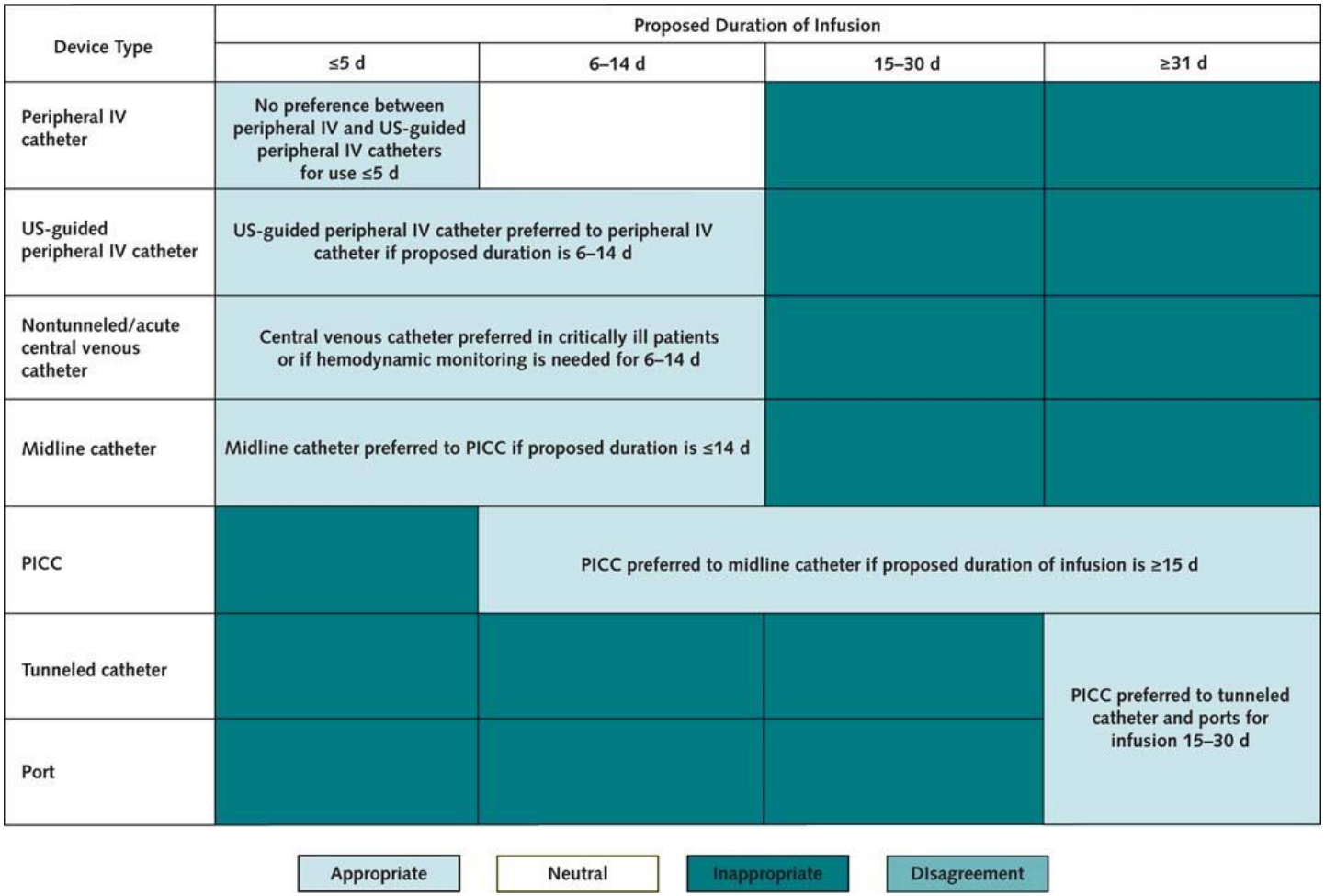
MAGIC Recommendations for PICC Insertion

