**PURPOSE**

To provide instructions for issuing blood components for transfusion

**LOCATION**

Northwest Lab Transfusion Support Service (TSS)

**PRINCIPLE & CLINICAL SIGNIFICANCE**

This SOP describes the workflow and inspection process that ensures all necessary testing is complete and blood and blood components meet patient requirements and pass a visual inspection prior to issue for transfusion.

**POLICIES**

* All blood components must be issued in the LIS system prior to dispensing blood component to clinical team, except in the instance when a downtime log is used.

**Exception:** Downtime Issue log can be used in lieu of the LIS system for emergency issue of blood components and when the LIS system is not available

* Blood components allocated to a patient should be issued in the following order with shortest date of expiration:
	+ Autologous
	+ Directed
	+ Allogeneic

**REAGENTS/SUPPLIES/EQUIPMENT**

|  |  |  |
| --- | --- | --- |
| **Reagents** | **Supplies** | **Equipment** |
| NA | Blood Product Release Form (BPRF) | Laboratory Information System or *Downtime Issue Log* |

**QUALITY CONTROL**

The Laboratory Information System (LIS) is validated at implementation and whenever significant changes are made to the system to assure it functions as expected.

**INSTRUCTIONS:**

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**[APPENDIX 3: Blood Component Transport Flyer](#Appendix3)**

**Verifying Blood Components are Allocated**

| **STEP** | **ACTION** |
| --- | --- |
| **1** | Receive the completed Blood Product Release Form (BPRF)  |
| **2** | * Log into Sunquest at location **NW**
* Click on **Blood Bank Inquiry> (BBI** **)**
 |
| **3** | * Select Lookup by ‘PatientID’
* Manually enter the patient’s MRN from the BPRF
 |
| **4** | Verify the patient has an order and a component(s) is allocated for issue:

|  |  |
| --- | --- |
| **If looking for a**  | **Look for the following order**  |
| RBC or granulocyte | TSCR, TSCREX or TXM |
| Platelet | TPLT |
| Plasma | TFFP |
| Cryoprecipitate | TCRY |

 |
| **5** |

|  |  |
| --- | --- |
| **If the patient**  | **Then** |
| Has an order | Verify component is allocated and located in the NW lab* Click and highlight the order row
* Click <Show Units>
* Click to highlight the unit in status ‘AL’
* Click <Unit Detail>

|  |  |
| --- | --- |
| **If components is** | **Then** |
| Allocated (AL) and located at NW  | Go to next step |
| Allocated (AL) but not located at NW  | * Contact Montlake TSL for ETA or resolution
* Notify the clinical team if product will be delayed
 |
| Not allocated but there is an order |

 |
| Does not have an order | Contact the clinical team and request an order be placed |

 |
| **6** | Click on <**Blood Product Issue> (BPI** **)** |
| **7** | * Select Lookup by ‘PatientID’
* Manually enter the patient MRN from the BPP
 |
| **8** | Select the appropriate Billing Account from the Event Selection window (if not already selected) to ensure billing is applied to the correct encounter |
| **9** | * Enter the appropriate component group(s) in the ‘Component’ field for the type of component requested for pickup
	+ RBCG – Red Blood Cell Group (includes granulocytes)
	+ PLG – Platelet Group
	+ PLSG – Plasma Group
	+ CRYG – Cryoprecipitate Group
* Click <Add>
 |
| **10** | Click <Select> to see what blood components are allocated to the patient and available for issue

|  |  |
| --- | --- |
| **If component is** | **Then**  |
| RBC in the Haemobank | Go to section [Retrieving RBC Component(s) from the Haemobank](#RetrievingRBCComponentfromHaemobank) |
| RBC in the refrigerator (i.e. in the case of washed RBC) | Go to section [*Issuing Blood Components in Sunquest*](#IsuingBloodComponentinSunquest) |
| PlateletPlasmaCryoprecipitateGranulocyte |

