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DOCUMENT TITLE:	Receipt of Blood Bank Specimens
DOCUMENT NOTES:	

Most of this is review. I have highlighted areas as reminders

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Receipt of Blood Bank Specimens

Purpose

This document describes the policies and processes for the Regional Kaiser Permanente Southern California Medical Centers as they relate to receiving blood specimens for the Transfusion Service (Blood Bank).

Policy

Specimen Labelling:

Specimen labelling criteria must be met for the specimen to be acceptable for testing

- Specimens collected for transfusion service testing must be labeled with:
  - Patient first and last name (middle initial or other suffix such as Jr, Sr, etc. is not required and is not used for determining acceptability of the specimen)
  - Medical Record Number (MRN)
  - Date of specimen collection
- Additionally, the following may be documented on the label or documented in the Cerner and/or MediCopia system.
  - The date/time of specimen collection
  - Identification of phlebotomist
- The intended recipient and the blood specimen must be identified positively at the time of collection; specimen must be completely labeled in the presence of the patient.
  - Specimens that are doubled labelled (e.g. Health Connect label and MediCopia label) are not to be accepted for testing unless both labels are verified as having the same patient identifiers.
- Patients who are scheduled for surgery at Non-Kaiser Permanente Facilities may **not** have specimens drawn at Kaiser Permanente facilities for transfer to the Non-KP facility.

Receipt of Specimens:

- All orders for the Transfusion Service must have physician orders either placed electronically in Health Connect or placed manually (paper orders). Paper orders are utilized for downtime and in some ambulatory areas which may not provide electronic access.
  - There may be exceptions when reflex testing occurs or during downtime. See relevant procedures for these exceptions.
- The final specimen must have a Cerner accession label on the tube such that testing automation/instrument can read the barcode.
- Specimens with truncated names due to more than 36 characters are acceptable to receive and test in the transfusion service.
  - The total character allocation on the specimen label is 36 characters which includes letters, commas, hyphens, apostrophes

Receipt of Blood Bank Specimens, Continued

and blank spaces. If a patient has a name using more than the 36 characters, the name will be truncated from right to left.

- For example: A patient name of Archimbald Wolfeschlegelsteinhausenberger would appear on the patient label as *Wolfeschlegelsteinhausenberger, Arch*

- Upon receipt of the blood specimen, it should be triaged as soon as possible so that if a second specimen (double check) is needed, it can be collected or if special products are needed, they can be ordered.

Testing of Specimen:

- Type and Screen must be completed within 3 days of specimen collection.

Specimen Expiration:

- All in-patients and (Emergency Department) ED patients will have a 3-day expiration date from the day of collection.
- Out-Patient specimens may be extended to 30 days if:
  - The patient has not been pregnant, transfused, or transplanted in the past 3 months. (These questions are completed by the provider for the Out-Patient (Ambulatory) Type and Screen order.)
  - The patient does not have a history of a clinically significant antibody AND the current specimen has a negative antibody screen.
  - Computer (electronic) crossmatch may be performed for red blood cells required for surgery within 30 days of specimen collection.
    - Computer (electronic) crossmatch may be performed at any medical center in the KP SCAL system, regardless of where pretransfusion testing occurred.
- Neonates (less than 4 months old) specimens may be extended to 4 months. Refer to *Infants Under Four Months Old, Pretransfusion Testing.*

30 day samples are for outpatient (pre-op) only. It is acceptable to use the extended sample immediately after surgery, but it is not intended for use in surgery patients who stay in the hospital for extended periods of time.

NO serologic XM beyond 3 days of collection. 30 day samples are only for computer XM.

Receipt of Blood Bank Specimens, Continued

Process

The following steps define acceptability of specimens submitted to the Blood Bank (Transfusion Service).

Steps	Action
1.	All specimens submitted must be examined prior to testing.

2.	Label information:
	• Patient's **first and last name**
	  • Middle initial or other suffix such as Jr, Sr, etc**. is not required** and is not used for determining acceptability of the specimen.
	  • Since the patient initial or title is not required, it's position on the tube (before or after the first or last name), is not a reason to reject the specimen.
	• Patient's **medical record number,** or equivalent
	• **Date of collection**
	  • The collection date may be embedded in the accession number of the specimen. For example, "x-15-127-xxxxxxx" signifies a collection date of May 7, 2015.
	  •
	Additional information is either documented by hand on the label or contained in the computer system(s)
	  • Collection date/time
	  •
	  • Identification of the person who collected blood
	  • Initials, NUID number, identification numbers or full name are acceptable, if they can be traced to the individual phlebotomist.
	
	If the additional information is not documented on the label there must be a mechanism to identify the date/time of specimen collection and the individual who collected the specimen from the patient.
	• This information may be recorded in the Cerner and/or MediCopia applications.

OK if this info is in Cerner and not handwritten.

Receipt of Blood Bank Specimens, Continued

3.	Transport: Specimens are transported from the collection location to the local Blood Bank/Transfusion Service at ambient or refrigerated temperature. Do NOT freeze. NOTE: No centrifugation of specimens (and evaluation of hemolysis) is required prior to transport. Follow local protocol. Refer to SOP *Transfer Blood Samples to KP Transfusion Services*

Process

The following steps describe the criteria for specimen rejection.

Step	Action
1.	Specimens are accessioned into Cerner as "In-Lab" per local protocol
2.	Blood Specimens must be labeled correctly, collected in an acceptable collection tube, and after centrifugation at the medical center evaluated for hemolysis.

