



University of Washington Medical Center 1959 NE Pacific Street. Seattle, WA 98195 Transfusion Services Laboratory Policies and Procedures Manual	Original Effective Date: 07-18-16	Number: PC-0059.02
	Revision Effective Date:	
TITLE: Order Processing		

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
- 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*

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REAGENTS/SUPPLIES/EQUIPMENT:

Reagents:	Supplies:	Equipment:
<ul style="list-style-type: none"> • NA 	<ul style="list-style-type: none"> • Accession Labels • Requisition 	<ul style="list-style-type: none"> • 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 <i>Patient History Check (HXCK)</i>	
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 <ul style="list-style-type: none"> • Access ORCA/EPIC • Compare information • Review alias names in EPIC <ul style="list-style-type: none"> ○ 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 <i>Canceling Orders and Correcting Results in Sunquest</i>)

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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 <i>Specimen Acceptability and Order Receipt</i>)	
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: <ul style="list-style-type: none"> • "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: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Cancel order (refer to SOP <i>Canceling Orders and Correcting Results in Sunquest</i>) • Reorder test as a BBHOLD and save sample (refer to SOP <i>Specimen and Unit Segment Management</i>) 	

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4	<p>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</p> <p>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</p>
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Neonatal RBC Orders (TNRBC)

STEP	ACTION								
1	<p>Verify the patient meets the following requirements:</p> <ul style="list-style-type: none"> • Patient is < 4 months old • Patient has a valid ABO/Rh and negative antibody screen on current admission or Patient has a valid ABO/Rh, no antibody screen but the mother has a negative antibody screen 72 hours prior to delivery or post-delivery <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">If patient</th> <th style="text-align: center;">Then</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Meets above requirements</td> <td style="padding: 5px;">Receive the TNRBC order and provide RBCs according to SOP <i>Selection of Red Blood Cell Components for Transfusion</i></td> </tr> <tr> <td style="padding: 5px;"> Has a Positive antibody screen Or No antibody screen and mother has a positive antibody screen 72 hours prior to delivery or post-delivery </td> <td style="padding: 5px;"> <ul style="list-style-type: none"> • Receive the TNRBC order • Add %XM to the unit • Perform an AHG crossmatch on the unit (in-date mother's specimen may be used for crossmatch) • Add BBCS comment and list the accession number of sample used for crossmatch and MRN of the mom • Refer to SOPs <i>Antibody Identification and Selection of Red Blood Cell Components for Transfusion</i> for additional requirements) </td> </tr> <tr> <td style="padding: 5px;">Does not meet any of the above requirements and a peripheral blood specimen collection is not an option</td> <td style="padding: 5px;">Call the TSL MD on - call for guidance about specimen options for providing blood component (ie: extending cord blood or mom's specimen, collect new neonatal specimen, ect.)</td> </tr> </tbody> </table>	If patient	Then	Meets above requirements	Receive the TNRBC order and provide RBCs according to SOP <i>Selection of Red Blood Cell Components for Transfusion</i>	Has a Positive antibody screen Or No antibody screen and mother has a positive antibody screen 72 hours prior to delivery or post-delivery	<ul style="list-style-type: none"> • Receive the TNRBC order • Add %XM to the unit • Perform an AHG crossmatch on the unit (in-date mother's specimen may be used for crossmatch) • Add BBCS comment and list the accession number of sample used for crossmatch and MRN of the mom • Refer to SOPs <i>Antibody Identification and Selection of Red Blood Cell Components for Transfusion</i> for additional requirements) 	Does not meet any of the above requirements and a peripheral blood specimen collection is not an option	Call the TSL MD on - call for guidance about specimen options for providing blood component (ie: extending cord blood or mom's specimen, collect new neonatal specimen, ect.)
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Does not meet any of the above requirements and a peripheral blood specimen collection is not an option	Call the TSL MD on - call for guidance about specimen options for providing blood component (ie: extending cord blood or mom's specimen, collect new neonatal specimen, ect.)								
2	Process order (refer to SOPs <i>Blood Component Preparation</i> and <i>Preparation of Divided Units</i> for aliquot preparation instructions)								

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Selecting Test Method

STEP	ACTION
1	Route specimen for testing based on the following guide: <ul style="list-style-type: none"> • 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						
	<table border="1"> <thead> <tr> <th>If collected</th> <th>Then</th> </tr> </thead> <tbody> <tr> <td>< 30 days ago</td> <td>Continue to next step</td> </tr> <tr> <td>> 30 days ago</td> <td>Notify caregiver that the patient is not eligible for sample extension and a new T&S sample must be submitted</td> </tr> </tbody> </table>	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
	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						
Verify the following criteria are met: <ul style="list-style-type: none"> • 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 							
2	<table border="1"> <thead> <tr> <th>If criteria are</th> <th>Then</th> </tr> </thead> <tbody> <tr> <td>Met</td> <td>Continue to next step</td> </tr> <tr> <td>Not met</td> <td>Notify caregiver the patient is not eligible for sample extension and a new T&S sample must be collected</td> </tr> </tbody> </table>	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
	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	<ul style="list-style-type: none"> • 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: <i>Sunquest: Responding to Quality Assurance Failures</i> 						
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

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

12-02-19: Added instruction for use of maternal blood specimen to provide red blood cell components to neonates >4 months old when an antibody screen was not performed on a neonatal specimen