TITLE: Returning Issued Blood Components to Inventory at Northwest Campus

PURPOSE:
To describe the process for evaluating blood components returned from an issued status prior to acceptance back into inventory or placing into quarantined status.

LOCATION:
Northwest Transfusion Support Service (TSS)

PRINCIPLE & CLINICAL SIGNIFICANCE:
Principle
All blood components returned to the Transfusion Service Laboratory (TSL) must be inspected and evaluated to ensure handling, temperature and the visual meet all applicable UWMW TSL, Food and Drug Administration (FDA) and CAP and AABB requirements are met prior to acceptance back into inventory.

Clinical Significance
Blood components issued for transfusions are susceptible to damage and increased risk for bacterial contamination if proper temperatures and handling practices are not maintained. Transfusion of components not maintained at the appropriate temperature may lead to reduced effectiveness of the product and can increase the risk of an adverse reaction in the recipient if transfused.

POLICIES:
- Quality Improvement (QI) form must be completed to document return of all blood components to TSS.
- Blood components may be returned and accepted into inventory for reissue only if all of the following conditions are met:
  - Blood component is not spiked
  - Ports are not tampered with
  - Label is not defaced in any manner
  - Visual inspection is acceptable – refer to SOP ***Visual Inspection of Blood Components at Northwest Campus***
  - Temperature is acceptable

Component Type	Acceptable Temperature Ranges	
	If	**Then**
Red Blood Cell and Plasma	Not returned in cooler	1-10ºC
	Returned in cooler	1-6ºC and HemoTemp Indicator flower is NOT black
Platelets, cryoprecipitate and granulocytes	20-24ºC	

- Blood Components not issued in a cooler (returned > 30 minutes from issue time, in or out of temperature range), must be approved by the UWMC TSL MD on call prior to acceptance back into inventory.
- Components returned with HemoTemp indicators-refer to SOP ***Issuing Components in a Blood Cooler at Northwest Campus*** for acceptability
- RBCs acceptable for return to inventory should remain in allocated status in Sunquest and reloaded into Haemobank. If transfusion is canceled, the RBC will be returned to Montlake TSL – refer to SOP ***Returning Blood Components to Montlake from Northwest Campus.***
- RBCs removed from the HaemoBank and issued as uncrossmatched, will automatically be quarantined in BloodTrack when returned to the HaemoBank

SPECIMEN REQUIREMENTS:
NA

REAGENTS/SUPPLIES/EQUIPMENT:

Reagents:	Supplies:	Equipment:
NA	Calibrated thermometer "Quarantine" stickers	LIS

QUALITY CONTROL:
NA

INSTRUCTIONS:

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Returning Blood Component in LIS
Returning Issued Blood Components in HaemoBank

Verifying Blood Component are Acceptable for Return to Inventory

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>1</td><td>
<table>
<tr><th>If</th><th>Then</th></tr>
<tr><td>Returned in a cooler within 4 hours of issue</td><td>• Verify the temperature reading on the HemoTemp stickers is acceptable - refer to SOP Issuing Components in a Blood Cooler at Northwest Campus
<table>
<tr><th>If temperature reading is</th><th>Then</th></tr>
<tr><td>1-6 ºC and the flower is NOT black</td><td>• Go to step 5</td></tr>
<tr><td>7-9ºC or the flower is black</td><td>• Place a Quarantine Sticker on the component
• Go to section Returning Blood Components in LIS</td></tr>
</table></td></tr>
<tr><td>Not returned in a cooler</td><td>Go to next step</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>2</td><td>Verify the temperature of the blood component using a NIST calibrated thermometer, folding the component around the thermometer and reading after 3-5 minutes refer to SOP Fluke Thermometer Operation</td></tr>
<tr><td>3</td><td>Document the temperature reading on a QI form
<table>
<tr><th>If components is</th><th>Then</th></tr>
<tr><td>Within acceptable temperature range</td><td>Go to next step
<table>
<tr><th>Component Type</th><th>Acceptable Temperature Range</th></tr>
<tr><td>RBC or Plasma</td><td>1-10 ºC</td></tr>
<tr><td>Platelets, cryoprecipitate or granulocytes</td><td>20-24 ºC</td></tr>
</table></td></tr>
<tr><td>Outside of acceptable temperature range</td><td>• Place a Quarantine Sticker on the component
• Go to section Returning Blood Components in LIS</td></tr>
</table></td></tr>
<tr><td>4</td><td>Perform visual inspection following SOP Visual Inspection of Blood Components at Northwest Campus
<table>
<tr><th>If</th><th>Then</th></tr>
<tr><td>Acceptable</td><td>• Component is acceptable to return to inventory
• Go to next section Returning Blood Components in LIS</td></tr>
<tr><td>Unacceptable</td><td>• Place a Quarantine Sticker on the component
• Go to section Returning Blood Components in LIS</td></tr>
</table></td></tr>
<tr><td>5</td><td>
<table>
<tr><th>If component returned</th><th>Then</th></tr>
<tr><td>≤ 30 minutes of issue</td><td>Go to next step</td></tr>
<tr><td>> 30 minutes of issue</td><td>• Place a Quarantine Sticker on the component
• Go to section Returning Blood Components in LIS</td></tr>
</table></td></tr>
</table>

