**PURPOSE:**

To describe the process by which orders are received, routed, prioritized and completed.

**PRINCIPLE & CLINICAL SIGNIFICANCE:**

Timeliness and accuracy of the Transfusion Service can directly impact patient outcomes

and customer satisfaction. Delays or inaccuracies can fail to prevent, or may even cause

morbidity and mortality.

**POLICIES:**

* Timely communication must occur with clinical care staff to prevent delay when specimens must be drawn in order to fill blood component orders.
* Verbal orders may be received from patient care areas in emergent situations (during MTP and OR procedures) and must be followed up with written or signed verbal orders
* All orders must be reviewed for patient attributes and new attributes entered in SQ and honored until a review for acceptability can be made by the TSL Medical Director or Resident
* Type & Screen Extended Expiration (TSCREX) orders may be collected up to 30 days in advance of a surgical procedure or prior to radiation isolation but must be tested within 3 days of collection
* Patients with clinically significant antibodies and current positive antibody screens do not qualify for TSCREX (electronic crossmatch battery) and must be recollected within 3 days prior to the scheduled procedure or transfusion need
* Red blood cell (RBC) component orders require two valid blood types on file from the in-house TSL prior to release of crossmatched units. The blood types must be performed on two separately drawn specimens
* Non-RBC Component orders require a single ABO/Rh on file from the in-house TSL prior to processing
* Release of platelet components are restricted to two per day except as approved by the TSL MD or cases of large volume blood loss
* Additional units can be added to an existing plasma and cryoprecipitate orders during the same date
* Type & Screen (TSCR) and Crossmatch (TXM) orders are valid for 3 days from the date of collection (day 0) and additional RBC units may be added to the order during this time
* Neonatal RBCs orders for patients < 4 months old do not require a second blood type if there is a negative antibody screen on the current admission and the order is filled with O Negative RBCs
* Cord blood testing must be performed manually due to potential for clots in the sample
* Bone Marrow Donor specimens are considered blood donor samples and ABO/Rh testing must include the weak D test

**SPECIMEN REQUIREMENTS:**

EDTA is preferred and if not tested soon after collection, should be stored at 1-6°C

Red top clotted blood samples are also acceptable

See SOP *Specimen Acceptability*

**REAGENTS/SUPPLIES/EQUIPMENT:**

|  |  |  |
| --- | --- | --- |
| **Reagents:** | **Supplies:** | **Equipment:** |
| * NA | * Accession Labels * Requisition | * LIS * Bar-code reader * Time stamp |

**QUALITY CONTROL:**

NA

**INSTRUCTIONS:**

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**Order Acceptability**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Review the patient’s history in Sunquest (SQ) according to SOP *Patient History Check (HXCK)* |
| 2 | Enter the patient name in BBI (Blood Bank Inquiry) in SQ |
| 3 | Verify the patient name and MRN in SQ matches the name and MRN on the specimen label and requisition   |  |  | | --- | --- | | **If Name and MRN** | **Then** | | Matches | Go to next step | | Does not match | Resolve the discrepancy before proceeding   * Access ORCA/EPIC * Compare information * Review alias names in EPIC   + Patient Profile/Demographics * Contact clinical care staff and verify patient name on armband * Proceed with LIS correction if indicated | |
| 4 | Click on the ‘Order’ tab to display current orders |
| 5 | Determine if the order just received is a duplicate or new order   |  |  | | --- | --- | | **If** | **Then** | | New | Go to next step | |  |  | | Duplicate | Cancel order (refer to SOP *Canceling Orders and Correcting Results in Sunquest*) | |
| 6 | Determine if a patient sample is required   |  |  | | --- | --- | | **If** | **Then** | | Not required | Go to next step | | Required | |  |  | | --- | --- | | **And BBHOLD sample is** | **Then** | | Available | Receive order (refer to SOP *Specimen Acceptability and Order Receipt*) | | Unavailable | Contact clinical care staff and request a specimen | | |
| 7 | Review the requisition for any special attributes not listed on the patient’s record in Sunquest (ie: irradiation, volume reduction, pooled platelets only, etc.)   |  |  | | --- | --- | | **If** | **Then** | | New attributes | Add to the patient record in Sunquest | | No new attributes | Process order | |