Venous access device recommendations for infusion of peripherally compatible infusate



IV = Intravenous; PICC = peripherally inserted central catheters; US = ultrasonography

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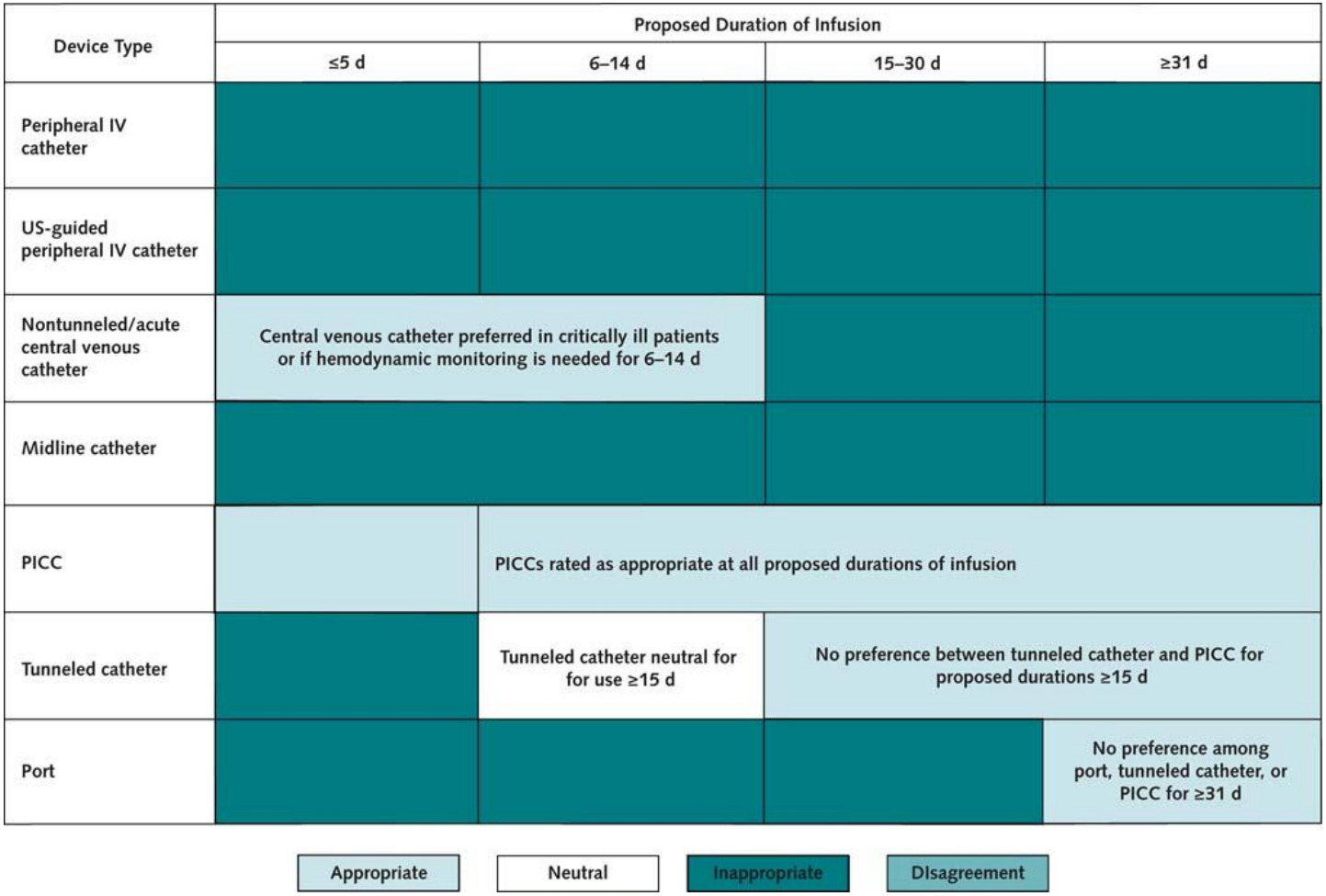
Venous access device recommendations for infusion of non-peripherally compatible infusate