 |

**Retrieving RBC Component(s) from the Haemobank *(****does not include Granulocytes)*

| **STEP** | **ACTION** |
| --- | --- |
| **1** | Log in to the Haemobank by scanning your UWMC ID Badge or entering in your EID# (Employee Identification #) |
| **2** | Touch <Taking Out> |
| **3** | Select the Transport Method

|  |  |
| --- | --- |
| **If transporting**  | **Then touch** |
| In a cooler | <Cooler>**NOTE**: Selected when issuing more than one refrigerated blood component |
| Not in a cooler | <Room Temp> |

 |
| **4** | Touch <Select Patient> |
| **5** | Enter the patient’s medical record number from the BPP |
| **6** | Touch <Search> |
| **7** | Confirm the patient details by verifying that the name and MRN on the screen matches the name and MRN on the *Blood Product Release Form*.

|  |  |
| --- | --- |
| **If**  | **Then** |
| Matches | * Touch <Yes>
* Go to next step
 |
| Does NOT match | * Resolve the discrepancy prior to removing any blood components
* Contact Montlake TSL for help when needed
 |

 |
| **8** | Select the type of blood component: <Red Cells>  |
| **9** | Open the door when you are prompted to remove component**NOTE:** Tray holding the blood component will illuminate in blue |
| **10** | Pull out the blue illuminated tray, gently

|  |  |
| --- | --- |
| **If**  | **Then** |
| Component is in the tray | Remove component from the tray**NOTE:** A blank Transfusion Record will be attached - refer to [Appendix 1](#Appendix1) for example |
| Tray is empty | Touch <Tray Empty> on the Haemobank screen |

 |
| **11** | Push the tray back into the slot gently until it stops moving and close the door |
| **12** | Scan the Unit Number from the component label when prompted |
| **13** | Perform a visual inspection and respond to the question “Is the unit suitable for transfusion? - refer to SOP ***Visual Inspection of Blood Components at Northwest Campus***

|  |  |
| --- | --- |
| **If**  | **Then** |
| Suitable (pass inspection) | Touch <Yes> |
| Unsuitable (does not pass inspection) | * Touch <No>
* Follow the prompts to return the component to Haemobank
 |

 |
| **14** |

|  |  |
| --- | --- |
| **If the component was** | **Then** |
| Remotely allocated from the Haemobank)  | * Compatibility Label will print
* Go to the next step
 |  |
| Allocated at Montlake TSL prior to loading in Haemobank | * No label prints. A Transfusion Report with patient information will already be attached to the component
* Go to section *Issuing Blood Components in Sunquest*
 |

 |
| **15** | Confirm the labels printed correctly

|  |  |
| --- | --- |
| **If printing is**  | **Then** |
| Successful | * Touch <Yes>
* Place the Compatibility Label on the back of the blood component bag- [refer to Appendix 2](#Appendix2)
* Go to next step
 |
| Unsuccessful | Touch <No> to print the compatibility label again

|  |  |
| --- | --- |
| **If printing**  | **Then** |
| Is successful | * Touch <Yes>
* Place the Compatibility Label on the back of the blood component bag
* Go to next step
 |
| Unsuccessful  | * Touch <Cancel> to abort the process
* Follow the prompts to return the component to storage in the Haemobank
* Contact Montlake TSL for help
 |

 |

 |
| **16** | Scan the unit number from the component label followed by the barcode on the Compatibility Label **NOTE:** Green check mark and the word “GOOD” will appear and Transfusion Record Label will print |
| **17** |

|  |  |
| --- | --- |
| **If Transfusion Record Label print is**  | **Then** |
| Successful | * Touch <Yes>
* Place the Transfusion Record Label to the top half of Transfusion Record form
 |  |
| Unsuccessful | Touch <No> to print the Transfusion Record Label again

|  |  |
| --- | --- |
| **If printing**  | **Then** |
| Is successful | * Touch <Yes>
* Place the Transfusion Record Label to the top half of the Transfusion Record form. [- refer to Appendix 2](#Appendix2)
* Go to next step
 |
| Unsuccessful | * Touch <Cancel> to abort the process
* Contact Montlake TSL for help

