Perform patient assessment of anticipated need for vascular access on admission, at least once a day, and when patient’s condition changes.

If emergent vascular access required, proceed with access.

Patient has no IV access

Duration device will be needed

See Table 1

1-5 days

>5 days

History of 4 PIVs this admission or difficult access

Will receive drugs/solutions in Table 2

Yes

Insert/continue PIV

Yes

>4 insertion attempts

No

No

No

Patient has existing VAD

Yes

See Table 3

Yes

Catheter problem

Yes

No

CVC needed for home therapy

Yes

Existing device other than a PICC, port, or tunneled CVC

Yes

No

No

No

Reassess once a day. Reassess when patient’s condition changes. Return to algorithms as indicated.
### Table II

**Vesicant or highly phlebogenic drugs for which central venous access delivery is recommended:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acyclovir</td>
<td>Chemotherapy agents:</td>
</tr>
<tr>
<td>Alprostadil</td>
<td></td>
</tr>
<tr>
<td>Amphotericin B</td>
<td>Carboplatin</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>Carmustine</td>
</tr>
<tr>
<td>Calcium chloride</td>
<td>Dacarbazine</td>
</tr>
<tr>
<td>Calcium gluconate</td>
<td>Dactinomycin</td>
</tr>
<tr>
<td>Ciprofloxacin</td>
<td>Daunorubicin</td>
</tr>
<tr>
<td>Clindamycin</td>
<td>Doxorubicin</td>
</tr>
<tr>
<td>•Dextrose &gt;12.5%</td>
<td>Etoposide</td>
</tr>
<tr>
<td>•Dobutamine</td>
<td>Fluourouracil</td>
</tr>
<tr>
<td>•Dopamine</td>
<td>Idarubicin</td>
</tr>
<tr>
<td>•Epinephrine</td>
<td>Ifosfamide</td>
</tr>
<tr>
<td>Erythromycin</td>
<td>Mechlorethamine</td>
</tr>
<tr>
<td>Gancyclovir</td>
<td>Mitomycin C</td>
</tr>
<tr>
<td>Gentamicin</td>
<td>Teniposide</td>
</tr>
<tr>
<td>Mannitol</td>
<td>Vinblastine</td>
</tr>
<tr>
<td>Nafcillin</td>
<td>Vincristine</td>
</tr>
<tr>
<td>Nicarpidine</td>
<td>Vindesine</td>
</tr>
<tr>
<td>Nitroprusside</td>
<td>Vinorelbine</td>
</tr>
<tr>
<td>•Norepinephrine</td>
<td></td>
</tr>
<tr>
<td>Phenobarbital</td>
<td></td>
</tr>
<tr>
<td>Phenylephrine</td>
<td></td>
</tr>
<tr>
<td>Pipercillin</td>
<td></td>
</tr>
<tr>
<td>•Potassium chloride &gt;50meq</td>
<td></td>
</tr>
<tr>
<td>Potassium acetate</td>
<td></td>
</tr>
<tr>
<td>Potassium phosphate</td>
<td></td>
</tr>
<tr>
<td>Rifampin</td>
<td></td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td></td>
</tr>
<tr>
<td>Tobramycin</td>
<td></td>
</tr>
<tr>
<td>Vancomycin</td>
<td></td>
</tr>
</tbody>
</table>

**Central line required**

Refer to *IV Therapy policy* for a comprehensive list of irritants/vesicants.

### Table I

**Diagnostic categories known to typically require >5 days of intravenous therapy:**

- Abcess
- Cardiac dysrhythmias
- Craniotomy
- Cystic fibrosis
- Epidermolysis bullosa
- Leukemia
- Liver disorders
- Lymphomas
- Metabolic disorders
- Neutropenia
- Nutrition disorders
- Pneumonia
- RSV Pneumonia
- Spinal procedures
- Surgery of
  - Esophagus
  - Duodenum
  - Kidney
- Syncope and collapse
- Transplants:
  - Heart
  - Liver
  - Lung
  - Kidney
- Ventricular shunt procedure

**Patient conditions often prolonging the need for IV therapy:**

- Coagulopathies
- Immunosuppression
- Malnutrition
- Obesity
- Poor venous access

### TABLE 3

**Fever**

- Damage to existing catheter
- Dislodgement or migration of catheter suspected
- Inflammation at exit site or along catheter track
- Leaking at catheter site
- Occlusion, i.e., unable or difficult to flush or withdraw
- Pain in catheterized extremity
- Swelling of ipsilateral arm, shoulder, or neck
- Visible collateral circulation