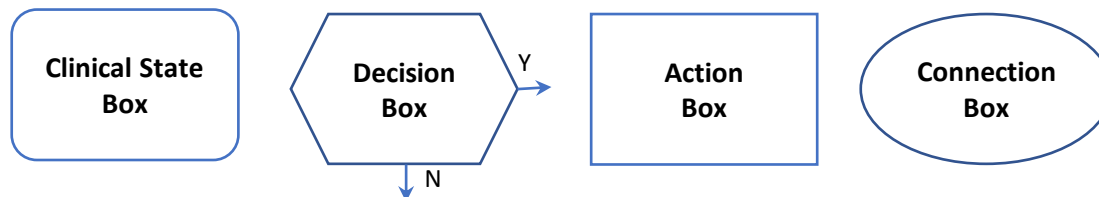
Section 1 GUIDELINES FOR PRIMARY CARE

TABLE OF CONTENTS

Introduction to Algorithm Interpretation	page 1
Classification of COVID-19 Cases (FIGURE 1A)	page 2
Community Quarantine Protocol (FIGURE 1B)	page 3
Contact Tracing Protocol (FIGURE 1C)	page 4
Management of Pregnant Patients (FIGURE 1D)	page 5
Newborn Care and Breastfeeding (FIGURE 1E)	page 6
References	page 7

INTRODUCTION

The clinical algorithm (flow chart) is a text format that is specially suited for representing a sequence of clinical decisions which are intended to improve and standardize decisions in delivery of medical care. For the purpose of clarity, a typical clinical algorithm is depicted with basic symbols that represent clinical steps in decision-making:



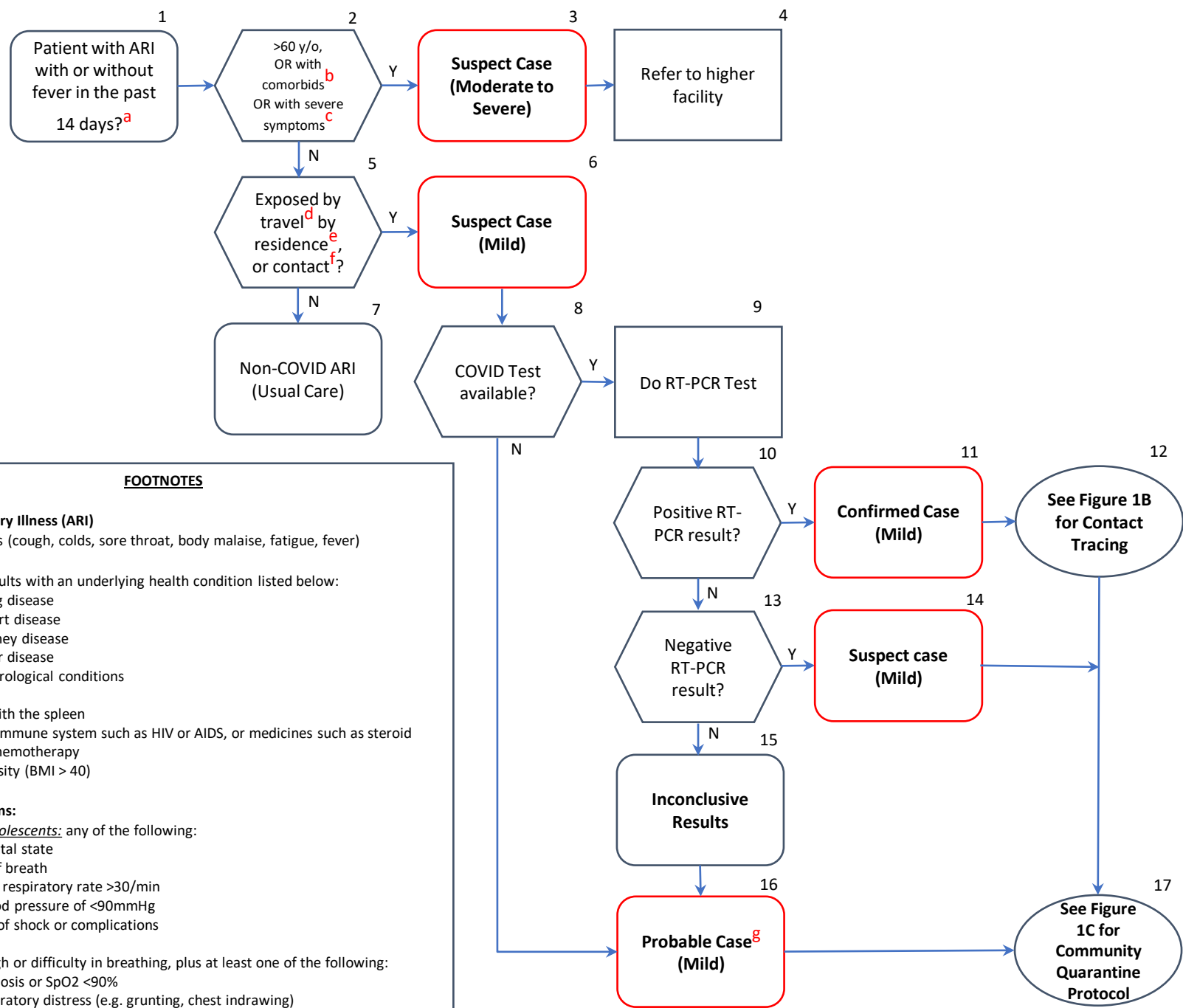
1. The rectangle with rounded edges depicts the current clinical state of an individual patient;
2. The hexagon is decision box which contains a question answerable by yes or no; one arrow going to the right signifies “yes”, and one arrow going downwards signifies “no”;
3. The rectangle with sharp edges depicts the action to be done; and
4. The oval depicts connection to another algorithm in a different page.

