

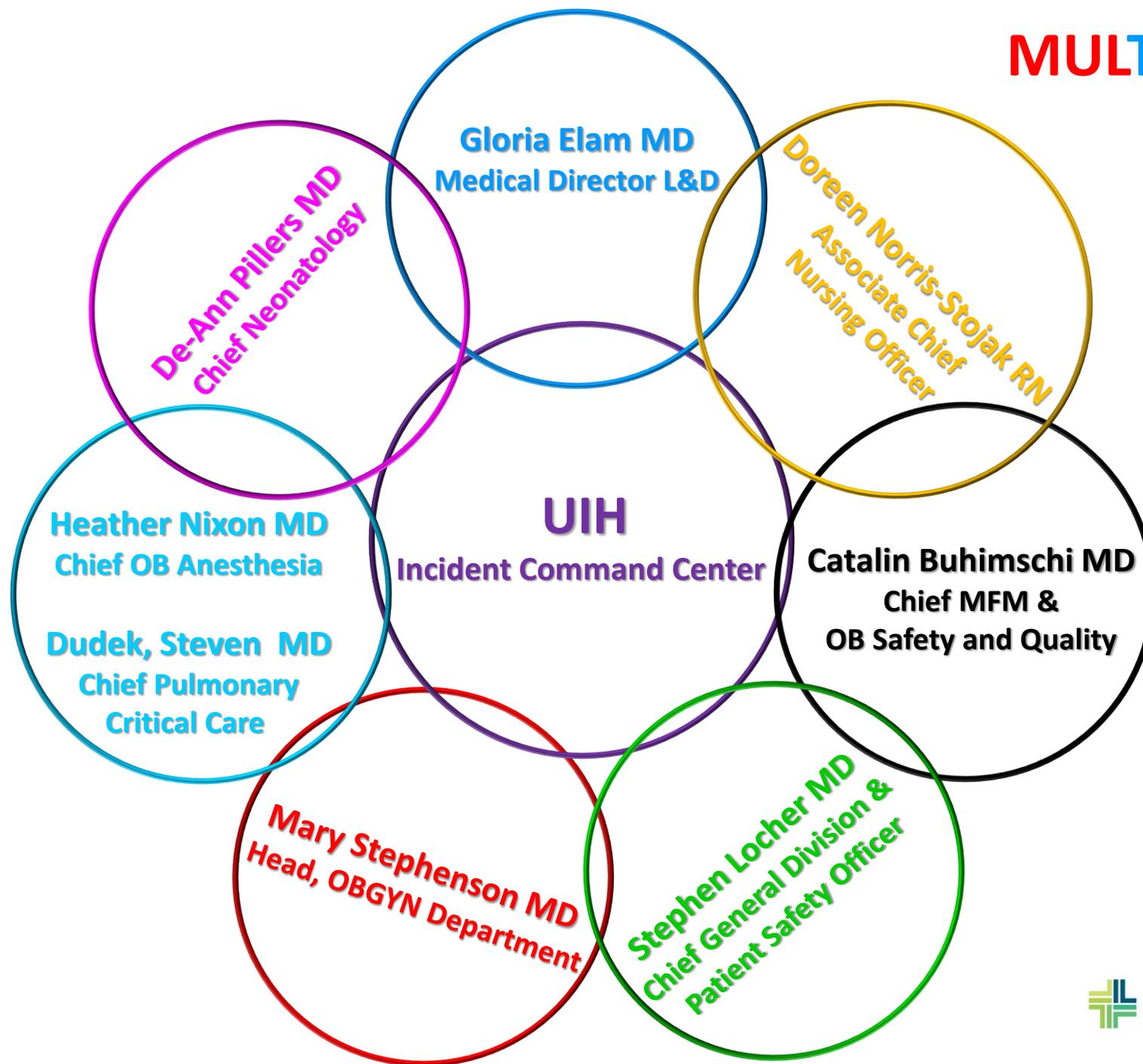


University of Illinois at Chicago Department of Obstetrics and Gynecology Covid-19 Algorithms