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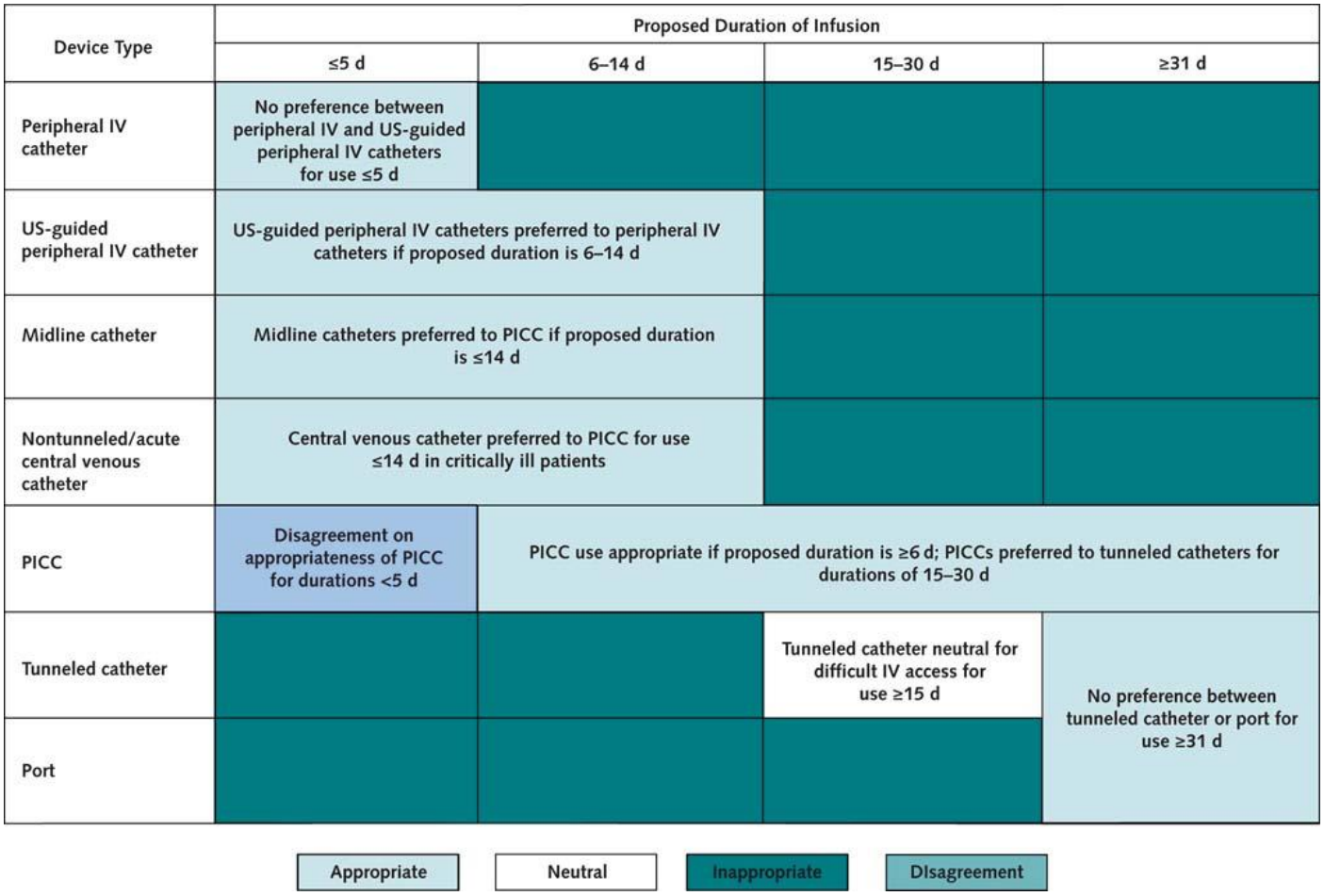
Venous access device recommendations for patients with difficult venous access