IF there are any of the below conditions:	Then…
○ Moderate to grossly hemolyzed (hemoglobin tinged is acceptable, see Attachment A) ○ Wrong type of collection tube used ○ Missing the patient's first and last names, medical record number or the means to identify who collected the blood	○ The order is canceled with the appropriate reason - ○ The drawing department is contacted to collect another specimen. Notification may be documented in Order Notes. ○ The unacceptable specimen is disposed of according to local protocol.

Receipt of Blood Bank Specimens, Continued

Process Cont'd

The following steps describe the criteria for specimen rejection.	
Step	**Action**
3.	A Clinical Laboratory Scientist, or trained transfusion service staff, will confirm that all identifying information is complete, legible, and in agreement with the manual or electronic request. ○ If there is any discrepancy or doubt about the accuracy of the information on the tubes or with the request, the specimens will not be accepted, and another specimen must be obtained. ○ If a specimen is not accepted, document the specimen rejection reason in Specimen Log-In. ○ Nursing is notified of the delay in testing as necessary. ○ Complete a QIM for rejected specimens if the specimen is rejected for a labeling or other error (Wrong blood in tube, wrong anticoagulant, etc.). ○ Reporting of unacceptable specimens due to hemolysis are reported per local protocol. No QIM report is required. **NOTES:** • Do not separate the serum or plasma from the cells in patient specimens for blood bank testing • Specimens submitted to other testing departments (e.g. Hematology) and found to be labeled with all required information may be used for testing if they are still stoppered.
4	If a specimen is rejected for labelling errors and/or hemolysis the medical center who has made that determination must notify the drawing department and contact the provider for a new order.

Receipt of Blood Bank Specimens, Continued

Procedure

The following steps describe the criteria for specimen receipt in the Transfusion Service.

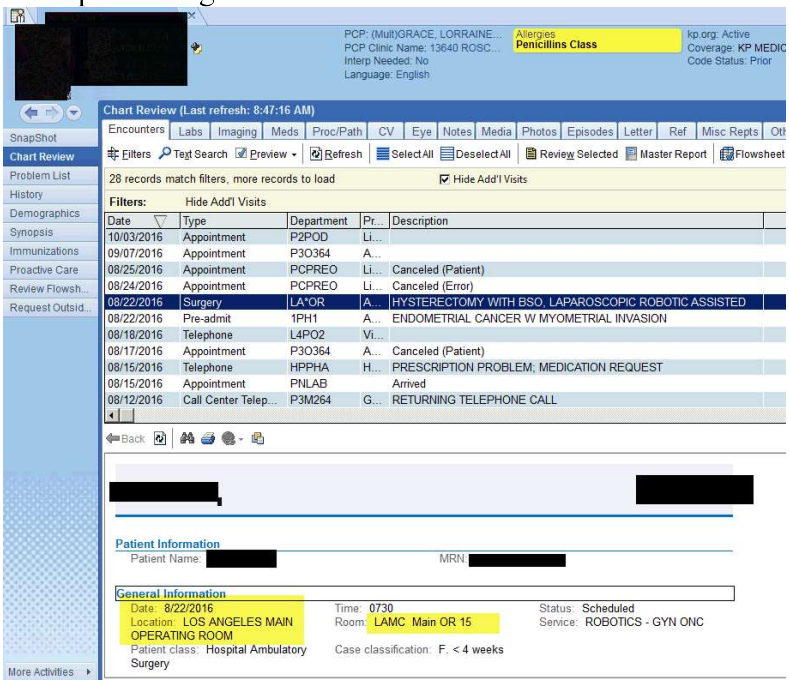
Step	Action
1.	Once specimen has been determined acceptable for testing further evaluation of patient history and transfusion requirements are completed as described in this section.
2.	If the specimen is labeled other than using the Cerner accession label initial: • The Cerner overlay label is affixed to specimen without covering the original label patient identifiers (name and MRN). • The CLS affixing the Cerner label must initial the Cerner label. Per local protocol: Initial and add a check mark to specimen label in red ink to indicate that PPI check was performed.
3.	If patient is an In-Patient or admitted to ER. • Go to step 5. ○ No completion of *"Checklist for Out-Patient Specimens for Blood Bank"* form is required.

This might be helpful

Receipt of Blood Bank Specimens, Continued

Procedure con't

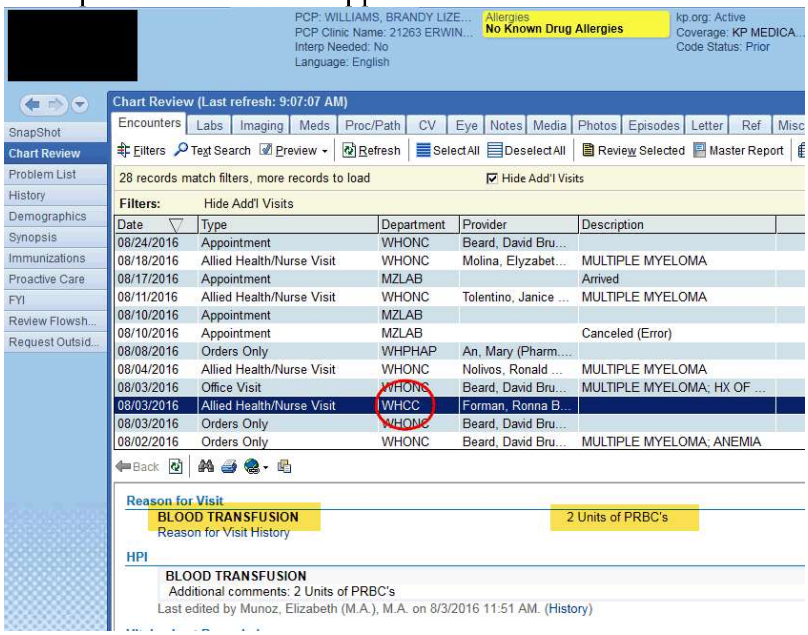
The following steps describe the criteria for specimen receipt in the Transfusion Service.