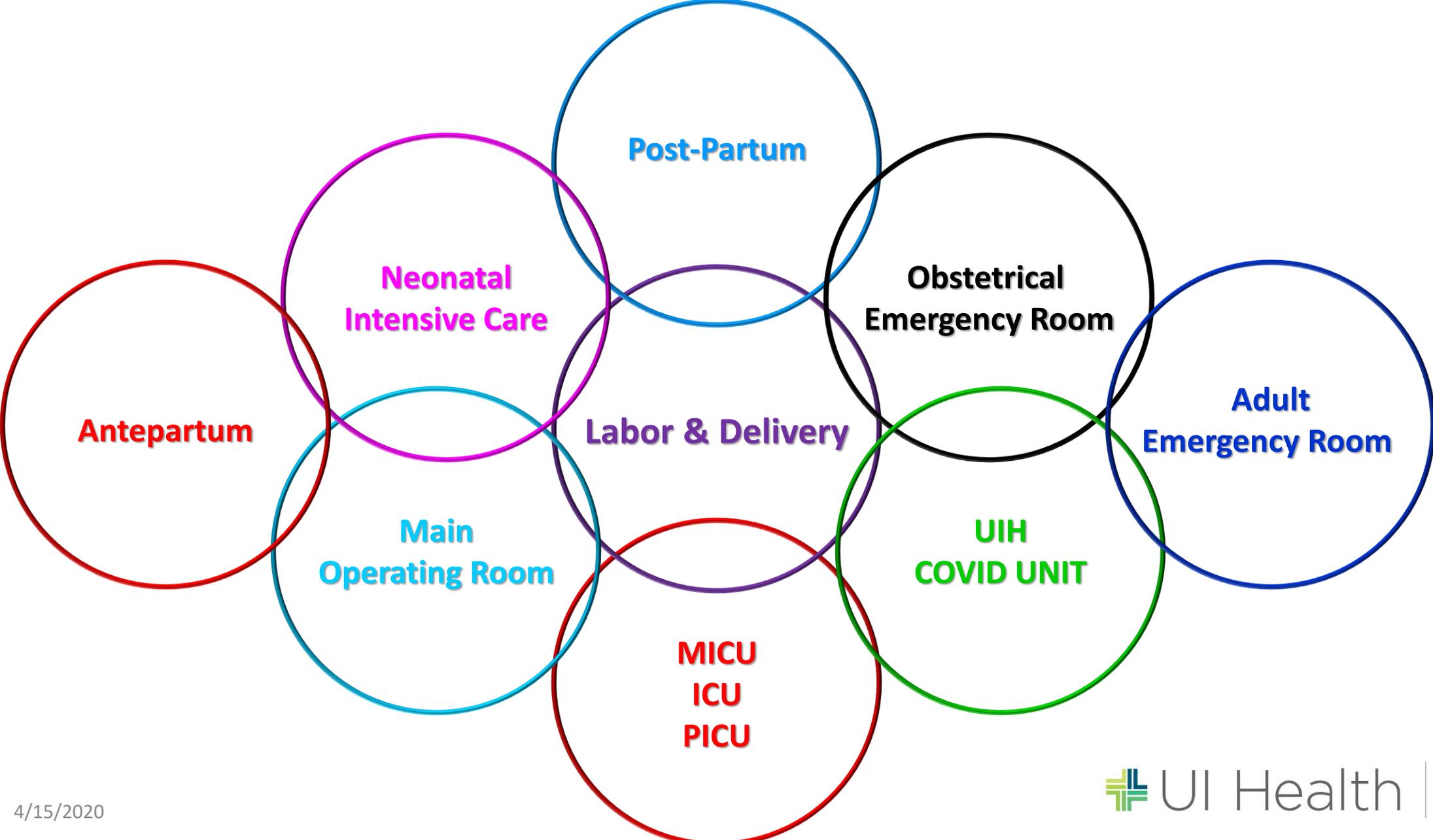
4/15/2020

Admission of + COVID Parturient

MULTIDISCIPLINARY TEAM



OBSTETRICAL AND UNIVERSITY OF ILLINOIS HEALTH CLINICAL UNITS



Admission of + COVID Parturient

Previable - Admit to appropriate COVID Unit

Viable (GA: 22 5/7 weeks)

