**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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**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) | | Platelet  Plasma  Cryoprecipitate  Granulocyte | |

**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. |