Step	Action
4.	For Out Patient specimens received, go to Health Connect to examine patient diagnosis and future encounters. • Snapshot tab for diagnosis • Chart Review Tab then, ○ Encounters tab: Open and examine "Surgery" and other future encounters which may indicate a transfusion appointment. Example of surgical encounter 

Receipt of Blood Bank Specimens, Continued

Procedure con't

The following steps describe the criteria for specimen receipt in the Transfusion Service.

Step	Action
4. con't	Example of Transfusion Appointment  "Other Orders" Tab and/or "Future Appointments" Tab may also indicate location of transfusion.  Complete Section A1 of the *Checklist for Out-Patient Specimens for Blood Bank*
5.	In Cerner, review Order Result Viewer (ORV) • Verify current specimen is "In-Lab" status • Note prior Type and Screen testing if completed ○ For Out-Patients complete Section A2 of *Checklist for Out-Patient Specimens for Blood Bank* ▪ If no prior test history in ORV, record "None". ▪ If there is a prior test history, record results on form Refer to Attachment D

ALL of these must be checked and evaluated BEFORE testing:
-PPI
-ORV
-KPHC (outpatient)

Do not simply log-in and load on Vision

Receipt of Blood Bank Specimens, Continued

Procedure con't

The following steps describe the criteria for specimen receipt in the Transfusion Service.

Step	Action
6.	Review patient product inquiry (PPI). • Review Transfusion Requirements • Review Blood Bank Comments • Review Alerts • Review Disease Alert field for Bone Marrow Transplant or other conditions. • Update Transfusion Requirements and/or Blood Bank Comments if needed. See "*Ordering Blood Products For Patients With Special Needs…*" SOP and Attachment C. For Out-Patients: Complete Section A2 of *Checklist for Out-Patient Specimens for Blood Bank* form • Go to Section B of checklist to determine if testing should be done at your medical center or if the specimen should be transferred to another medical center. ○ If specimen requires transfer to another Medical Center refer to *Transfer Blood Specimens to KP Transfusion Services* SOP ▪ Complete Section C of *Checklist for Out-Patient Specimens for Blood Bank* form NOTE: Testing orders default to Ortho Vision#1 bench for Type and Screen (ABO/Rh & AbSc 2-Gel) at all Medical Centers See Attachment B.

Receipt of Blood Bank Specimens, Continued

Procedure con't

The following steps describe the criteria for specimen receipt in the Transfusion Service.

Step	Action
7.	Proceed with testing per applicable SOP(s).
8.	For Out-Patient specimens, complete all applicable sections D-F on the *Checklist for Out-Patient specimens for Blood Bank* form. • Refer to Attachments G and H for flowchart regarding evaluation of specimen for 30 day expiration (Section E on form). ○ NOTE: A historical upload of ABO/Rh type to the patient demographics does NOT count as a 2nd specimen determining eligibility for computer crossmatch. • Refer to Attachments E and F for Cerner instructions on extending specimens to 30 day expiration. The checklist/form may be discarded once the date of surgery or procedure has occurred

Specimen expiration

The following steps define the specimen expiration in Cerner

Step	Action
1.	Specimen will expire 3 days post RBC transfusion. For Example: • If a patient goes to surgery on day 26 and used blood, and a request comes in on day 30 for more blood, a new specimen must be obtained.
2.	Neonate specimens will NOT expire upon discharge of neonate from Inpatient status. Verify test history and encounter when product orders are received.
3.	See Attachments E and F for management of specimen expiration dates in Cerner.

See attachments below

Receipt of Blood Bank Specimens, Continued

Scroll down to these attachments

Controlled Documents

Attachment A	Hemolysis Grading
Attachment B	Patient Product Inquiry (Cerner Flowchart)
Attachment C	Adding Transfusion Requirements or Blood Bank Comments (Cerner Flowchart)
Attachment D	Order Result Viewer (Cerner Flowchart)
Attachment E	Extending Specimen Expiration in PPI or RE (Cerner Flowchart)
Attachment F	Extending an Expired Specimen Expiration Date (Cerner Flowchart)
Attachment G	30 day specimen: Flowchart A
Attachment H	30 day specimen: Flowchart B
Form	Checklist for Out-Patient specimens for Blood Bank
Procedure for Venipuncture	
Infants Under Four Months Old, Pretransfusion Testing	
Ordering Blood products for Patient with Special Needs	
Transfer Blood Specimens to KP Transfusion Services	

Uncontrolled Documents

1. Technical Manual, current edition, Bethesda: AABB.
2. Standards for blood banks and transfusion services, current edition, Bethesda: AABB.
3. CAP Standards

Authors: SCPMG Transfusion Service Managers
Regional Blood Bank Compliance Officer

Distribution All SCPMG Transfusion Services

Receipt of Blood Bank Specimens, Continued

Reviewed and approved by:

Previously Reviewed	April 26, 2000
Virginia Vengelen-Tyler, MBA, MT(ASCP)SBB, CQA(ASQ) Regional Blood Bank Compliance Officer	Date
Signature Collected Electronically	January 5, 2011
Adriana A. Bedoya, M.D. FCAP, FASCP Medical Director- San Diego –SA	Date
Signature Collected Electronically	April 26, 2000
Gary Gochman, MD, Medical Director – Transfusion Service- Tri-Central Service Area	Date
Signature Collected Electronically	March 7, 2010
Jeffrey D. Shiffer, MD. Medical Director –San Fernando Valley SA	Date
Signature Collected Electronically	March 23, 2000
Joseph Thompson, MD. Medical Director – Transfusion Service- Metropolitan Los Angeles Service Area	Date
Signature Collected Electronically	March 6, 2000
David Huebner-Chan, MD. Medical Director – Transfusion Service- Orange County Service Area	Date
Signature Collected Electronically	April 24, 2000
Dong Quach, MD. Medical Director – Transfusion Service- Inland Empire Service Area	Date