- **Assess Maternal Respiratory/COVID status for level of care needed**
- **Assess Maternal Obstetric Needs (Laboring status/Bleeding/FHR Tones)**
- **Disposition to MICU/ICU/PICU, +COVID floor unit or L&D COVID bed-based on clinical assessment**

Transports (UIC-IDPH Administrative Perinatal Center)

- **Guidelines - Adult Emergency Room Provider**

Screening of + COVID Parturient

SMFM/ACOG/SOAP (Inpatient/Outpatient)

- 1. How do you feel?**
- 2. Do you have fever?**
- 3. Do you have difficulty breathing or SOB?**
- 4. Do you have difficulty breathing without grasping for air?**
- 5. Do you needed to stop frequently when walking across the room?**
- 6. Did you cough blood?**
- 7. Do you have any new chest pain or pressure in the chest when coughing?**
- 8. Did you lose your taste or smell?**
- 9. Are you unable to keep liquids down?**
- 10. Do you have dizziness when standing (dehydration)?**
- 11. Did you have recent contact with COVID patients?**
- 12. Do you have sick (signs of cold) family members?**

Universal wearing of face masks

Universal temperature screening

+ COVID-19 - Critical Care Needed

Viability: **≥22 5/7** weeks GA

Viable

Non-Viable

*Obstetric
Risk
Assessment*

**Discussion for Delivery Planning in
MICU/ICU/PICU**

MICU/ICU/PICU

NDRT : Neonatal Delivery Response Team

**Activate NDRT-C*
by baby nurse for delivery attendance**

**Post Delivery - UIC COVID-19 Unit
or MICU/ ICU/PICU (depending on clinical status)**

+ COVID-19 No Critical Care, + Admission

Viability: **≥22 5/7** weeks gestational age

Main OR rooms:

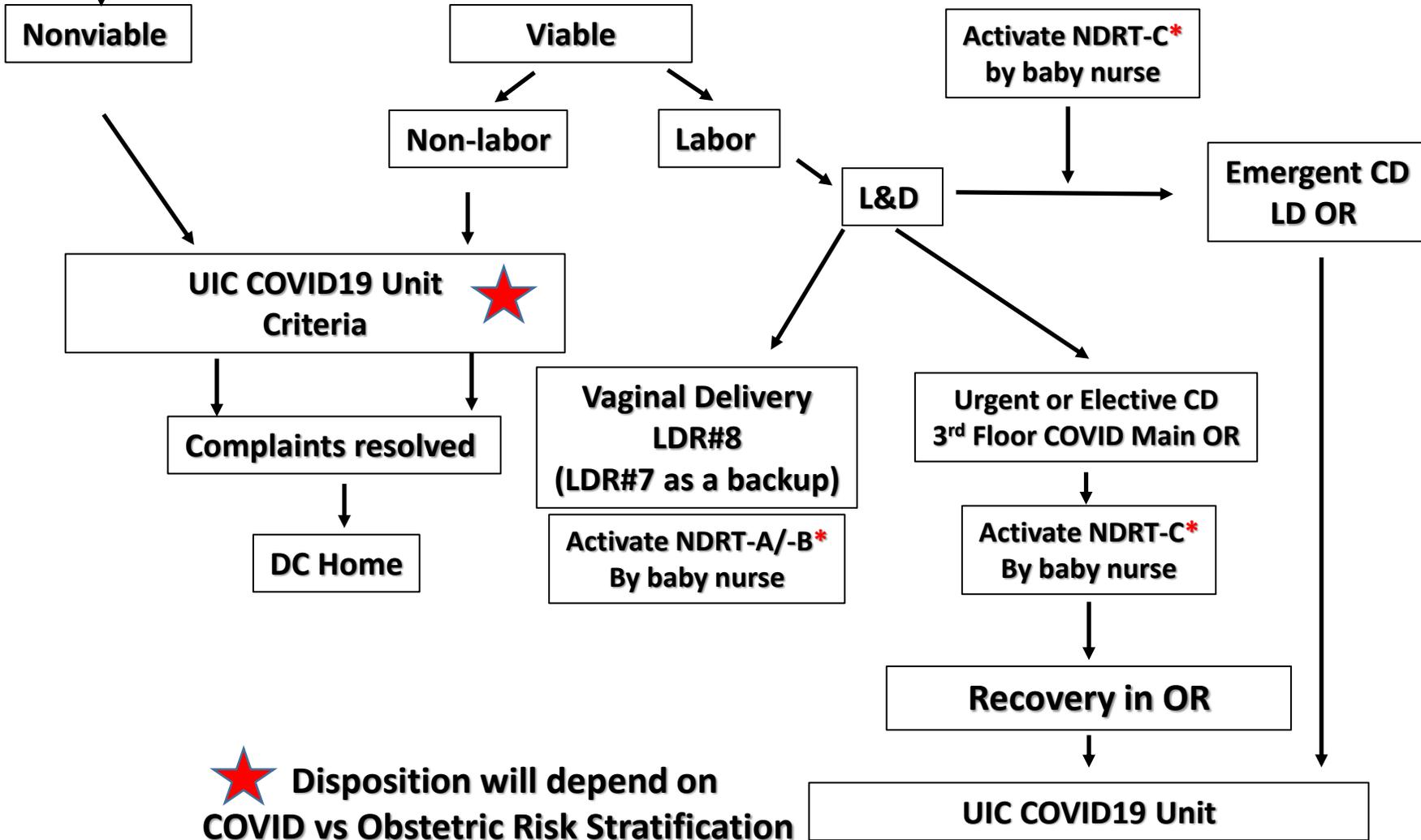
- OR #1
- OR #2
- Neo: OR #3

Transfer to MICU/ICU/PICU if
Critical Care Required
at any time
during admission

***NDRT activation**
Please see detail in the attached

L&D: Labor and Delivery Unit
OR: Operating Room
CD: Cesarean Delivery
NDRT : Neonatal Delivery Response Team