Note that the following algorithms are adapted from multiple guidelines as released by the World Health Organization, Department of Health, and other societies. This document was also reviewed by different experts with the end-goal of having a summarized and comprehensive compilation of guidelines that will aid in management of COVID-19 patients by healthcare workers from both the community and hospital levels.

Lastly, while these patient-centered algorithms intend to summarize and simplify recommendations, these may be subject to change as evidence emerges and guidelines are updated. Any recommendations on patient care are not absolute. Final decisions remain under the discretion of the healthcare provider.

FIGURE 1A. CLASSIFICATION OF CASES

Version 06 April 2020 (original)



FOOTNOTES

^a Acute Respiratory Illness (ARI)

Flu-like symptoms (cough, colds, sore throat, body malaise, fatigue, fever)

^b Comorbidities – adults with an underlying health condition listed below:

- Chronic lung disease
- Chronic heart disease
- Chronic kidney disease
- Chronic liver disease
- Chronic neurological conditions
- Diabetes
- Problems with the spleen
- Weakened immune system such as HIV or AIDS, or medicines such as steroid tablets or chemotherapy
- Morbid obesity (BMI > 40)

^c Severe Symptoms:

For adults and adolescents: any of the following:

- altered mental state
- shortness of breath
- SpO₂ <94%, respiratory rate >30/min
- systolic blood pressure of <90mmHg
- other signs of shock or complications

For children: cough or difficulty in breathing, plus at least one of the following:

- central cyanosis or SpO₂ <90%
- severe respiratory distress (e.g. grunting, chest indrawing)
- signs of pneumonia with a general danger sign: inability to breastfeed or drink, lethargy/unconsciousness, or convulsions

Other signs of pneumonia may be present: fast breathing (in breaths/min):

