**PURPOSE**

To provide instructions for issuing blood components for transfusing to patients

**PRINCIPLE & CLINICAL SIGNIFICANCE**

This SOP describes the work flow 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.

**REAGENTS/SUPPLIES/EQUIPMENT**

|  |  |  |
| --- | --- | --- |
| **Reagents** | **Supplies** | **Equipment** |
| NA | NA | Laboratory Information System computer 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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**Issuing Blood Component(s)**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Receive the completed Blood Product Release Form (BPR) |
| 2 | Time Stamp the BPR with time received in the department |
| 3 | Enter the patient ID# in **Blood Bank Inquiry** to verify the requested product (s) is available for the patient:   |  |  | | --- | --- | | **If requested product is** | **Then** | | Available | Proceed to step 4 | | An RBC qualifies for electronic crossmatch but is not crossmatched | Go to SOP *Electronic Crossmatch*  (UWMC TSL only) | | Not available and not resolved by electronic crossmatching | Refer issue to UWMC TSL for resolution | |
| 4 | Open the **Blood Product Issue** screen and perform the following steps:   * Select “Patient ID” from the drop down menu * Scan the medical record number from the BPR (type in manually if necessary) * Select the appropriate Billing Account # from the Event Selection window (if not already selected) to ensure billing is applied to the correct encounter |
| 5 | Enter the appropriate component group(s) and click <Add>   * RBCG – Red Blood Cell Group (includes granulocytes) * PLG – Platelet Group * PLSG – Plasma Group * CRYG – Cryoprecipitate Group |
| 6 | Click <Select> to see what blood components are allocated to the patient and available for issue |
| 7 | Select the blood component from refrigerator or platelet incubator based on the following criteria:   * Autologous, before directed units or HLA selected), before allogenic units * Unit expiring first if more than one unit is available   **NOTE:** Any questions should be referred to MLS staff at the UWMC TSL |
| 8 | Record the issue date/time on the *Transfusion Record* of each blood component  **NOTE**: Time stamp may be used |
| 9 | 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  **NOTE:** Click < **More**> to review patient’s requirements if there are multiple lines of text not easily reviewed in the two line display window. |
| 10 | Scan the unit number and component type to select the unit in Sunquest and verify the correct unit is automatically selected   |  |  | | --- | --- | | **If Unit selected is** | **Then** | | Correct | Go to next step | | Not correct | * 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 drop down menu **only** after verifying any discrepancies were resolved | |
| 11 | Click <Continue> |
| 12 | Inspect the blood component for the following:   * Expiration date has not passed * Correct labeling * Intact container * No clots, turbidity, hemolysis or other abnormal appearance of the component (See SOP: *Visual Inspection of Blood Products*)  |  |  | | --- | --- | | **If the visual inspection** | **Then** | | Passes | * Result the visual inspection by selecting the Pass All key * Go to the next step | | Fails | * Select the Inspect Unit key * Answer the “Visual inspection ok?” by selecting the No * Enter the “Reason for failure” code * Add any further explanation in the free text area if required * Select “Quarantine” for the new status * Click <OK>   **NOTE:** **Any units failing the visual inspection should be quarantined according to SOP:** *Quarantine of Blood and Blood Components*.  **DO NOT issue unless the component passes the visual inspection**  NOTE to SCCA: Call TSL for unit reassignment | |
| 13 | Verify the following information is in agreement when present   |  |  |  |  | | --- | --- | --- | --- | | **BPR** | **Sunquest** | **Transfusion Record** | **Blood**  **Component**  **(ISBT) Label** | | Name & MR # | Name & MR # | Name & MR # |  | |  | 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 | |
| 14 | |  |  | | --- | --- | | **If there are** | **Then** | | Discrepancies | Resolve any discrepancies before proceeding with issue | | No Discrepancies | Go to the next step | |
| 15 | Complete issue in Sunquest or use a manual *Downtime Issue Log* if Sunquest is not available   * 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** | | Pneumatic tube system | PTS | | Transporter | Scan the blood transporters badge or enter their first and last name | | Portable refrigerator | Enter the portable refrigerator tracking number |   **NOTE:** If products are issued on the DT Issue Log, entry into Sunquest should be performed as soon as feasible. |
| 16 | |  |  | | --- | --- | | **If a QA Failure** | **Then** | | Does NOT occur | Go to next step | | Occurs | Refer the issue to an MLS prior to issue. If the issue cannot be corrected and the product is acceptable for issue, one of the following will occur:   |  |  | | --- | --- | | If | Then | | MLS is available on site | MLS issues the blood components. Refer to SOP *Sunquest: QA Warnings & Overrides:* | | MLS is not available on site | Staff issues the blood component on the Downtime Issue Log and the form is downtime faxed or tubed to the 6th floor TSL for completion in Sunquest | | |
| 17 | * Click <Save> and the “Add Billing” window will open * Click <Cancel> |
| 18 | Give the unit and transfusion record to a second staff member to perform a clerical check of the unit label and transfusion record and comparing the following:   |  |  | | --- | --- | | **Blood Component Label** | **Transfusion Record** | | **Donor ABO/Rh** | Donor ABORH | | Unit Number/Div. | Unit Number/Div. | | Unit Expiration | Unit Expiration | | Component Type | Component Type | | NA | Crossmatch Interp. |   **NOTE**: If a second staff member is not available the issue staff member will perform and document the clerical check. |
|  | |  |  | | --- | --- | | **If 2nd clerical is** | **Then 2nd tech** | | Acceptable | Initials the Transfusion Record | | Not acceptable | Notifies the issue staff member of any discrepancies | |