**Processing Cord Blood Orders (CORD)**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Review the requisition for the for the following comments:   * “Patient is <1000gm perform T&S for potential transfusion needs in pt. <4 months old” * free text comment ordering a type and screen  |  |  | | --- | --- | | **If either comment is** | **Then** | | Present | Receive the order in Sunquest  **NOTE:** MLS will add an antibody screen (AS) to the cord blood order at the time of testing | | Not present | Go to next step | |
| 2 | Perform a history check of the mother’s medical record to determine if the mother:   * Is Rh negative * Is Group O * Has no blood type on file * Has a history of a positive antibody screen, no current antibody screen or no history on file   **NOTE:** Mother’s medical record number should be included on the ORCA requisition or manually entered on downtime requisitions   |  |  | | --- | --- | | **If** | **Then** | | Any of the conditions are met | Receive order  Go to step 4 | | None of the conditions are met | Go to next step | |
| 3 | * Cancel order (refer to SOP *Canceling Orders and Correcting Results in Sunquest*) * Reorder test as a BBHOLD and save sample (refer to SOP *Specimen and Unit Segment Management* ) |
| 4 | Enter order on the Cord Blood Log for every cord blood specimen received to ensure that every patient that delivers at UWMC is evaluated for Rh immune globulin administration  **NOTE:** If a peripheral blood sample (TSCR) is received in place of a CORD sample, the order should be written on the Cord Blood Log |

**Neonatal RBC Orders (TNRBC)**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Verify the patient meets the following requirements:   * Patient is < 4 months old * Patient has a valid (current admission) ABO/Rh and negative antibody screen  |  |  | | --- | --- | | **If patient has a** | **Then** | | Valid ABO/Rh and negative antibody screen (current admission) | Receive the TNRBC order | | Positive antibody screen | * Do not receive the TNRBC order * Add the units ordered (UO) to a current TSCR or TXM battery * Perform an AHG crossmatch on the unit * Refer to SOPs *Antibody Identification* and *Selection of Blood for Transfusion* for additional requirements) | |
| 2 | Process order (refer to SOPs *Blood Component Preparation* and *Preparation of Divided Units* for aliquot preparation instructions) |

**Selecting Test Method**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Route specimen for testing based on the following guide:   * Order priority (Stat vs. Routine): Use method that will meet required TAT – Manual may be faster * Staffing and Workload * Grossly hemolyzed or lipemic specimen: Processing on Tango may result in invalid results   Short draw specimen: May be QNS on Tango due to dead space requirements for pipetting |

**Extending TSCREX Sample Outdate (MLS only)**

|  |  |
| --- | --- |
| **STEP** | **ACTION** |
| 1 | Verify the sample was collected within the last 30 days   |  |  | | --- | --- | | If collected | Then | | < 30 days ago | Continue to next step | | > 30 days ago | Notify caregiver that the patient is not eligible for sample extension and a new T&S sample must be submitted | |
| 2 | Verify the following criteria are met:   * No history of clinically significant antibodies * Current antibody screen negative * No history of transfusion in last 3 months (review history in Sunquest in addition to patient response to questions) * No pregnancy in last 3 months  |  |  | | --- | --- | | If criteria are | Then | | Met | Continue to next step | | Not met | Notify caregiver the patient is not eligible for sample extension and a new T&S sample must be collected | |
| 3 | Select the TSCREX order in Sunquest BOP |
| 4 | * Update the sample expiration with an additional 3 days (T+3) and perform electronic crossmatch on any requested units * Override the QA failure according to SOP: *Sunquest: Responding to Quality Assurance Failures* |
| 5 | <Save> |

**CALIBRATION:**

NA

**PROCEDURE NOTES AND LIMITATIONS:**

* Each accession only allows allocation of 100 blood components. If additional RBC products are required, a duplicate order should be placed with a collection date/time one minute later than the original sample. *Transfer test results from original Accession, credit 2nd ABO/Rh and antibody screen and add BBC comment “Duplicate order for allocation purpose see accession XXXXX for original results”.*

**REFERENCES:**

* Specimen Management, Routing and Tracking User Guide, Misys Laboratory

**RELATED DOCUMENTS:**

FORM Cord Blood Log

SOP Patient History Check (HXCK)

SOP Specimen Acceptability, Specimen and Order Receipt

SOP Blood Administrative Data Entry Updates

SOP Canceling Orders and Correcting Results in Sunquest

SOP Specimen and Unit Segment Management

**APPENDIX:**

NA

|  |  |  |  |
| --- | --- | --- | --- |
| **UWMC SOP Approval:** | | | |
|  |  |  |  |
| **UWMC CLIA Medical Director** |  |  |  |
|  | Mark H. Wener, MD | Date |  |
|  |  |  |  |
| **Transfusion Service Manager** |  | Date |  |
|  | Deanne Stephens |  |  |
|  |  |  |  |
| **Compliance Analyst** |  | Date |  |
|  | Christine Clark |  |  |
| **Transfusion Service**  **Medical Director** |  | Date |  |
|  | John R. Hess, MD |  |  |
|  |  |  |  |
| **UWMC Biennial Review:** | |  |  |
|  |  |  |  |
|  |  | Date |  |
|  |  |  |  |
|  |  | Date |  |
|  |  |  |  |