<2 months: ≥60; 2-11 months: ≥50; 1-5 years: ≥40

^d Exposure by travel

Travel from a country/area where there is sustained community level transmission

^e Exposure by residence

Lives in an LGU where there is sustained community level transmission

^f Exposure by contact

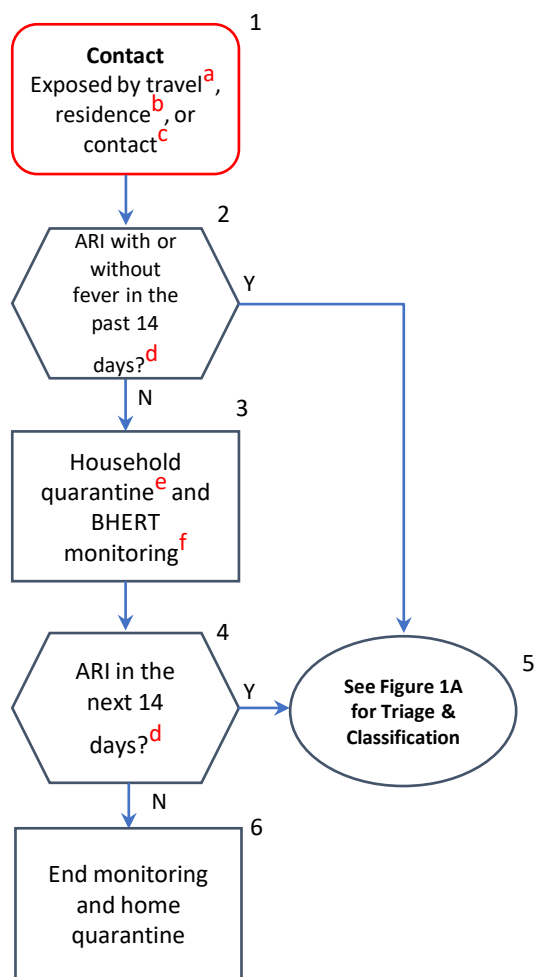
1. Providing direct care to suspect, probable, or confirmed COVID-19 patients without using proper PPE (i.e. healthcare workers);
2. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
3. Direct physical contact with a probable or confirmed case; OR
4. Other situations as indicated by local risk assessments

^g Probable Case

Proceed to box 10 if repeat test becomes possible/available

FIGURE 1B. CONTACT TRACING PROTOCOL

Version 06 April 2020 (original)



FOOTNOTES

^aExposure by travel

Travel from a country/area where there is sustained community level transmission

^bExposure by residence

Lives in an LGU where there is sustained community level transmission

^cExposure by contact

1. Providing direct care to suspect, probable, or confirmed COVID-19 patients without using proper PPE (i.e. healthcare workers);
2. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
3. Direct physical contact with a probable or confirmed case; OR
4. Other situations as indicated by local risk assessments

^dAcute Respiratory Illness (ARI)

Flu-like symptoms (cough, colds, sore throat, body malaise; fatigue, fever)

^eHousehold Quarantine – All members of the household (including pets) must strictly stay at home