Receipt of Blood Bank Specimens, Continued

DOCUMENT HISTORY PAGE

Effective Date: April 26, 2000

Change type: new, major, minor etc.	Changes Made to Document – Describe	Signature responsible person/Date	Med. Dir. Reviewed/ Date	Lab Manager reviewed/ Date	Date change Imp.
New					
Revised	Added ILIDS parts to this sop. Added Flowchart references	Ginny Tyler 01/21/08	Collected by 12/12/2007	N.A.	
Minor	Added a flowchart for routing errors	Ginny Tyler 02/24/08	N.A.	N.A.	
Minor	Removed cancel orders from FC C (DOE) and added a new FC F for canceling in ORV.	Ginny Tyler 03/11/08	N.A.	N.A.	
Minor v.04	1. Defined hemolysis in Attachment A 2. Added comments about patients with historic antibodies. 3. Formatted the policy in to specimen collection and receipt of specimen.	Ginny Tyler 11/25/09	N.A.	N.A.	

Receipt of Blood Bank Specimens, Continued

Minor v.05	1. Removed the restriction to crossmatch samples within 3 days for tube. Validated these for 14 days, and all methods are OK. 2. Gave instruction on what to do when drawing samples for surgery at another MC. New form to transfer the samples and call courier. 3. Described that double check still needed for nurse draws in ED and OR.	Ginny Tyler 12/23/10	N.A.	N.A.	
Minor V.06	1. Removed RRL as courier 2. Added A-Line and Dynamax attachments	Ginny Tyler 07/24/11	N.A.	N.A.	
V.07	1. Removed the requirement to have time as a required item on the patient blood samples lab 2. Defined the trained staff acceptable to check the out-patient or clinic draws.	Ginny Tyler 11/28/11	All approved by 11/17/11	N.A.	

IMP = Implemented

MasterControl History of Change:		
Change type: new, major, minor etc.	**Version #**	**Description of Change**
Minor	10	• Removed KRMS, replaced with Cerner • Removed Transport of samples • Changed title to be only Collection of BB samples
Major	11	• Added that when there is a discrepancy due to a missing title, i.e. Sr, Jr, or its location on the label or wrist band, that this is not a reason to reject the sample—that the title is not required.
Minor	12	Update Policy to match Process for date/time requirements on specimens

Receipt of Blood Bank Specimens, Continued

Major	13	Remove use of Patient Identification form for Blood Bank samples. Added Checklist of OP Specimens for Blood Bank form to controlled documents and steps to complete the form. Removed requirement to file QIM for hemolyzed samples. Added steps needed to review patient needs in Cerner in Health Connect to be followed at specimen receipt. Added Attachments to outline Cerner workflows.
Major	14	Added policy for truncated names on specimen label, updated Attachment G (routing of samples).
Major	15	Added policy to allow for computer (electronic) crossmatch to be performed at any medical center (patient must qualify for the computer crossmatch) regardless of which medical center did pre-transfusion testing. Removed policy/processes regarding specimen collection-transfusion service does not perform. Updated title, removing "Collection". Updated steps to align with revised form *Checklist for Out-Patient specimens for Blood Bank.* Removed Attachment G-Cerner Routing. Updated statement regarding neonatal specimen expiration, these specimens will NOT expire upon discharge of neonate from Inpatient status. Added related controlled documents referred in document.
Minor	16	Updated policies for specimen labeling to capture current processes and to align with AABB/CAP standards.

Receipt of Blood Bank Specimens, Continued

ATTACHMENT A
Hemolysis Grading:

Approximate Hemoglobin Concentration (mg/dL)
General guidance for acceptance/rejection:
≤50 mg/dL – not hemolyzed