**NOTE:** BloodTrack and the Haemobank track the component as issued |

 |

 |
| **18** | Answer the question” Do you want more Red Cells for the same patient?

|  |  |
| --- | --- |
| **If**  | **Then** |
| NO | * Touch <No>
* Go to section [*Issuing Blood Components in Sunquest*](#IsuingBloodComponentinSunquest)
 |
| YES | * Touch <Yes>
* Repeat steps 10 thru 17
* Go to Section [*Issuing Blood Components in Sunquest*](#IsuingBloodComponentinSunquest)

**NOTE:** Multiple units on the same patient should be issued in a blood transport cooler. You must complete labeling the Transfusion Record for each unit prior to removal of the next unit |

 |

**Issuing Blood Component(s) in Sunquest**

| **STEP** | **ACTION** |
| --- | --- |
| **1** | Select the blood component from the appropriate storage device**NOTE:** * When more than one component is allocated, issue components based on the following:
	+ Autologous donations before directed, before allogeneic
	+ Shortest date first
* Contact Montlake Lab with any questions concerning what order to select components
 |
| **2** | Verify the blood component meets all patient transfusion requirements by reviewing the patient transfusion requirements located under the tabs at the top of the screen* Antigens/Antibodies
* Problems
* Comments
* Transfusion Attributes

**NOTE:** Click <**More**> to review all requirements in one screen. Click **<Less>** to collapse screen |
| **3** |

|  |  |
| --- | --- |
| **If the component**  | **Then**  |
| **MATCHES ALL** patient requirements | Go to the next step |
| Does **NOT MATCH ALL** patient requirements  | Call Montlake TSL to resolve the discrepancy  |

 |
| **4** | Scan the following information from the blood component label

|  |  |
| --- | --- |
| **Field**  | **Scan** |
| Unit # | Donor Identification Number  |
| Component | Component type (Ecode) |
| Division | Verify the correct Division is selected using the dropdown arrow |

 |
| **5** | Verify the correct unit is automatically selected

|  |  |
| --- | --- |
| **If unit is** | **Then** |
| Correct | Go to next step |
| Not correct | * Click <Cancel>
* Resolve any issues and attempt to rescan the unit. If scanning the unit is not possible, the unit number may be entered manually along with the component type
* Select the component from the dropdown menu **only** after verifying any discrepancies were resolved
 |

 |
| **6** | Click <Continue> |
| **7** | Perform a visual inspection of the blood component – refer to SOP***Visual Inspection of Blood Products at Northwest Campus**** Expiration date has not passed
* Correct labeling
* Intact container
* No clots, turbidity, hemolysis or other abnormal appearance of the component

|  |  |
| --- | --- |
| **If visual inspection** | **Then** |
| Passes | * Result the visual inspection by selecting the Pass All key
* Go to the next step
 |
| Fails | * **DO NOT issue unless the component passes the visual inspection**
* Select the <Inspect Unit >
* Answer the “Visual inspection ok?” by selecting the No
* Enter “CQI” as the “Reason for failure” code
* Select “Quarantine” for the new status
* Click <OK>
* Initiate a QI form and quarantine the component following

SOP ***Quarantine and Final Disposition of Blood Components at Northwest Campus*** |

 |
| **8** | Verify the following information when present is in agreement on all forms and labels

|  |  |  |  |
| --- | --- | --- | --- |
| **Blood Product Releasep Form** | **Sunquest** | **Transfusion Record** | **Blood****Component****(ISBT) Label** |
| Name & MRN | Name & MRN | Name & MRN |  |
|  | Recipient Type | Recipient Type |  |
|  | Donor Blood Type | Donor Blood Type | Donor Blood Type |
|  | Unit Number/Div. | Unit Number/Div. | Unit Number/Div. |
|  | Unit Expiration | Unit Expiration | Unit Expiration |
| Component Type |  | Component Type | Component Type |

 |
| **9** |

|  |  |
| --- | --- |
| **If**  | **Then** |
| Discrepancies | * DO NOT issue component when discrepancy between forms and labels exist
* Contact Montlake TSL for help resolving the discrepancy
* Resolve any discrepancies and correct documents prior to going to the next step
 |
| No Discrepancies | * Initial the Transfusion Record at the bottom right corner
* Go to the next step
 |

 |
| **10** | Perform the following verification with blood runner/courier:* Hand the blood product release form and labeled blood component to the blood courier
* Retain the Transfusion Record for read back .