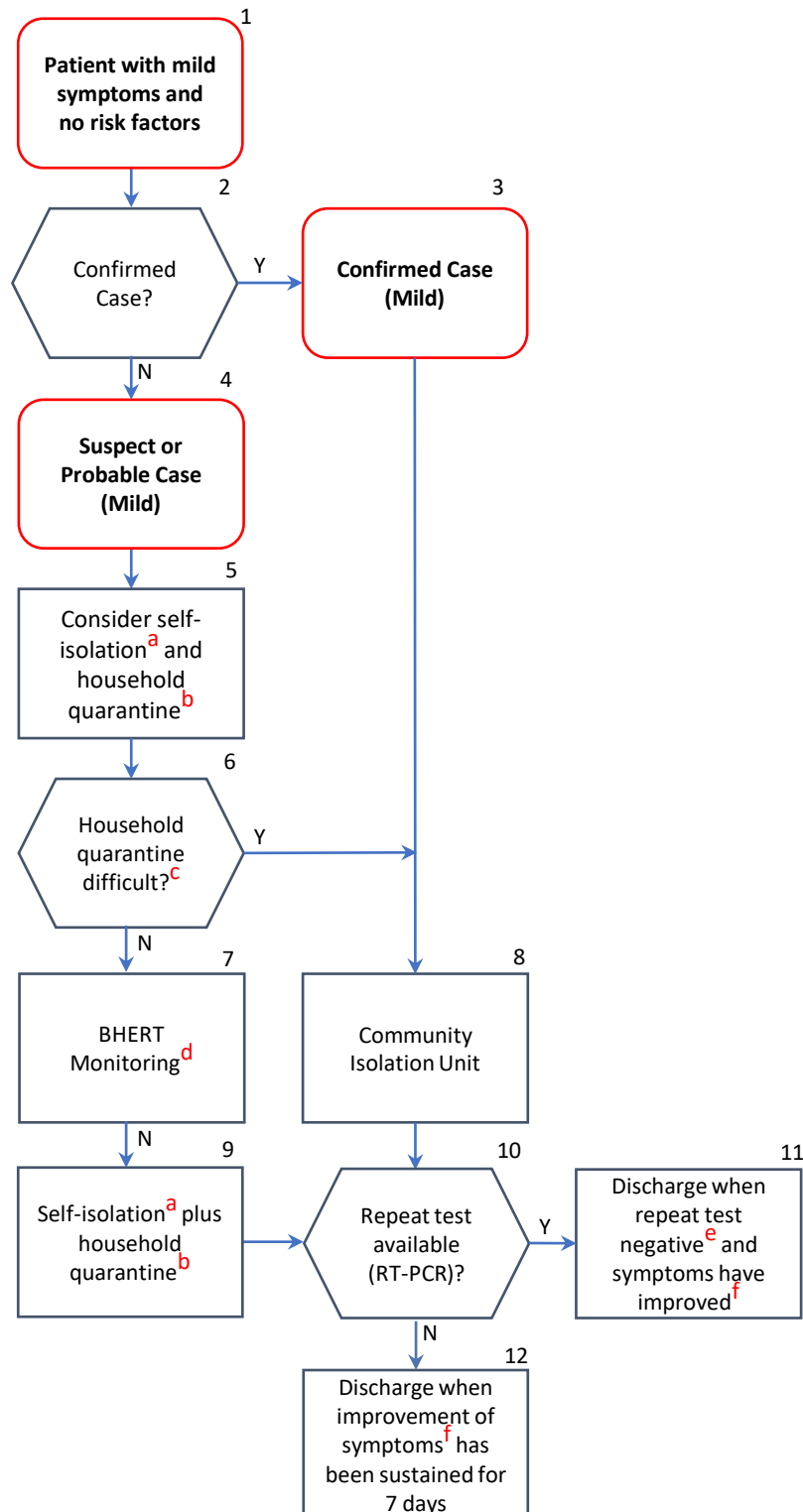
^fBHERT Monitoring

Barangay Health Emergency Response Team (BHERT)

- Accomplish a **Case Identification Form (CIF)**
- Ensure monitoring throughout the duration of isolation & quarantine
- Facilitate home care and basic needs
- A daily report shall be forwarded to the Municipality/City Epidemiology and Surveillance Units (MESU/CESU) which in turn are forwarded to the Provincial Epidemiology and Surveillance Units (PESU)

FIGURE 1C. COMMUNITY QUARANTINE PROTOCOL

Version 06 April 2020 (original)



FOOTNOTES

^a **Self-isolation** – strict isolation of the patient in a separate room or area in the household

^b **Household Quarantine** – All members of the household (including pets) must strictly stay at home

^c **Situations where household quarantine is difficult**

1. Living with vulnerable person (with comorbid or >60y/o)
2. No separate bedroom or bed not >1m away
3. No separate bathroom for patient
4. Not well-ventilated
5. No separate utensils and personal things
6. No separate towels for handwashing

^d **BHERT Monitoring**

Barangay Health Emergency Response Team (BHERT)

- Accomplish a **Case Identification Form (CIF)**
- Ensure monitoring throughout the duration of isolation & quarantine
- Facilitate home care and basic needs
- A daily report shall be forwarded to the Municipality/City Epidemiology and Surveillance Units (MESU/CESU) which in turn are forwarded to the Provincial Epidemiology and Surveillance Units (PESU)