>50 mg/dL – hemolyzed

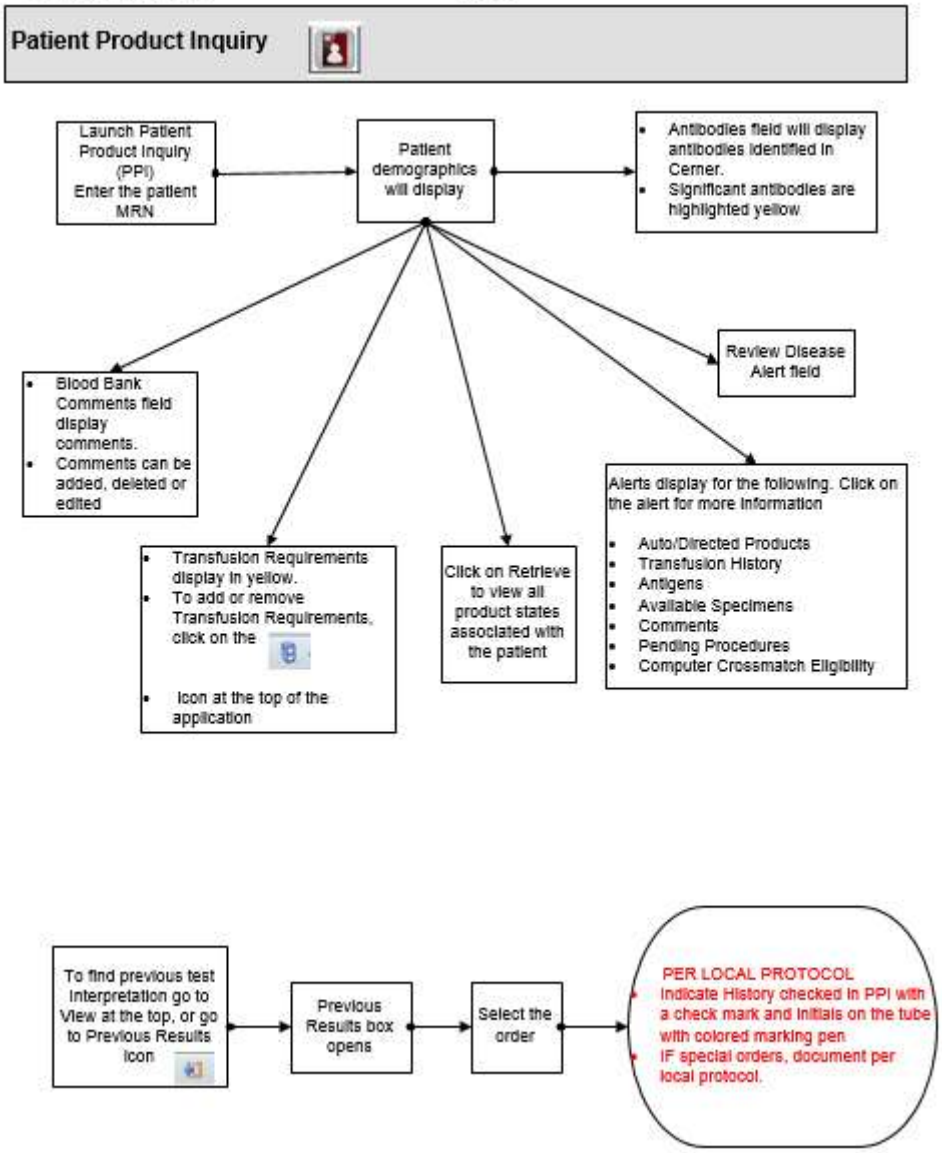
Basic guideline is:

- *Accept for slight hemolysis would be 50 mg/dL or less.
- Do not accept if the specimen is above 50 mg/dL of hemoglobin which will start appearing as "cherry" red and it will be difficult to read print through the tube.

Reference: Mayo Clinic Communiqué: Preanalytic Laboratory Errors: Identification and Prevention, Vol. 33, No. 12, December 2008.

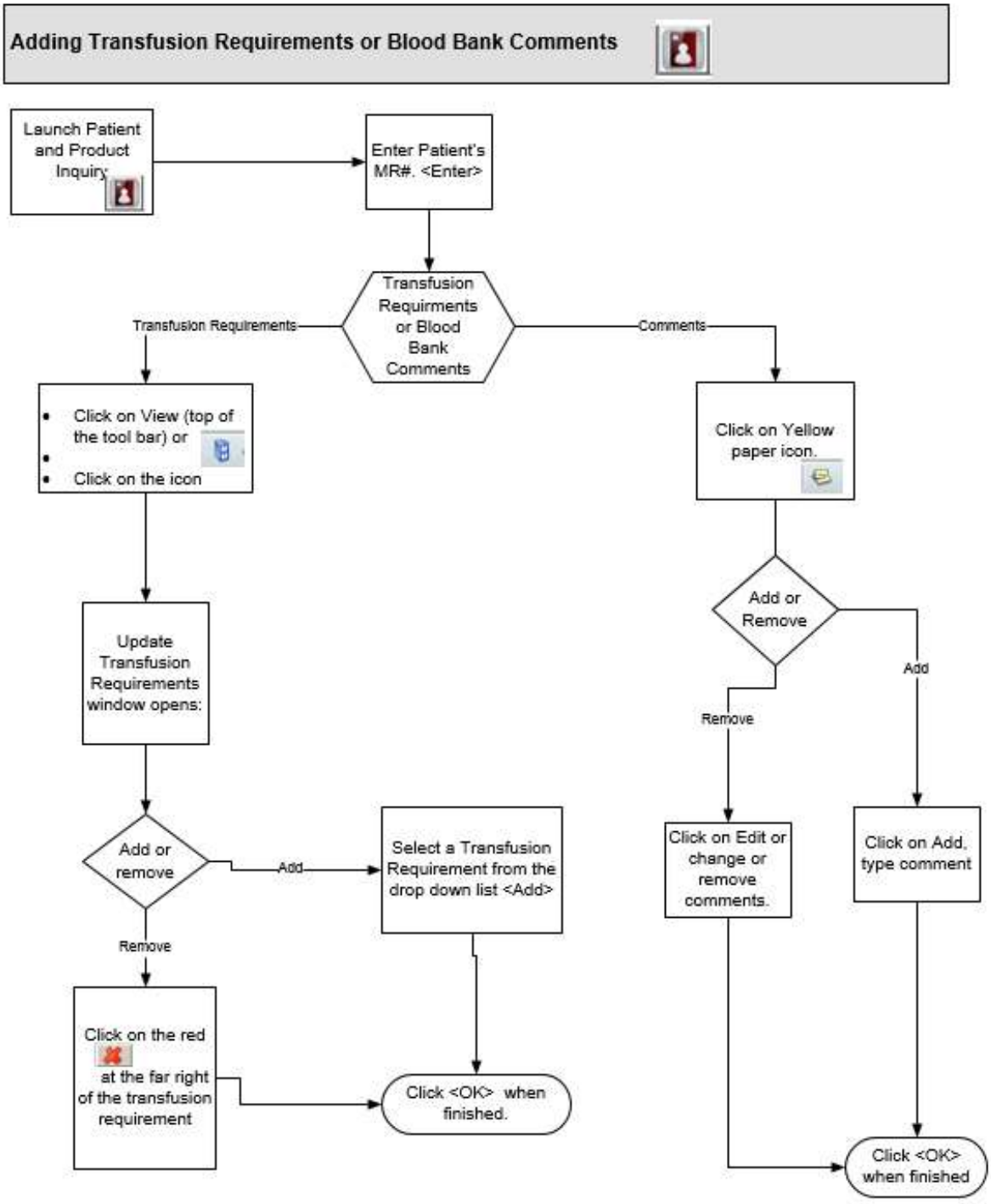
Receipt of Blood Bank Specimens, Continued

