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MASSACHUSETTS GENERAL HOSPITAL

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IV Access and Blood Draw Algorithm
Medicine Inpatients During COVID-19

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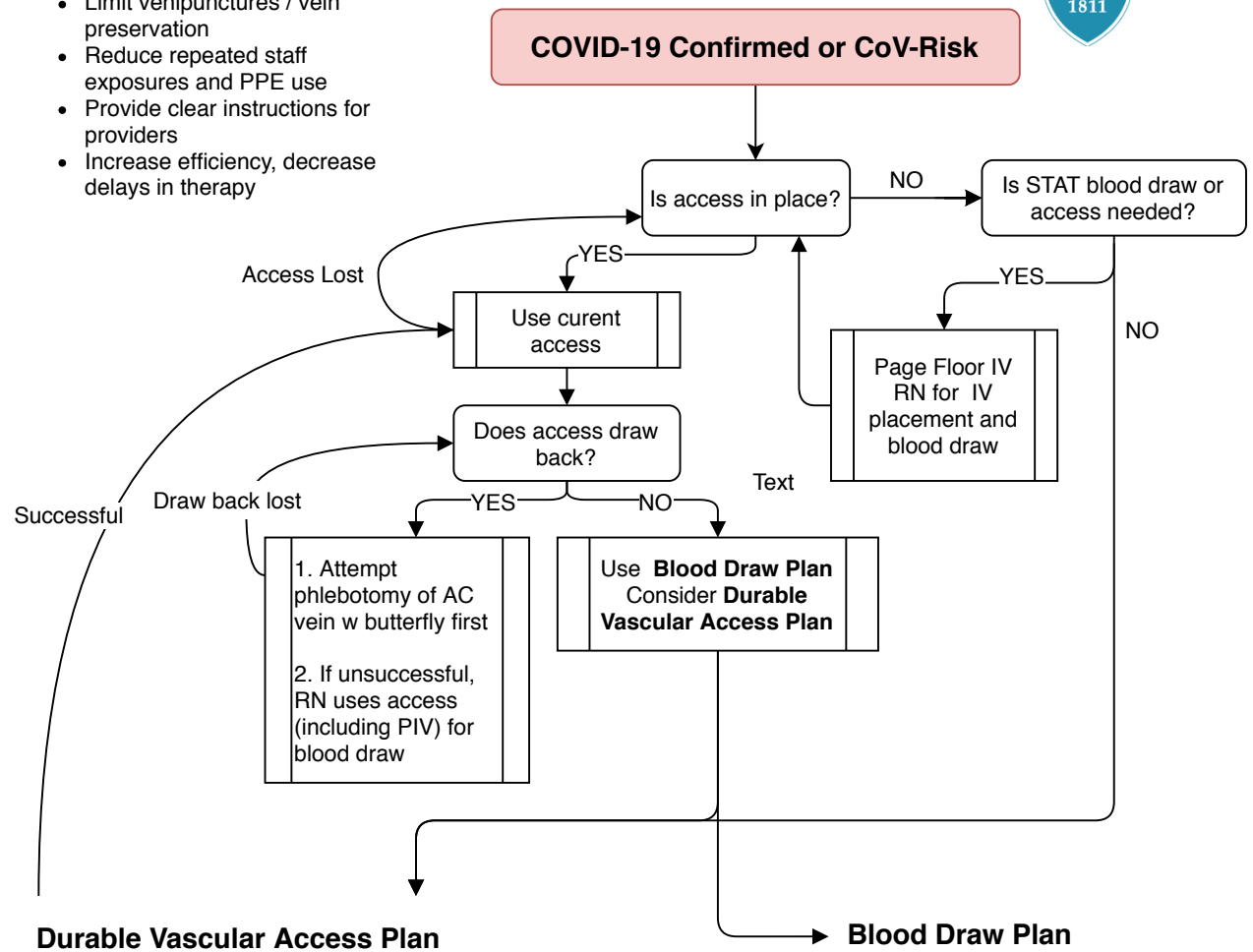
Goals

