**EXAMPLE VASCULAR ACCESS DEVICE CONSIDERATIONS**

1. Will vesicant, irritant, or cytotoxic infusates be administered through the device? (Refer to INS Red and Yellow List)
   - For infusates with extremes of pH, patient and clinical variables should be considered.

2. What is the expected length of therapy?

3. Have you assessed medical history, applicable patient factors, vein accessibility, and potential risks for placement?

   Examples:
   - ESRD: No accessible upper arm veins; Ipsilateral mastectomy with node removal; Ipsilateral AV fistula or graft; Arm limitations (paralysis, infection, cast, etc); Blood clot in intended vessel or catheter pathway; Bleeding risks; Respiratory and hemodynamic status; Need for multiple lumens; Need for power injection; Required flow rates; and Facility protocols.

**VEIN DIAMETERS & VESSEL FLOW RATES**

<table>
<thead>
<tr>
<th>Vein Diameter</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mm Forseam</td>
<td>20–60 ml/min</td>
</tr>
<tr>
<td>9 mm Basilic Upper Arm Vein</td>
<td>50–300 ml/min</td>
</tr>
<tr>
<td>10 mm Axillary Vein</td>
<td>150–300 ml/min</td>
</tr>
<tr>
<td>20 mm Subclavian</td>
<td>500–1500 ml/min</td>
</tr>
<tr>
<td>30 mm Superior Vena Cava</td>
<td>2000 ml/min</td>
</tr>
</tbody>
</table>

**BARD VASCULAR ACCESS DEVICES**

- Guidewire-assisted PIV
- Midline
- Peripherally Inserted Central Catheter
- Acute IVC
- Implantable Port

**DIAGNOSTIC CATEGORIES KNOWN TO TYPICALLY REQUIRE >5 DAYS OF IV THERAPY**

- CHRONIC DISEASES
  - CRONITOMY
  - CYSTIC FIBROSIS
  - EPIDERMOLYSIS BULLA
  - LEUKAEMIA
  - LIVER DISORDERS
  - METABOLIC DISORDERS
  - LYMPHOMAS
  - LIVER DISORDERS
  - CYSTIC FIBROSIS
  - CRANIOTOMY
  - CARDIAC DYSRYTHMIAS
  - ABSCESS

- NUTRITION DISORDERS
  - PONINGENIA
  - DIABETES
  - NEUROPATHY
  - VASCULAR HISTORY
  - EDEMA
  - VASCULAR DISEASE
  - PECULIARITY
  - DRUG ABUSER

- PATIENT HISTORY WHICH MAY CONTRIBUTE TO DIFFICULT INSERTION

- CHRONIC DISEASES
  - DIABETES
  - END STAGE RENAL DISEASE
  - CANCER
  - CARDIOVASCULAR DISEASES
  - INFECTIONS
  - SKIN CELL
  - OBESITY
  - GLORIETY
  - PEDIATRIC
  - DRUG ABUSER