4/15/2020

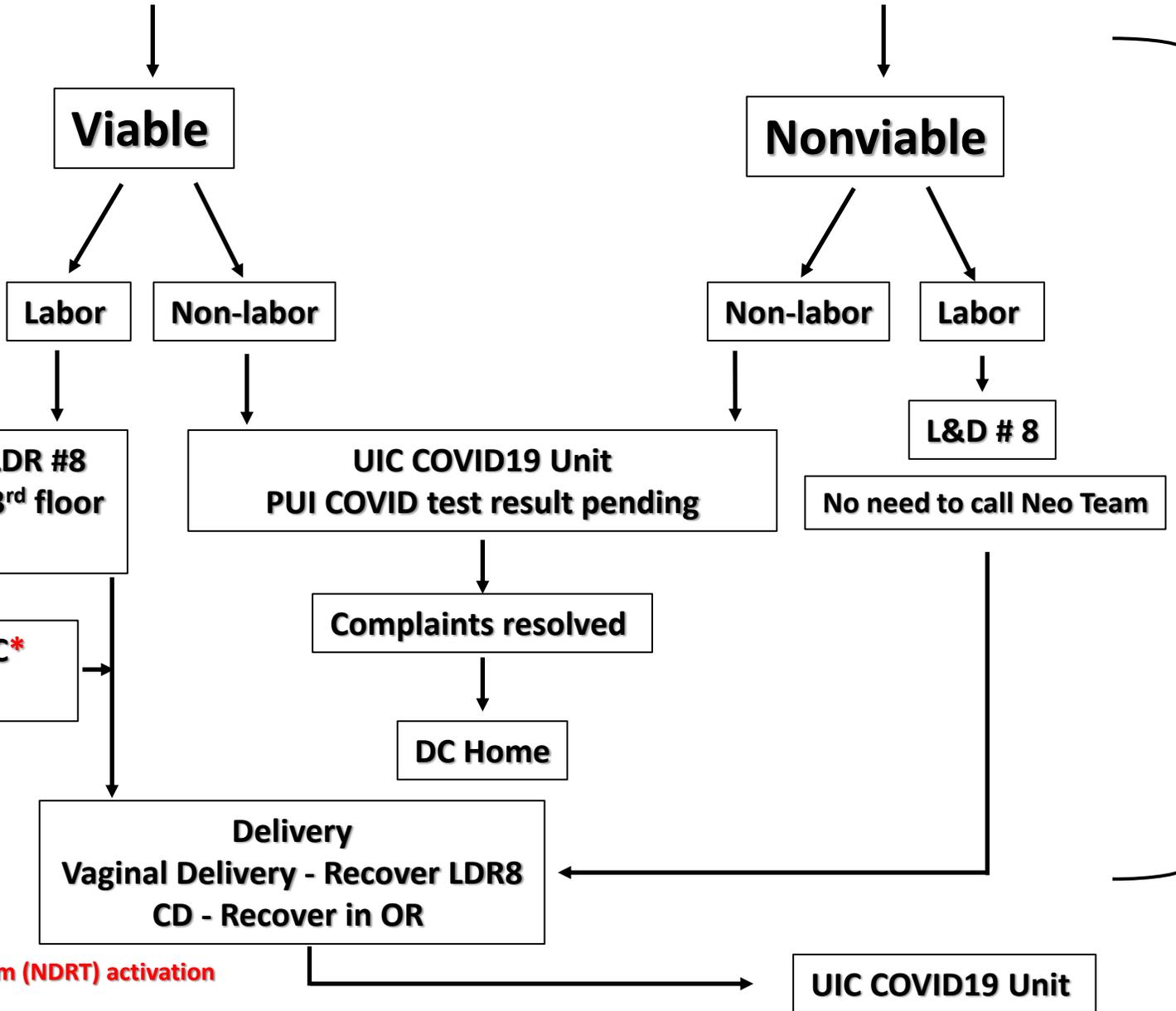


★ Disposition will depend on
COVID vs Obstetric Risk Stratification

PUI COVID-19 hospitalization needed

Main OR rooms:

- OR #1
- OR #2
- Neo: OR #3



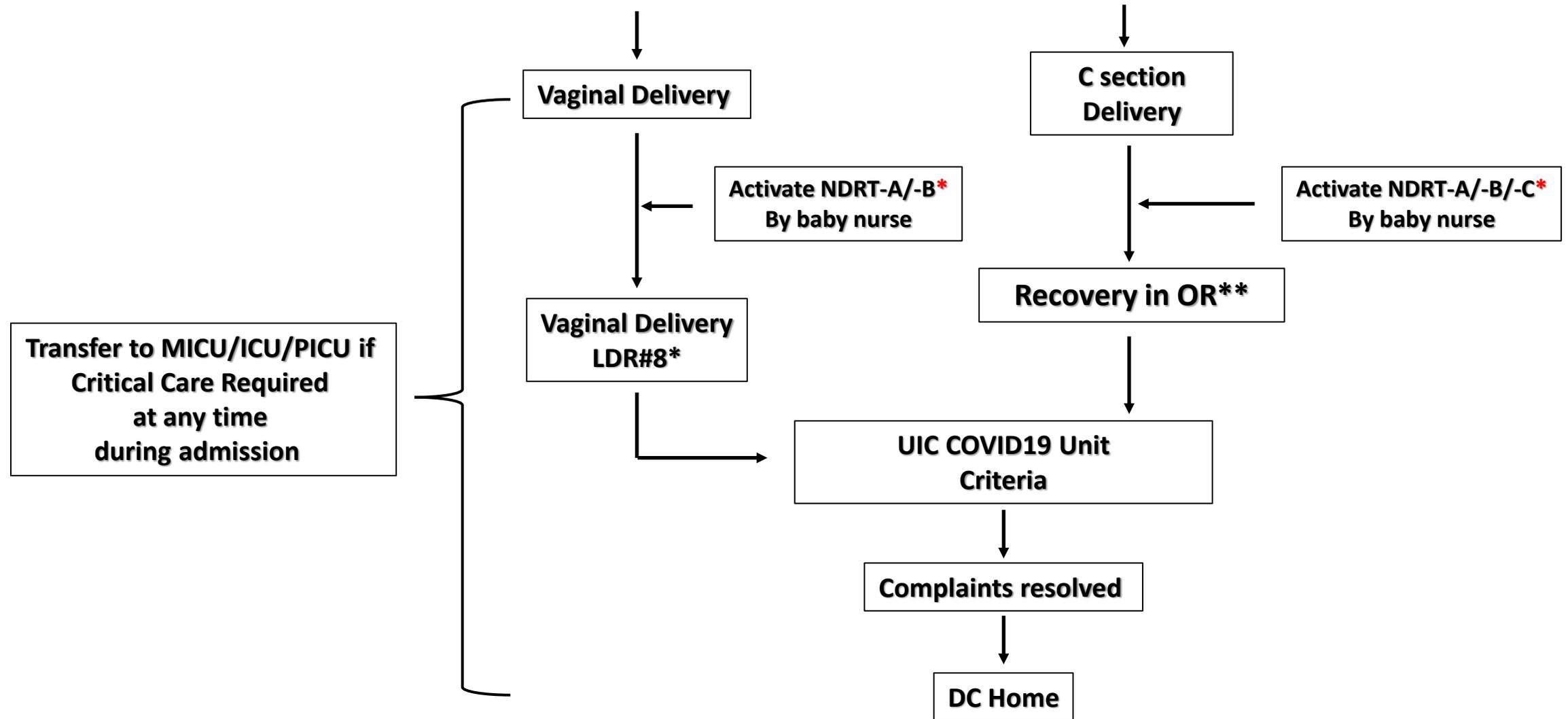
L&D: Labor and Delivery Unit

COVID test result
+COVID - follow no critical care algorithm
-COVID result – proceed with obstetric care as normal

* Neonatal Delivery Response Team (NDRT) activation
Please see detail in the attached

4/15/2020

+ COVID-19 No Critical Care, Postpartum



* Neonatal Delivery Response Team (NDRT) activation
Please see detail in the attached
4/15/2020

* Overflow - L&D Rooms #6 & #7
** OR 3rd or 4th Floor

Delivery of COVID + Patient in MICU/ICU/PICU

Viable Pregnancy in + COVID-19 Mother - Critical Care Needed

CRITICAL CARE UNIT

GA: $\geq 22 \frac{5}{7}$ weeks

YES FETAL CENTRAL MONITORING

**OB EVALUATION FOR
EMERGENT CESAREAN NEEDED-
TEAMS PLACED ON STANDBY –
Dial 171 (626) - OB1**

**L&D OB TEAM AT BED SIDE
5-5719/3-5219**

NO CESAREAN

OB team notifies

- Critical Care Team - onsite
- L&D Charge Nurse - 35230
- Anesthesia – 3-0555/3-4264
- Neonatology – 7-4151

**YES
CESAREAN**

**CONTINUE MANAGEMENT IN
THE MICU/ICU/PICU**

**OB ATTENDING PERFORMS
C/S & HANDS BABY TO NICU
TEAM MEMBER**

Post Delivery - UIC COVID19 Unit or MICU/ICU/PICU (depending on clinical status)

Viable Pregnancy in + COVID-19 Mother - Critical Care Needed

CRITICAL CARE UNIT

GA: $\geq 22 \frac{5}{7}$ weeks

**RN AT BEDSIDE –NOTIFIES
OB TEAM CATEGORY II-III
TRACING - #Pager/5-5719**

NO FETAL CENTRAL MONITORING

**L&D OB TEAM AT BED SIDE
5-5719/3-5219**

**OB EVALUATION FOR
EMERGENT CESAREAN NEEDED-
TEAMS PLACED ON STANDBY –
Dial 171 (626) - OB1 (3)**

NO CESAREAN

OB team notifies

- Critical Care Team - onsite
- L&D Charge Nurse - 35230
- Anesthesia – 3-0555/3-4264
- Neonatology – 7-4151