Returning Blood Component in LIS

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>1</td><td>
<table>
<tr><th>If returning in SQ</th><th>Then</th></tr>
<tr><td>Immediately</td><td>Open “Blood Status Update” function and retain the default “Update Option” <Unit Update></td></tr>
<tr><td>Later</td><td>Record the return time on the Transfusion Record and place the component in the backup refrigerator until it can be returned in SQ</td></tr>
</table>
NOTE: If Sunquest is down the return is documented on the Downtime Issue Log and must be entered into Sunquest as soon as feasible.</td></tr>
<tr><td>2</td><td>Scan the unit number and component type at the “Unit Selection” prompt

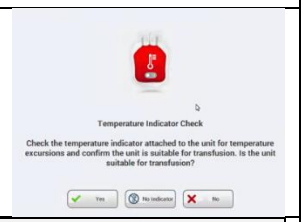
NOTE: The unit number may be manually entered if unable to scan</td></tr>
</table>

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>3</td><td>Tab through the current date and time or update if necessary when entering information from the downtime issue log</td></tr>
<tr><td>4</td><td>Select the appropriate “New Status” from the drop down box and then <Tab>
<table>
<tr><th>If component is</th><th>Then select</th></tr>
<tr><td>Acceptable for return to inventory</td><td>• ‘Inventory’ (INV)
• Press <tab>, <tab> to bypass the Temperature field

IMPORTANT: Do not enter temperature readings into Sunquest. Temperature is documented on the QI.
• Record the results of the visual inspection when prompted “Pass visual inspection” in SQ by clicking the “Yes” or “No” box</td></tr>
<tr><td>Not acceptable for return to inventory for any reason</td><td>• ‘Quarantine’
• Enter the reason code ”CQI” in the Reason Code field
• Click <Add>
• Refer to SOP Quarantine and Final disposition of Blood Components at Northwest Campus</td></tr>
</table>
IMPORTANT: Do not enter temperature data in this field. The system does not have logic to alert the user if the temperature is out of range.</td></tr>
<tr><td>5</td><td>Click <9.Unit Location></td></tr>
<tr><td>6</td><td>Update the location to NWBB and Click <OK> in the “Location Update”</td></tr>
<tr><td>7</td><td>Click <Save></td></tr>
<tr><td>8</td><td>Select the appropriate response at the “Reallocation of unit’ window
<table>
<tr><th>If component is</th><th>Then</th></tr>
<tr><td>Not to be loaded in Haemobank</td><td>
<table>
<tr><th>If transfusion of component is</th><th>Then</th></tr>
<tr><td>Still anticipated</td><td>• Select ‘Allocated’ from the drop down menu
• Save
• Contact Montlake TSL if unit transfusion record is not acceptable for reissue</td></tr>
<tr><td>Cancelled</td><td>• Select ‘Released’ from the drop down menu
• Save</td></tr>
</table>
</td></tr>
<tr><td>Loaded into the Haemobank</td><td>
<table>
<tr><th>If</th><th>Then</th></tr>
<tr><td>Crossmatch</td><td>• Select ‘Allocated’ from the drop-down menu
• Click <Save>
• Contact Montlake TSL if unit transfusion record is not acceptable for reissue</td></tr>
</table>
</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>NOTE: Component should remain in allocated status even if the component is no longer needed for transfusion</td></tr>
<tr><td>Uncrossmatched</td><td>• Select “Released” from the drop-down menu
• Click <Save></td></tr>
</table>
</td></tr>
<tr><td>9</td><td>
<table>
<tr><th>If component is</th><th>Then</th></tr>
<tr><td>Red Cells</td><td>Go to section Returning Issued Blood Components in Haemobank</td></tr>
<tr><td>• Plasma
• Washed Red Cells</td><td>Store in backup refrigerator</td></tr>
<tr><td>Platelet</td><td>Store on platelet incubator</td></tr>
<tr><td>Cryo or granulocyte</td><td>Store at room temperature</td></tr>
</table>
</td></tr>
<tr><td>10</td><td>Complete QI form and send/fax to Montlake TSL</td></tr>
</table>