ATTACHMENT B



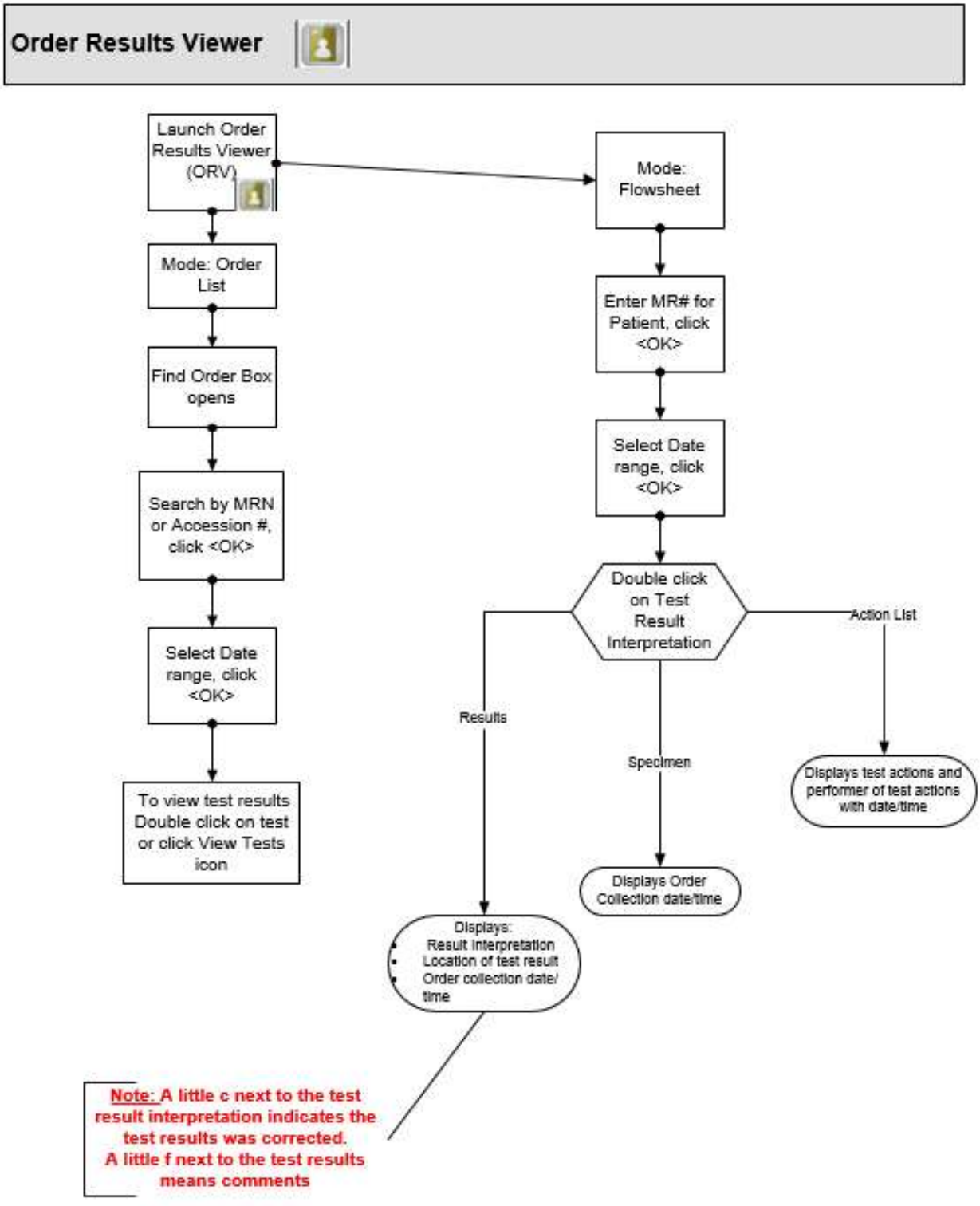
Receipt of Blood Bank Specimens, Continued