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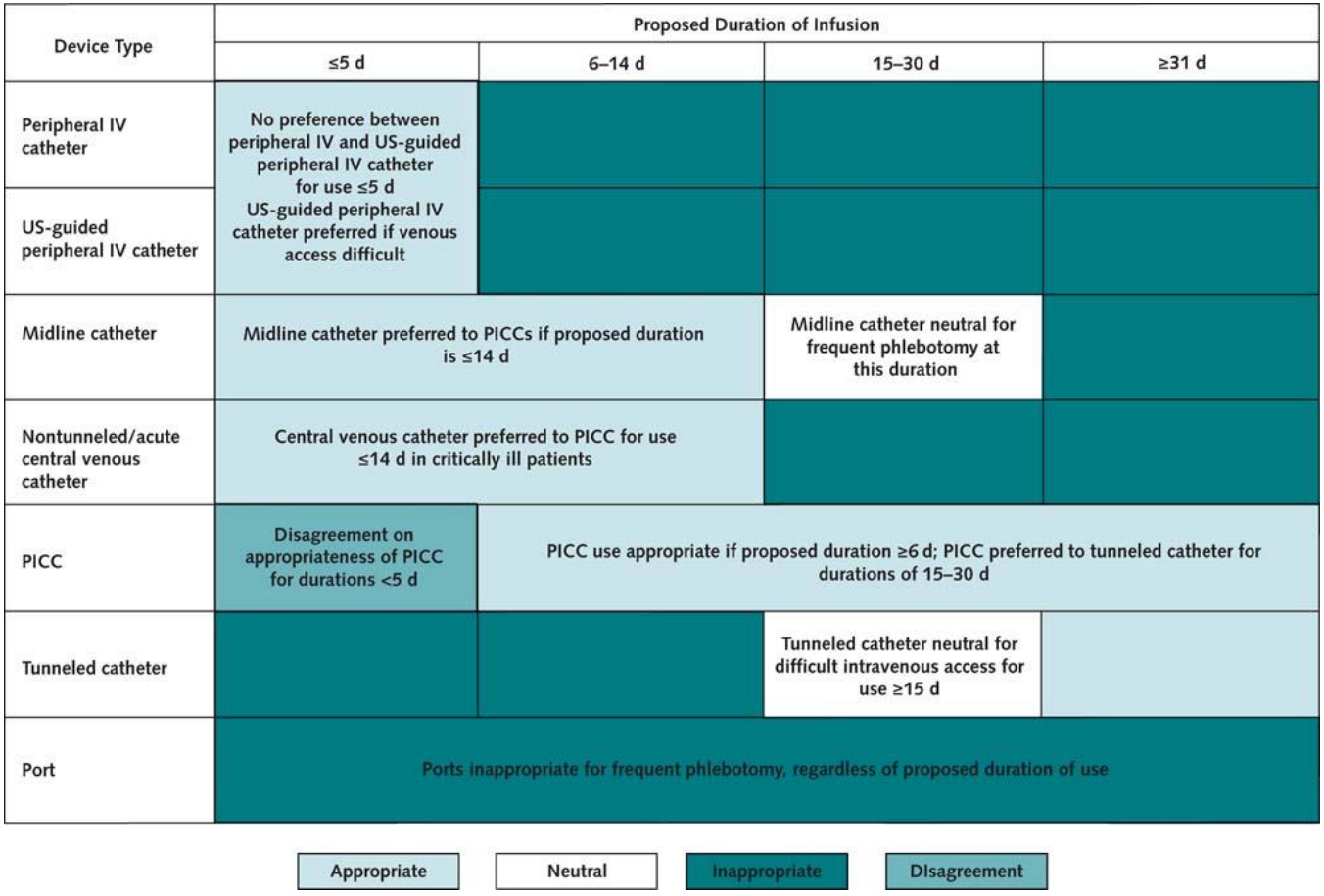
Venous access device recommendations for patients who require frequent phlebotomy