Returning Issued Blood Components in Haemobank

<table>
<tr><th>STEP</th><th>ACTION</th></tr>
<tr><td>1</td><td>Remove and discard HemoTemp indicators attached to the component</td></tr>
<tr><td>2</td><td>Log in by scanning your UWMC ID Badge or entering in your EID# (Employee Identification #)</td></tr>
<tr><td>3</td><td>Touch <Putting In></td></tr>
<tr><td>4</td><td>Scan the ID number on the blood component</td></tr>
<tr><td>5</td><td>Touch <YES> when the “Temperature Indicator Check” window appears
 
</td></tr>
<tr><td>6</td><td>
<table>
<tr><th>If green screen</th><th>Then</th></tr>
<tr><td>APPEARS prompting you to place the blood component into the storage location</td><td>• The Haemobank will select an empty tray, the tray will illuminate and the main door will unlock

NOTE: RBCs removed as uncrossmatched will be in quarantined automatically when returned to the HaemoBank
NOTE: If the tray is not empty, select “Tray Not Empty” button on the Haemobank screen. The Haemobank will select another tray.</td></tr>
</table>
</td></tr>
</table>

STEP	ACTION	
	Does NOT APPEARS	• Verify the component was entered into BloodTrack • Call Montlake TSL for resolution
7	Open the main door and pull the tray out until click is heard	
8	Place the component flat and ports-side first into the designated tray	
9	Gently push the tray back into place. The light will go out.	
10	Close the main door	
11	Repeat steps 4 thru10 above additional components	
12	Touch <Logout> when finished	

CALCULATIONS/INTERPRETATIONS/RESULTS REPORTING/NORMAL VALUES/CRITICAL VALUES

NA

CALIBRATION:

NA

NOTES AND LIMITATIONS:

- Broken components should not be returned to the Montlake TSL for disposition. Document broken components on a QI form and discard the component in a biohazard container. Fax the QI to Montlake TSL.

REFERENCES:

- Technical Manual. Current edition, Bethesda, MD: AABB,
- Standards for Blood Banks and Transfusion Services. Bethesda, MD; AABB, current edition
- Sunquest users Guide, current version
- Blood Track Courier. Braintree, MA. Haemonetics Corporation, Version 4.11.0

RELATED DOCUMENTS:

Form *Downtime Issue Log*
Form *Quality Improvement*
SOP *Issuing Blood Components in a Blood Cooler at Northwest Campus*
SOP *Fluke Thermometer Operation*
SOP *Visual Inspection of Blood Components at Northwest Campus*
SOP *Quarantine and Final Disposition of Blood Components at Northwest Campus*
SOP *Returning Blood Components to Montlake from Northwest Campus*

ADDENDUM:

NA

UWMC SOP Approval:

Chief of Clinical Services (CLIA Medical Director)	Mark H. Wener, MD	Date 10/20/20
Transfusion Service Manager	Nina Sen	Date 10/16/20
Transfusion Service Compliance Analyst	Christine Clark	Date 10.16.2020
Transfusion Service Medical Director	Monica B. Pagano, MD	Date 10-19-2020

UWMC Biennial Review:

	Date
	Date