**YES
CESAREAN**

**CONTINUE MANAGEMENT IN
THE MICU/ICU/PICU**

**OB ATTENDING PERFORMS
C/S & HANDS BABY TO NICU
TEAM MEMBER**

Post Delivery - UIC COVID19 Unit or MICU/ICU/PICU (depending on clinical status)

NEONATAL DELIVERY RESPONSE TEAM (NDRT)*

LEVEL CODES**	A	B	C
Maternal or fetal conditions	<p>Assisted vaginal delivery; Elective C-section Magnesium Sulfate Intrauterine Amniotic Infection (IAI) (chorio) Macrosomia Meconium IUGR Singleton 35 0/7-36 6/7 wk <i>Post date >=41wk</i></p> <p>Non-life threatening fetal anomaly not requiring immediate intervention (eg, cleft lip; club foot)</p> <p>Care plan in chart for fetal concerns requiring a level 1 neonatal provider</p>	<p>Multiples Urgent C-section Oligo/polyhydramnios</p> <p>Singleton 28 0/7-34 6/7 wk</p> <p>Shoulder precautions Any non-life threatening newborn event that requires medical intervention (eg. hemodynamically stable infant with respiratory distress) in post-partum unit. Any newborn event that requires IMMEDIATE / EMERGENT intervention in L&D.</p> <p>Care plan in chart for fetal concerns requiring a level 2 neonatal provider</p>	<p>< 28 weeks gestation Emergent C-section Category 3 FHR tracing Any OB expectation for severe fetal compromise Code shoulder Newborn code Off-site delivery (outside 4th floor L&D/OR)</p> <p>Major congenital fetal anomaly identified in the Center for Perinatal Care plan requiring a Neonatologist</p>
RESPONSE			
Who responds to the call / delivery	<p>Baby Nurse (first responder) Neonatal Provider (1) - Neonatal fellow (first responder) Neonatal Attending (backup) NICU hospitalist/Peds/FP resident (back up)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Limit at 2 providers at the time 2 sets of appropriate PPE</p> </div>	<p>Baby Nurse (first responder) Neonatal Provider (1 or more) - Neonatal fellow (first responder) Neonatal attending (back up) Admission NICU RN (replace baby nurse as request) Respiratory therapist (per request) NICU hospitalist/Peds/FP resident (back up)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Limit at 2-4 providers at the time 4 sets of appropriate PPE</p> </div>	<p>Baby Nurse (first responder) Neonatal Provider (2) - Neonatal fellow (first responder) - Neonatal attending (first responder) Respiratory therapist (first/second responder) Admission NICU RN (second responder, replace baby nurse) Pharmacist (per request) NICU hospitalist/Peds/FP resident (back up)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Limit at 4 providers at the time 4 sets of appropriate PPE</p> </div>

*Not for use for supporting non related-delivery or plan of palliative care

**Level code can be escalated to higher level as per neonatal provider's discretion

OB Equipment Needs

- **C-Section pack**
- **Laminated contact list posted on the patient door**
- **NST Monitor with extended cords and fetal strip paper, ziplock bag and labels**
- **WOW for RN charting**
- **Cap**
- **N95**
- **Goggle (face mask with shield as alternative) ***
- **Double gloves - Sizes 6-8.5**
- **Gown**
- **Chlorhexidine scrub**
- **Shoe covers**
- **Surgical lamps**
- **Postpartum hemorrhage kit (Methergine, Cytotec, *Carboprost*, Tranexamic acid)**

Procedure

Activate NDRT by calling a baby nurse or designated person

Baby nurse or designated person calls neonatal fellow (please follow guidelines/criteria on previous page) and also