ATTACHMENT C



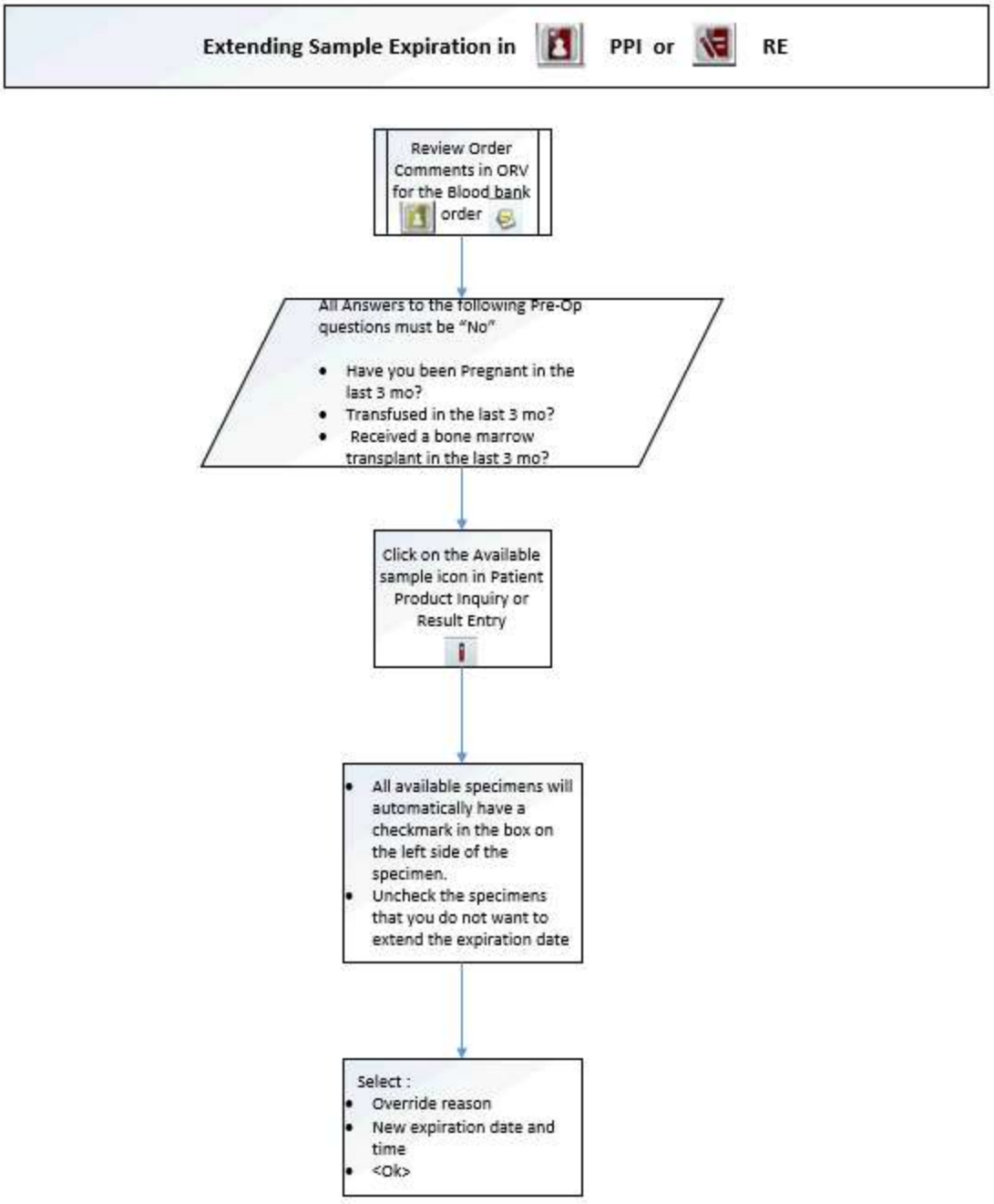
Receipt of Blood Bank Specimens, Continued

ATTACHMENT D



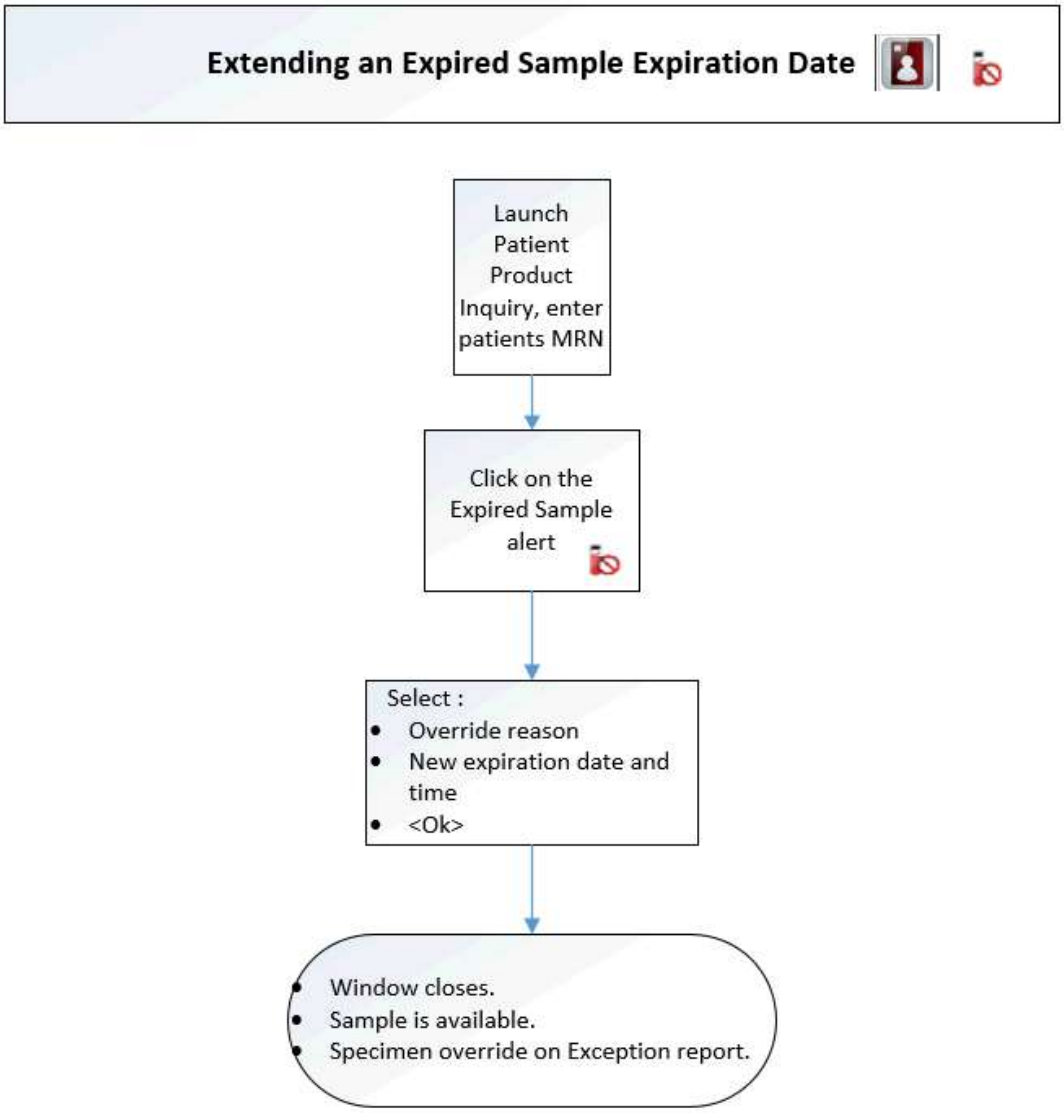
Receipt of Blood Bank Specimens, Continued