| Lab Staff reads the following from the Transfusion Record | Courier Staff confirms the following on each blood component  |
| --- | --- |
| Patient full Name and MRN | Patient full Name and MRN | Release form and Compatibility label |
| Patient ABO/Rh | Patient ABO/Rh | Compatibility label |
| Donor ABO/Rh | Donor ABO/Rh | Component face label |
| Unit Number/Div | Unit Number/Div | Component face label |
| Donor Unit Expiration date and time (as applicable) | Donor Unit Expiration date and time (as applicable) | Component face label |
| Component Type | Component Type | Component face label |
| Crossmatch Interpretation (where applicable) | Crossmatch Interpretation (where applicable) | Compatibility label |
| Special transfusion requirement such as irradiation | Special transfusion requirement such as irradiation | Component face label |

 |
| **11** |

|  |  |
| --- | --- |
| **If**  | **Then** |
| Discrepancies | * **DO NOT** issue component when discrepancy between forms and labels exist
* Contact Montlake TSL for help resolving the discrepancy
* Resolve any discrepancies and correct documents prior to going to the next step
 |
| No Discrepancies | * Initial the Transfusion Record at the bottom right corner
* Go to the next step
 |

 |
| **12** | * Click <Continue>
* Tab to accept the default for issue date and time or update if not issuing in real time
* Verify the patient location matches the requested delivery location, or enter the correct location (Search may be used to locate the correct location)

|  |  |
| --- | --- |
| **If issuing by** | **Then enter in the ‘Issue to” field** |
| Transporter | Scan the blood transporters badge or enter their first and last name  |
| Portable Coolers | Enter the blood transport cooler ID# |

 |
| **13** |

|  |  |
| --- | --- |
| **If a QA Failure**  | **Then** |
| Does NOT occur | Go to next step |
| Occurs  | Call Montlake TSL prior to issue. **NOTE:** If the issue cannot be corrected and the product is acceptable for issue, Montlake may direct you to issue the blood component using the Downtime Issue Log – go to section [Issue Using Downtime Issue Log](#IssuingUsingDowntimeIssueLog) |

 |
| **14** | * Click <Save> and the “Add Billing” window will open
* **Click <Cancel>**

**CRITICAL:** If the ‘Add Billing window ‘is not canceled, the window will timeout and documentation of the issue process will be lost. When this occurs, it is considered a Biological Product Deviation requiring report to the Food & Drug Administration (FDA)  |
| **15** |

|  |  |
| --- | --- |
| **If transporting via** | **Then** |
| Transporter  | * Place blood component(s) with attached transfusion record in a plastic bag
* Give to the transporter for delivery to the patient’s transfusionist
* Hand the transporter a *Blood Component Transport* flyer-refer to **Appendix 3: Blood Component Transport Flyer**
 |
| Cooler  | Go to SOP *I****ssuing Blood Components in a Blood Cooler at Northwest Campus*** |

 |

**Issue Using Downtime Issue Log**

| **STEP** | **ACTION** |
| --- | --- |
| **1** | Document the Today’s Date and select NW as the location at the top of the *Downtime Issue Log* |
| **2** | Document the following:* Patient Name
* Patient MRN
* Patient Location – where the component will be transfused
* Unit Number/Division – Donor identification number and container or division number
* Ecode
 |
| **3** | Document outcome of steps 7, 8,9, 10 of section Issuing Blood Components under “Pass Visual Inspect”. NOTE: Step 10 verification process of Section: ***Issuing Blood Components*** **DOES NOT** apply for MTP and emergency issue of blood components.

