

APPENDIX B: VASCULAR ACCESS DEVICE SELECTION ALGORITHM

Vascular Access Device Selection								
Evaluate prescribed therapy:								
① length of therapy	② need for blood draws	③ number of lumens needed	④ patient's vasculature	⑤ patient's preference				
⑥ patient's ability to cope/care for device		⑦ discharge IV needs	⑧ care setting (e.g. acute, long term, home)					
Device Type	Proposed Duration of Infusion							
	Less than or equal to 5 days	6 to 14 days	15 to 30 days	Greater than or equal to 31 days				
Intraosseous	For emergent cases; Less than or equal to 24 hours							
Peripheral IV (PIV)								
Ultrasound-guided PIV	For difficult venous access							
Short-term CVC	Preferred in critically ill patients or if hemodynamic monitoring is needed for 6 to 14 days							
Extended dwell PIV	Preferred for non-vesicant medication for 6 to 30 days							
PICC								
Tunneled CVC				PICC preferred to Tunneled CVC and IVAD for infusion for 15 to 30 days				
IVAD								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%; background-color: #92d050; text-align: center;">Appropriate</td> <td style="width: 25%; text-align: center;">Neutral</td> <td style="width: 25%; background-color: #ff0000; text-align: center;">Inappropriate</td> </tr> </table>						Appropriate	Neutral	Inappropriate
	Appropriate	Neutral	Inappropriate					
Consider:								
① Risk for insertion complications		② Risk for post-insertion complications		③ Potential for change in therapy				
④ Current and potential activity level of patient		⑤ Past medical history		⑥ Current medical condition				

Adapted from "The Michigan Appropriateness Guide for Intravenous Catheters (MAGIC): Results From a Multispecialty Panel Using the RAND/UCLA Appropriateness Method"; Annals of Internal Medicine, Vol. 163 No. 6 (Supplement), 15 September 2015.