- Ensure adequate access for all patients
- Limit venipunctures / vein preservation
- Reduce repeated staff exposures and PPE use
- Provide clear instructions for providers
- Increase efficiency, decrease delays in therapy



Non-COVID 19

IV Access

- If floor team cannot obtain access, RN to page floor IV RN
- Vascular access nursing team will assess for appropriate vascular access device and consult with care team as needed
- AMPS is no longer involved in routine workflow for access

Blood Draw Plan

- Same as below

Durable Vascular Access Plan

- RN to page floor IV RN
- Vascular access nursing team will assess
- **Early PICC insertion** will be considered for COVID patients in collaboration with primary team based on frequency of blood draws, expected length of stay, risk of rapid decompensation, and need for subsequent central access
- Other access (midline, extended dwells, UGIV) will be recommended as appropriate
- AMPS is no longer routinely involved for access

Blood Draw Plan

- If patient needs peripheral stick for labs, **floor staff** (RN or PCA) attempt first
- If floor staff fails, page floor IV RN. If floor IV RN fails, they escalate to IV resource nurse
- AMPS is no longer routinely involved for blood draws
- All **non-stat blood draws** will be **consolidated** at floor specific times
    - Provider to **limit all labs to AM blood draw** if possible
    - All other non stat labs ordered will be drawn at the next scheduled lab times.
    - Eg if labs drawn at 9AM and non stat lab ordered at 930AM, lab will be drawn at next scheduled draw time at 2PM

Changes to Usual Practice for COVID-19

- Educate and allow for RNs to draw off PIVs, midlines, and extended dwells
- Consolidate blood draws to set times
- Early PICC placement in appropriate patients
- If febrile due to COVID, will place PICC prior to BCX negative at 48H without ID approval if primary team documents agreement
- PICC team to consult with renal directly in patients with low GFR
- Allow IV team to place certain orders independently in EPIC (PICC insertion, lidocaine, CXR, KVO, etc)

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3/25/20

PICC Screening Guidelines

- Allergies
  - CHG
  - Latex
  - Heparin/HIT
  - Lidocaine
  - Tegaderm
  - Tape
- Renal function
  - CrCl > 60 OK
  - CrCl 45-60 use dominant arm
  - CrCl <45 nephrology input
- Coagulation
  - INR <3
  - Plt > 5000
- Infectious Disease
  - In general if febrile (T> 100), blood cultures should be no growth x 48h and patient afebrile x 24h prior to PICC placement
  - If another line is removed for presumed or confirmed infection, 24-48 hour line holiday prior to PICC placement
- Anatomy (e.g. from prior imaging) requiring referral to IR
  - Left SVC
  - Central vessel occlusions, narrowing, stenosis
- Clots
  - Use unaffected side
  - If bilateral refer to IR
  - If h/o thrombus in prior 6 months, recommended ultrasound
- Hardware requiring referral to IR
  - Pacer/ICD <3 month old
  - Transvenous wire
- Hardware OK for bedside
  - Pacer/ICD >3 months old, use opposite arm
  - Epicardial wires
  - Leadless pacer
  - Consult with EP if pacer planned while PICC in place
- Other Reasons for IR Referral
  - Amplatzer device
  - Central vein stent
  - SVC syndrome
  - Impella RP
  - Mediastinal Mass
- Prior stroke
  - Use unaffected arm if possible
- TPN
  - Requires dedicated lumen
- Other lines
  - ECMO or planned ECMO: no PICC placement
  - Indwelling CVC: Use opposite side
- Mastectomies
  - BMI >=30 increases risk of lymphedema
  - Lumpectomy or simple mastectomy **without** axillary lymph node dissection (ALND) or regional lymph node radiation (RLNR) is ok for PICC, PIV, and blood draw. Consider unaffected arm first
  - For patients **with** ALND and RLNR requires discussion with provider and specific order written.
  - Current or prior lymphedema is **contraindication** to venipuncture