^e **Repeat Test Negative**

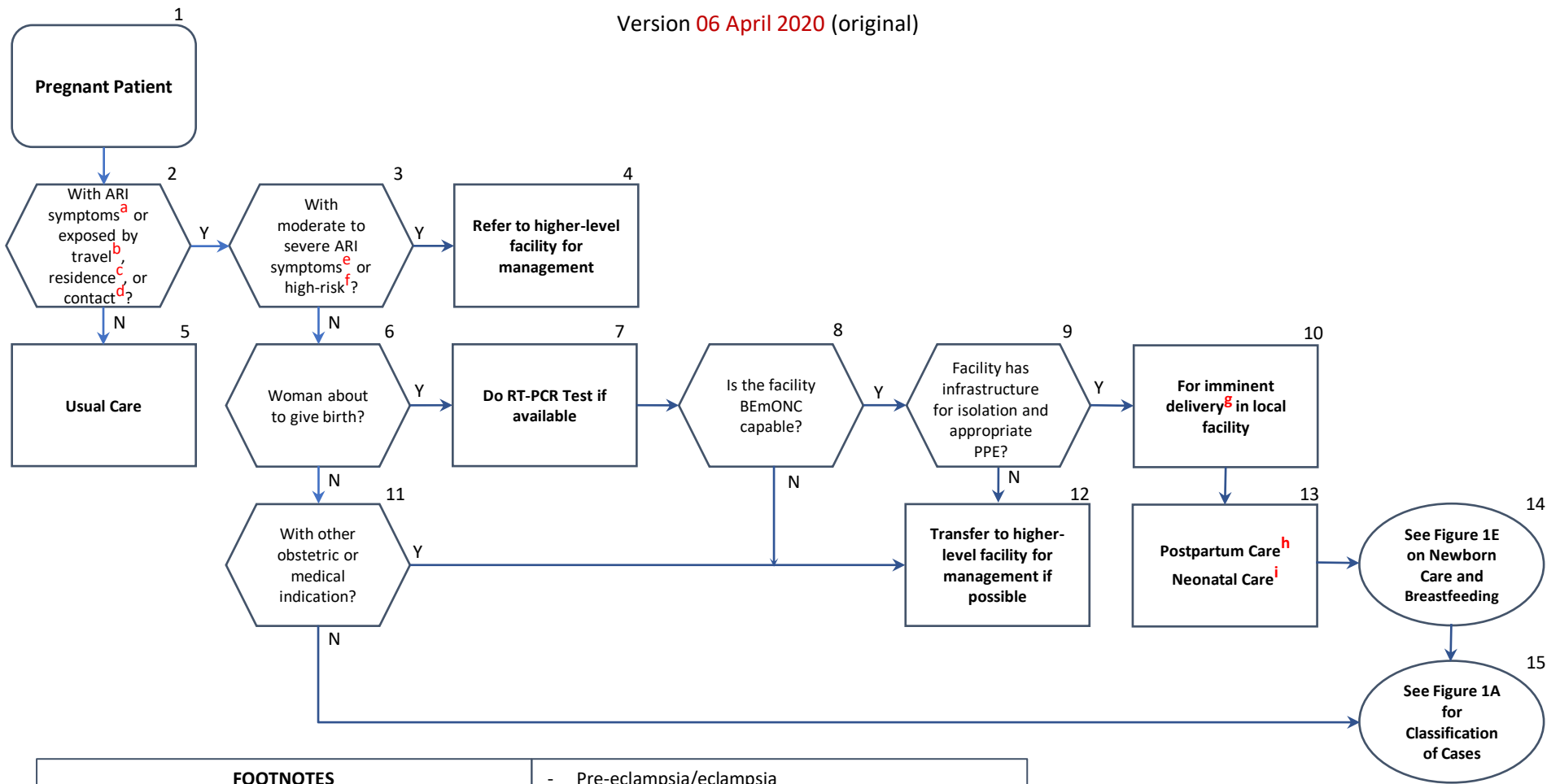
- Two consecutive negative tests 24 hours apart is preferred or at least one negative test prior to discharge

^f **Improvement of symptoms:**

- Temp <37.8°C > 3 days,
- Respiratory symptoms reduced significantly
- CXR shows significant improvement

FIGURE 1D. PREGNANT PATIENTS

Version 06 April 2020 (original)



FOOTNOTES

^a Acute Respiratory Illness (ARI)

Flu-like symptoms (cough, colds, sore throat, body malaise; fatigue, fever)

^b Exposure by travel

Travel from a country/area where there is sustained community level transmission

^c Exposure by residence

Lives in an LGU where there is sustained community level transmission

^d Exposure by contact

1. Providing direct care to suspect, probable, or confirmed COVID-19 patients without using proper PPE (i.e. healthcare workers);
2. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
3. Direct physical contact with a probable or confirmed case; OR
4. Other situations as indicated by local risk assessments