- Prepare for resuscitation bed
- Prepare for appropriate PPE (also this supply should be checked every shift in daily basis and replenish it to keep at least 4 sets of them)
- Prepare to Sterile Scrub-in for receiving the infant from OB team (if delivery occurs in OR; unless OB team brings the infant to resuscitation bed)
- Keep close contact with OB-Neo team to make sure neonatal team will be present in the delivery field in 15 minutes in advance if possible

Wear an appropriate PPE as shown below:

For case without PUI/COVID

1. Glove
2. Face mask with shield
3. Hospital scrub
4. Cap (if delivery occurs in OR)
5. Gown (if delivery occurs in OR)
6. Shoes cover (if delivery occurs in OR)

For case with PUI/COVID

1. Cap
2. N-95 (if reusable, recommend to put face mask on top)*
3. Goggle (face mask with shield as alternative) *
4. Double Glove
5. Gown
6. Hospital scrub
7. Shoes cover

(*In case limit resource, it is mandatory for baby nurse, respiratory therapist and person intubating infant to wear it, the rest of the team can wear a facemask with shield)

Hand sanitizing right before and after attending delivery

Neonatal team will wait in front of the delivery room until baby nurse or designated person give a green light to enter to room

In case of 2 or more urgent requests at the same time (also up to neonatal provider's discretion)

1. First responders will attend the first event
2. Second responders and / or back up team will attend the second event
3. And so on

4/15/2020

OB/NICU/Anesthesia Summary

<u>Covid + Nonviable No OB Issues</u>	<u>Covid + Nonviable + OB Issues</u>	<u>Covid + Viable No OB Issues</u>	<u>Covid + Viable + OB Issues</u>	<u>PUI/Covid + for Vaginal Delivery</u>	<u>PUI/Covid + for C/S Delivery</u>	<u>MICU/ICU/PICU Delivery</u>	<u>Hx + ? Shedding for Delivery</u>
Transfer COVID Unit or MICU/ICU/PICU	OBER #5	Transfer COVID Unit or MICU/ICU/PI CU	OBER #5 or L&D #8	L&D #8 for labor delivery and recovery	Scheduled and Urgent C/S Main OR 3	Maternal Status or Fetal Monitoring Deteriorates – OB/NICU /Anes. Team to Bedside	? Tx as still positive
OB Consult	Transfer COVID Unit or MICU/ICU/PICU	After OB Assessment				Emergency Delivery in Unit	
			Transfer COVID Unit or MICU/ICU/PI CU	Transfer COVID Unit or MICU/ICU/PICU	Recover Main OR 3	Recovery in MICU/ICU/PICU	
			May go to Rm 412 APSD*		Transfer COVID Unit or MICU/ICU/PICU		
					Emergent C/S - L&D OR Recover L&D OR		
			*MFM determination of transfer disposition		Transfer COVID Unit or MICU/ICU/PICU		

4/15/2020

NICU resuscitation in adjacent room

Admit to Family Medicine COVID-19 Team

DISCONTINUATION OF TRANSMISSION - BASED PRECAUTIONS FOR COVID-19 PATIENTS

Test-based strategy

- **Resolution of fever without the use of fever-reducing medications**
and
- **Improvement in respiratory symptoms (e.g. cough, shortness of breath),**
and
- **Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive nasopharyngeal swab specimens collected ≥ 24 hours apart (total of two negative specimens)**

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html>

DISCONTINUATION OF TRANSMISSION - BASED PRECAUTIONS FOR COVID-19 PATIENTS

Non-test based strategy

- **At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g. cough, shortness of breath) and**
- **At least 7 days have passed since symptoms first appeared**

UNIVERSAL SCREENING

POC Test-based strategy

- **Approved by UIC April 2020**
- **Sites: L&D, OBER**
- **Type of POC testing (viral genome)**
- **Universal PUI categorization pending POC test results**
- **PPE health care providers pending results**
- **POC testing vs Temp screening - visitors**
- **Testing 24-48 hours prior to elective procedures (eg CD, ECV)**
- **Testing every 72 hours**