**Transporting Blood Component(s)**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Prepare the blood for transport   |  |  | | --- | --- | | **If transporting via** | **Then** | | Pneumatic tube system | * Place the blood components in a sealed biohazard bag * Refer to facility policy for use of the pneumatic tube system | | Transporter | Place the blood components in a sealed biohazard bag   |  |  | | --- | --- | | **If transport location** | **Then send the** | | UWMC OR | Blood components and the BPR with the transporter | | All other locations including SCCA patient care areas | Blood components | | | Portable blood refrigerator | * Verify the temperature of the refrigerator is between 1 and 6°C prior to loading * Place RBC or plasma component inside the refrigerator | |
| 2 | File the returned BPR in the appropriate location in the department  **NOTE:** When components are issued via the pneumatic tube:   * + The BPR should be returned within 15 minutes of issue   + If not returned, contact the patient care area to verify the units were delivered as expected and request immediate return of the signed BPR |

**PROCEDURE NOTES/LIMITATIONS**

* In some situations, it may be desirable to weigh the unit of blood to get a more accurate volume, which can be documented on the Transfusion Record in the donor volume field
* Blood Product Issue may be accessed directly from BOP by selecting Issue or Emergency at the “Continue to Blood Product Issue?” Prompt.

**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 Release (BPR)

FORM Transfusion Record

SOP Visual Inspection of Blood Components

SOP Quarantine of Blood and Blood Components

SOP Sunquest: QA Warnings & Overrides

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| **UWMC SOP Approval:** | | | | |
|  |  |  | |  |
| **Chief of Clinical Services**  **(CLIA Medical Director)** |  | | Date |  |
|  | Mark H. Wener, MD | |  |  |
| **Transfusion Service Manager** |  | | Date |  |
|  | Deanne Stephens | |  |  |
| **Transfusion Service Compliance Analyst** |  | | Date |  |
|  | Christine Clark | |  |  |
| **Transfusion Service**  **Medical Director** |  | | Date |  |
|  | Monica B Pagano, MD | |  |  |
|  |  | |  |  |
| **UWMC Biennial Review:** | | |  |  |
|  |  | |  |  |
|  |  | | Date |  |
|  |  | |  |  |
|  |  | | Date |  |
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| **SCCA SOP Approval:** | | | |
|  |  |  |  |
| **SCCA CLIA Medical Director** |  | Date |  |
|  | Brent L. Wood, MD |  |  |
| **Director, Transfusion Services** |  | Date |  |
|  | Terry Gernsheimer, MD |  |  |
| **Alliance Lab Manager** |  | Date |  |
|  |  |  |  |
|  |  |  |  |

**REVISION HISTORY**:

04/22/2018: As part of the Sunquest 8.1 upgrade, programming was changed to require scanning or manually entering the unit number when issuing a component. This applies only at UWMC locations but not HMC.