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Appropriate Indications for PICC Use

Appropriate indications for PICC use

- Delivery of peripherally compatible infusates when the proposed duration of such use is ≥6 d*
- Delivery of non-peripherally compatible infusates (e.g., irritants or vesicants), regardless of proposed duration of use
- Delivery of cyclical or episodic chemotherapy that can be administered through a peripheral vein in patients with active cancer, provided that the proposed duration of such treatment is ≥3 mo†
- Invasive hemodynamic monitoring or requirement to obtain central venous access in a critically ill patient, provided the proposed duration of such use is ≥15 d‡
- Frequent phlebotomy (every 8 h) in a hospitalized patient, provided that the proposed duration of such use is ≥6 d
- Intermittent infusions or infrequent phlebotomy in patients with poor/difficult peripheral venous access, provided that the proposed duration of such use is ≥6 d§
- For infusions or palliative treatment during end-of-life care‖
- Delivery of peripherally compatible infusates for patients residing in skilled nursing facilities or transitioning from hospital to home, provided that the proposed duration of such use is ≥15 d¶

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Inappropriate Indications for PICC Use

Inappropriate indications for PICC use

- Placement for any indication other than infusion of non-peripherally compatible infusates (e.g., irritants or vesicants) when the proposed duration of use is ≤5 d
- Placement in a patient with active cancer for cyclical chemotherapy that can be administered through a peripheral vein, when the proposed duration of such treatment is ≤3 mo and peripheral veins are available
- Placement in a patient with stage 3b or greater chronic kidney disease (estimated glomerular filtration rate ≤44 mL/min) or in patients currently receiving renal replacement therapy via any modality
- Insertion for nonfrequent phlebotomy if the proposed duration of such use is ≤5 d
- Patient or family request in a patient who is not actively dying or in hospice, for comfort in obtaining daily blood samples for laboratory analysis
- Medical or nursing provider request in the absence of other appropriate criteria for PICC use

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Appropriate PICC Practices

Appropriate PICC practices

- Before ordering a PICC, consult relevant specialists (e.g., infectious diseases, oncology), operators (vascular access professional), and/or hospital pharmacists to determine optimal device choice and characteristics*
- After non-EKG or non-fluoroscopically guided PICC insertion, verify PICC tip position via chest radiography
- Only adjust PICCs that terminate in the upper or middle one third of the superior vena cava or right ventricle
- In the absence of indications for a multilumen PICC, use a single-lumen PICC of the smallest gauge
- Use normal saline rather than heparin to flush PICCs after infusion or phlebotomy
- Exchange PICCs to change device features (e.g., number of lumens) or treat dislodgement over a guidewire
- Provide ≥3 mo of uninterrupted systemic anticoagulation for treatment of PICC-related DVT in the absence of contraindications to such therapy†
- Use the smallest sized catheter and vein on the contralateral arm after ≥3 mo of therapeutic anticoagulation when placing a PICC in a patient with history of PICC-related DVT‡
- Provide a "line-free" interval to ensure clearance of bacteremia when managing PICC-related bloodstream infections

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Inappropriate PICC Practices

Inappropriate PICC practices

- Urgent requests for PICC placement in a hemodynamically unstable patient in the wards or ICU
- Preferential placement of a PICC on the basis of arm dominance
- Chest radiography verification of the PICC tip after placement via verifie EKG guidance or fluoroscopy§
- Adjustment of PICC tips that reside in the lower one third of the superior vena cava, cavoatrial junction, or right atrium
- Advancement of a partially dislodged PICC in the setting of external migration of the catheter of any length
- Removal of PICCs that are clinically necessary, centrally positioned, and otherwise functional in the setting of PICC-related DVT
- Routine removal or replacement of PICCs that are clinically necessary without objective evidence of catheter-associated bloodstream infection in febrile patients
- Removal of a PICC by a health care team member not trained to remove this device

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