^e Severe and Critical – any of the following:

- Altered mental state
- Shortness of breath
- SpO2 <94%
- Respiratory rate >30/min
- Systolic blood pressure of <90mmHg
- Other signs of shock or complications

^f Examples of High-risk features

- Preterm labor
- Vaginal bleeding

- Pre-eclampsia/eclampsia
- Preterm pre-labor rupture of membranes (pPROM) Malpresentations
- Young primigravid
- Elderly primigravid
- Multifetal pregnancy

^g Imminent Delivery

- Admit to a designated isolation area
- Require all personnel in attendance to wear the appropriate PPE
- Require all transport personnel to wear appropriate PPE to be removed once patient has been transferred
- Delivered by NSD
- Obtain/verify if the naso-oro-pharyngeal swab specimens were collected

^h Postpartum Care

- Monitor postpartum patient in the same isolation area by the same delivery team
- Discharge early once stable, if mild case
- coordinate with RESU for monitoring and surveillance
- Require all transport personnel to wear appropriate PPE (see Figure 3)

ⁱ Neonatal Care

- Institute appropriate neonatal resuscitation measures as necessary
- Render standard newborn care
- Do routine hearing and newborn screening tests prior to discharge when feasible
- Manage high-risk infants accordingly. Refer to a specialist/subspecialist

FIGURE 1E. NEWBORN CARE AND BREASTFEEDING

Version 06 April 2020 (original)

FOOTNOTES

^a This algorithm adapted from DOH Memorandum 2020-0146 reflects decision-making in facilities where COVID-19 diagnostic tests can be done and results secured expediently.

Since most mothers will present as contact cases, management in each specific situation may depend on the context under which the mother presents. Separation will depend on availability of isolation rooms or facilities, testing capability, safety of the HCW, and parents' preferences.

WHO Interim Guidance on the Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected or confirmed (updated Mar 13, 2020), recommends to:

1. Enable mothers and infants to remain together in skin-to-skin contact
2. Practice rooming-in throughout the day and night, especially immediately after birth during establishment of breastfeeding.
3. Constant use of surgical mask for mother and proper handwashing before and after handling her newborn

^b Separation of newborn and mother

If separation is not feasible in the institution due to resource constraints, health care worker may follow guidelines established by own institution

