

## TECHNICAL SPECIFICATION

<b>Indicator 8</b>	:	<b>Incidence of Thrombophlebitis among inpatients with intravenous(IV) cannulation</b>																								
<b>Element</b>	:	<b>Internal Business Process</b>																								
<b>Rationale</b>	:	Thrombophlebitis has a direct/indirect impact on the patient health as it can cause discomfort, pain and prolonged in-patient stays that may lead to the patient suffering from economic consequences.																								
<b>Definition of Terms</b>		<p><b>Thrombophlebitis:</b> inflammation of the wall of a vein with associated thrombosis.</p> <p>Assessment of Thrombophlebitis with <b>Visual Infusion Phlebitis (VIP) Scores</b></p> <table border="1"> <thead> <tr> <th colspan="3"><b>VISUAL INFUSION PHLEBITIS (VIP) SCORES</b></th> </tr> <tr> <th><b>Site Observation</b></th> <th><b>Score</b></th> <th><b>Action</b></th> </tr> </thead> <tbody> <tr> <td>IV site appears healthy</td> <td><b>0</b></td> <td>No sign of phlebitis <b>OBSERVE CANNULA</b></td> </tr> <tr> <td><b>One</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain near IV site (pain score of 1-3)</li> <li>May not require analgesics</li> <li>Slight redness near IV site</li> </ul> </td> <td><b>1</b></td> <td>Possibly first signs of phlebitis <b>OBSERVE CANNULA</b></td> </tr> <tr> <td><b>Two</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with activities</li> <li>Redness around site</li> <li>Swelling</li> </ul> </td> <td><b>2</b></td> <td>Early stage of phlebitis <b>RESITE CANNULA</b></td> </tr> <tr> <td><b>ALL</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with concentration</li> <li>Redness around site</li> <li>Swelling/Induration</li> </ul> </td> <td><b>3</b></td> <td>Medium stage of phlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b></td> </tr> <tr> <td><b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula(pain score of 7-9)</li> <li>Interferes with basic needs</li> <li>Redness around site</li> <li>Swelling/Induration</li> <li>Palpable venous cord</li> </ul> </td> <td><b>4</b></td> <td>Advanced stage of phlebitis or the start of thrombophlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b></td> </tr> <tr> <td><b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula (pain score of 10) . Bed rest required</li> <li>Redness around site</li> <li>Swelling/ Induration</li> <li>Palpable venous cord</li> <li>Pyrexia</li> </ul> </td> <td><b>5</b></td> <td>Advanced stage of thrombophlebitis <b>INITIATE TREATMENT</b> <b>RESITE CANNULA</b></td> </tr> </tbody> </table>	<b>VISUAL INFUSION PHLEBITIS (VIP) SCORES</b>			<b>Site Observation</b>	<b>Score</b>	<b>Action</b>	IV site appears healthy	<b>0</b>	No sign of phlebitis <b>OBSERVE CANNULA</b>	<b>One</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain near IV site (pain score of 1-3)</li> <li>May not require analgesics</li> <li>Slight redness near IV site</li> </ul>	<b>1</b>	Possibly first signs of phlebitis <b>OBSERVE CANNULA</b>	<b>Two</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with activities</li> <li>Redness around site</li> <li>Swelling</li> </ul>	<b>2</b>	Early stage of phlebitis <b>RESITE CANNULA</b>	<b>ALL</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with concentration</li> <li>Redness around site</li> <li>Swelling/Induration</li> </ul>	<b>3</b>	Medium stage of phlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b>	<b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula(pain score of 7-9)</li> <li>Interferes with basic needs</li> <li>Redness around site</li> <li>Swelling/Induration</li> <li>Palpable venous cord</li> </ul>	<b>4</b>	Advanced stage of phlebitis or the start of thrombophlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b>	<b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula (pain score of 10) . Bed rest required</li> <li>Redness around site</li> <li>Swelling/ Induration</li> <li>Palpable venous cord</li> <li>Pyrexia</li> </ul>	<b>5</b>	Advanced stage of thrombophlebitis <b>INITIATE TREATMENT</b> <b>RESITE CANNULA</b>
<b>VISUAL INFUSION PHLEBITIS (VIP) SCORES</b>																										
<b>Site Observation</b>	<b>Score</b>	<b>Action</b>																								
IV site appears healthy	<b>0</b>	No sign of phlebitis <b>OBSERVE CANNULA</b>																								
<b>One</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain near IV site (pain score of 1-3)</li> <li>May not require analgesics</li> <li>Slight redness near IV site</li> </ul>	<b>1</b>	Possibly first signs of phlebitis <b>OBSERVE CANNULA</b>																								
<b>Two</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with activities</li> <li>Redness around site</li> <li>Swelling</li> </ul>	<b>2</b>	Early stage of phlebitis <b>RESITE CANNULA</b>																								
<b>ALL</b> of the following signs evident: <ul style="list-style-type: none"> <li>Pain at IV site(pain score of 4-6)</li> <li>Interfere with concentration</li> <li>Redness around site</li> <li>Swelling/Induration</li> </ul>	<b>3</b>	Medium stage of phlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b>																								
<b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula(pain score of 7-9)</li> <li>Interferes with basic needs</li> <li>Redness around site</li> <li>Swelling/Induration</li> <li>Palpable venous cord</li> </ul>	<b>4</b>	Advanced stage of phlebitis or the start of thrombophlebitis <b>RESITE CANNULA</b> <b>CONSIDER TREATMENT</b>																								
<b>ALL</b> of the following signs evident and <b>extensive:</b> <ul style="list-style-type: none"> <li>Pain along path of cannula (pain score of 10) . Bed rest required</li> <li>Redness around site</li> <li>Swelling/ Induration</li> <li>Palpable venous cord</li> <li>Pyrexia</li> </ul>	<b>5</b>	Advanced stage of thrombophlebitis <b>INITIATE TREATMENT</b> <b>RESITE CANNULA</b>																								

<b>Criteria</b>	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All admitted patients with peripheral venous cannula</li> <li>2. Peripheral cannulas that were inserted during current admission</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. "Double counting" i.e the complication that has been counted during previous admission</li> <li>2. Psychiatry patient</li> <li>3. Neonates patient</li> <li>4. Paediatric patient</li> <li>5. Unconscious patient</li> </ol>
<b>Type of indicator</b>	:	Rate-based outcome indicator
<b>Numerator</b>	:	Total Number of thrombophlebitis incidences
<b>Denominator</b>	:	Total Number of inserted peripheral venous cannulas
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	≤0.5%
<b>Data Collection</b>	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> data will be collected from every ward of the hospital.</li> <li>2. <b>Who:</b> data will be collected by the ward manager/staff nurse/ personnel in charge of the ward.</li> <li>3. <b>How frequent:</b> Monthly data collection.</li> <li>4. <b>Who Should verify:</b> All performance data must be verified by the Head of Department / Head of Unit/ Hospital Director.</li> <li>5. <b>How to collect:</b> Data will be collected from the record book /patient's case notes.</li> </ol>
<b>Remarks</b>	:	<ul style="list-style-type: none"> <li>• Thrombophlebitis Chart (BKJ-BOR-PPK-10 Pind.2/2018) Will be used for thrombophlebitis monitoring.</li> <li>• Report must be sent to State matron (KPJN) for Nursing Division compilation</li> <li>• All peripheral venous cannula must be counted.</li> </ul>