|  |  |
| --- | --- |
| **If all**  | **Then**  |
| Passed (acceptable) | Document **** in the Pass Visual Inspect field |
| Failed (unacceptable) | Do not continue

|  |  |
| --- | --- |
| **If** | **Then** |
| Component fails visual inspection  | Quarantine component following SOP *Quarantine of Blood and Blood Components at Northwest Campus* |
| Any other information is unacceptable | Contact Montlake TSL to help resolve discrepancy |

 |

 |
| **4** | Document the following:* Issue by (Tech) - document 4-digit tech ID
* Issued to – Employee ID number or name of person picking up component or cooler
 |
| 5 | Perform verification with the blood runner/courier:* Have the runner/courier read the patient name and MRN from the patient label or blood product release form while tech compares to the downtime log.

|  |  |
| --- | --- |
| **If** | **Then** |
| No discrepancy | Go to next step |
| Discrepancy | Resolve discrepancy before going to next step  |

 |
| 6 | Hand the transporter a *Blood Component Transport* flyer- refer to **Appendix 3:Blood Component Transport Flyer**  |
| 7 | Fax a copy of the form to Montlake for computer entry in SQ of issue |

**PROCEDURE NOTES/LIMITATIONS**

* You will have only 60 seconds to attach the compatibility label to the component and scan the unit number from the component tag and the barcode from the compatibility label

**REFERENCES:**

* Technical Manual. Bethesda, MD; AABB, current edition
* Standards for Blood Banks and Transfusion Services. Bethesda, MD; AABB, current edition

**RELATED DOCUMENTS:**

FORM *Blood Product Pickup Slip*

FORM *UH3363 UW Medicine Transfusion Record*

FORM *UH3919 UW Medicine Transfusion Record (Haemobank)*

FLYER *Blood Component Transport*

SOP *Visual Inspection of Blood Components at Northwest Campus*

SOP *Quarantine and Final Disposition of Blood Components at Northwest Campus*

SOP *Issuing Blood Components in a Blood Cooler at Northwest Campus*

|  |
| --- |
| **UWMC SOP Approval:** |
|  |  |  |  |
| **UWMC CLIA Medical Director** |  |  |  |
|  | Mark H. Wener, MD | Date |  |
|  |  |  |  |
| **Transfusion Service Manager** |  | Date  |  |
|  | Nina Sen |  |  |
|  |  |  |  |
| **Compliance Analyst** |  | Date  |  |
|  |  |  |  |
| **Transfusion Service** **Medical Director** |  | Date |  |
|  | Monica Pagano, MD |  |  |
|  |  |  |  |
| **UWMC Biennial Review:** |  |  |
|  |  |  |  |
|  |  | Date |  |
|  |  |  |  |
|  |  | Date |  |
|  |  |  |  |

10/18/21- Updated to include Blood Transport Flyer andprocess

**APPENDICES:**

**APPENDIX 1: Examples of Transfusion Records**

|  |  |
| --- | --- |
| Components remotely allocated from Haemobank | Used for thawed plasma, thawed cryoprecipitate, and RBC components allocated from Montlake stock |

**APPENDIX 2: Attaching Haemobank Labels to Transfusion Record and Blood Component**

|  |  |
| --- | --- |
|  |  |

**APPENDIX 3: Blood Component Transport Flyer**

|  |
| --- |
| **Blood Component Transport**1. Deliver blood component(s) **promptly** to the location of the patient and hand-off **directly** to a clinical team member.
2. Confirm the full name of the patient with the person receiving the blood.
3. Do **NOT** leave unattended at the patient location.
4. Do **NOT** open storage container during transport.
5. Do **NOT** place blood component in any other storage container.
6. Do **NOT** place the components on heated or cooled surfaces.
7. Do **NOT** transport blood components for multiple patients at the same time.

  |