ATTACHMENT E



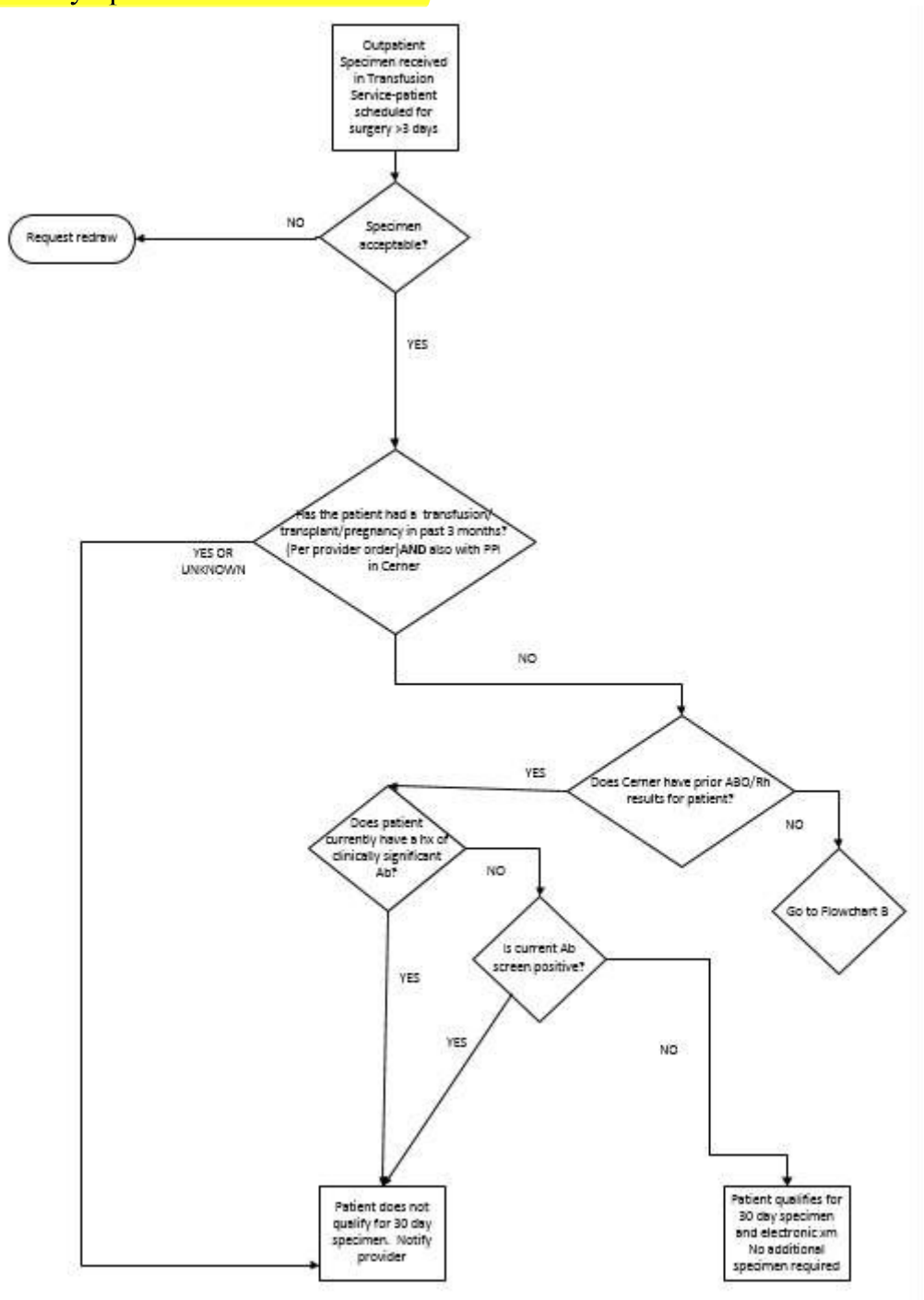
Receipt of Blood Bank Specimens, Continued

ATTACHMENT F:



Receipt of Blood Bank Specimens, Continued

ATTACHMENT G
30 day specimen: Flowchart A



Receipt of Blood Bank Specimens, Continued

ATTACHMENT H

30 day specimen: Flowchart B