^c Expressed Milk

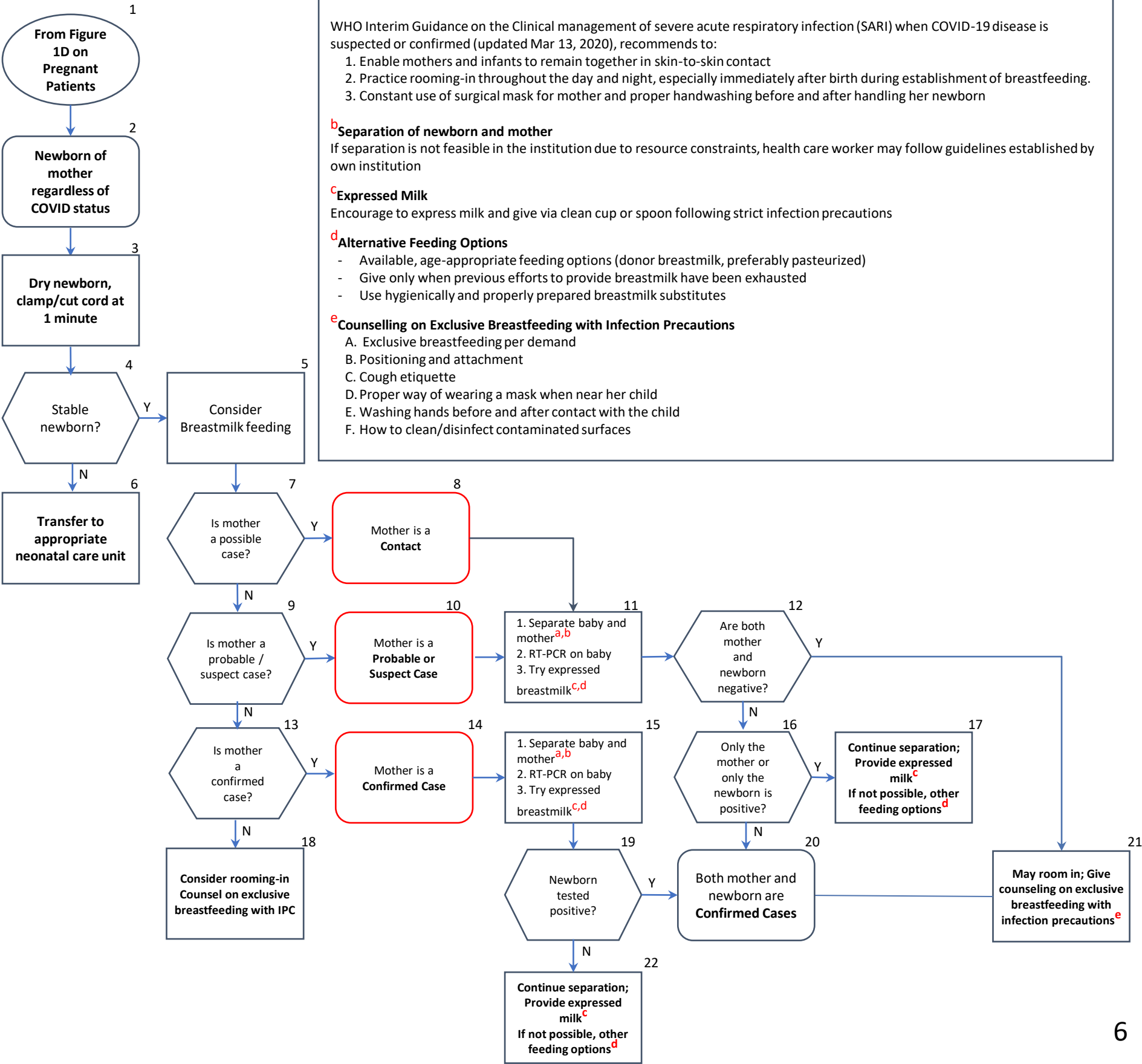
Encourage to express milk and give via clean cup or spoon following strict infection precautions

^d Alternative Feeding Options

- Available, age-appropriate feeding options (donor breastmilk, preferably pasteurized)
- Give only when previous efforts to provide breastmilk have been exhausted
- Use hygienically and properly prepared breastmilk substitutes

^e Counselling on Exclusive Breastfeeding with Infection Precautions

- A. Exclusive breastfeeding per demand
- B. Positioning and attachment
- C. Cough etiquette
- D. Proper way of wearing a mask when near her child
- E. Washing hands before and after contact with the child
- F. How to clean/disinfect contaminated surfaces



REFERENCES

- De los Reyes, MA, et al. (2020). *Clinical Practice Guidelines for Sepsis and Septic Shock in the Philippines 2020 Full Manuscript*. Philippine Society for Microbiology and Infectious Disease
- Department of Health. (2020). *Reiteration of the Guidelines on the Disposal and Shipment of the Remains of Confirmed Cases of 2019 Novel Coronavirus Acute Respiratory Disease (2019-nCoV ARD)*. Department Circular No 2020-0047
- Liu Y, Yan LM, Wan L, Xiang TX, Le A, Liu JM, Peiris M, Poon LM, Zhang W. (2020) *Viral dynamics in mild and severe cases of COVID-19*. Lancet Infectious Diseases 2020
- Philippine Obstetrical and Gynecological Society (Foundation) Inc., et al. (2020). *Algorithm on Management of Pregnant PUI/Confirmed COVID-19 Patient*
- Philippine Society for Microbiology and Infectious Disease. (2020). *Interim Guidelines on the Clinical Management of Adult Patients with Suspected or Confirmed COVID-19 Infection 2.0*
- Philippine Society of Public Health Physicians. (2020). *Recommendation on Community-Based Management of COVID-19 (v3)*
- World Health Organization. (2020). *Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19)*