Wake Forest® Baptist Health	**DOCUMENT TYPE:** ☒ Procedure	**ORIGIN DATE IN TITLE 21** 3/11/2020
CLIA Lab Director: Dr. Gregory Pomper	**LAB DEPARTMENT:** Central Processing Lab	**CONTACT:** Central Processing Lab

APPLICABLE LABORATORY(S)):

☒ North Carolina Baptist Hospital (NCBH)
☐ Lexington Medical Center (LMC)
☐ Davie Medical Center (DMC)
☐ Wilkes Medical Center (WMC)
☐ High Point Medical Center (HPMC)
☐ Westchester
☐ Clemmons

PROCEDURE STATEMENT

Central Processing staff should follow established laboratory guidelines to maintain consistency in the processing of laboratory test requests and patient specimens.

SCOPE

i. Procedure Owner/Implementer: Central Processing Lab
ii. Procedure Prepared by: Central Processing Management
iii. Who Performs Procedure: Central Processing Staff

DEFINITIONS

A. Procedure: A process or method for accomplishing a specific task or objective.
B. WFBH Lab System: Wake Forest Baptist Lab System is a health system that includes Wake Forest Baptist Medical Center and all affiliated organizations including Wake Forest University Health Sciences (WFUHS), North Carolina Baptist Hospital (NCBH), Lexington Medical Center (LMC), Davie Medical Center (DMC), Wilkes Medical Center (WMC), High Point Medical Center (HPMC), Lab at Westchester and Lab at Clemmons.
C. CP: Central Processing
D. CSF: Cerebral Spinal Fluid
E. TDM: Therapeutic Drug Monitoring
F. Path Lab Handbook: The Online Test Directory lists tests and services that are performed in-house with specimen requirements and special handling procedures.

POLICY GUIDELINES

A. Procedure

1. **Central Processing Services:** The Central Processing Laboratory responsibilities include the receipt, accessioning, processing, and distribution of most lab samples/orders received in the laboratory.

2. **Department of Pathology Lab Handbook:** The lab may provide a current list of test methods including performance specifications to clients upon request. The Pathology Lab Handbook Online Test Directory is accessible via the Wake Forest Baptist Health Intranet: https://intranet.wakehealth.edu/Departments/Pathology/Handbook/

3. **Specimen Transport:** Specimens may be transported to the Clinical Laboratory via the hospital pneumatic tube system.
   a. Ordering locations without pneumatic tube are responsible for transporting samples to the laboratory.
   b. The WFBMC Clinical Labs provide an on-campus courier who makes scheduled rounds in the hospital for onsite clinics and various other locations for pickup and delivery of samples to the lab.
   c. It is recommended that irretrievable specimens be hand delivered to the laboratory, including but not limited to: CSF, body cavity fluids, joint fluids, blood gases, tissue, blood or urine cultures collected before antibiotic therapy, amniocentesis, cordocentesis, peak/trough TDM levels, and intravascular catheter tips for culture.
   d. Hand delivered samples must be logged in the log book at the main lab window.

4. **Bloodborne Pathogens:** All samples transported to and received in the clinical laboratory should be handled according to standard precautions and bloodborne pathogen standards as outlined in the WFBH Blood and Body Fluid Exposure Control Plan and the Laboratory Safety Manual.
   a. CSF samples with known or suspected Creutzfeldt-Jakob disease should be processed in a biosafety cabinet. Alert any staff that may be subsequently handling this sample.

5. **Specimen Processing Priority:**
   a. Blood and body fluid samples received in the lab are processed upon receipt on a first come, first served basis with priority given to STAT orders.
   b. **Red specimen bags**: STAT orders must be in a red STAT bag.
   c. **Green specimen bags**: Pediatric oncology and Cancer Center samples should be sent in a green bag. Pediatric oncology CBC samples are considered STAT and should be taken directly to hematology.
   d. **Blue specimen bags** from a Code Stroke Pevco carrier (and pager notifications) indicate a Code Stroke patient. These samples are always processed STAT and should be taken directly to hematology and Spin. Wrap Code Stroke specimen caps in red tape to identify them. Do not place Code Stroke specimens on the track.
   e. **OB Only HIV** are always STAT and delivered immediately to microbiology. Do not scan OB Only HIV. Do not put in bucket for Spin to deliver.
   f. **OR specimens** from Tube 104 or Tube 12 (OR Stat Lab) are always STAT. Scan and deliver immediately.
   g. **Ammonia samples** should be processed STAT and should remain on ice until the Spin person delivers the specimen to the testing area.

6. **Specimen Receipt and Accessioning:** Specimen test requests received in the lab should be processed in Beaker. Exceptions not entered in Beaker include orders for Microbiology, Blood Bank, Cytology, Surgical Pathology, Genetics, and HLA. These tests/samples are received in the lab and forwarded to the respective test areas.

7. **Specimen Evaluation:** Specimens should be evaluated when received in Central Processing for the appropriate specimen type and integrity of the sample.
   a. **Specimen Integrity:** Leaking or broken specimens should be evaluated and discarded if they cannot be safely salvaged, or if the quality of the test results would be compromised.
   b. **Specimen Types:** Specimen types are defined in Beaker for each test. Specimens must be evaluated prior to processing according to the defined test requirements. Ordering locations should be notified in the event a specimen does not meet the defined test type requirements. Each laboratory section may have additional specimen requirements.
   NOTE: Sendouts should evaluate any referral testing that is sent in an unexpected tube type. They may be able to send to an alternate referral testing lab.

8. **Specimen Communications:** Communications regarding specimen problems should be communicated to the ordering location by the lab section evaluating the problem.
   a. Central Processing should handle and communicate problems regarding specimen types and compromised specimens (broken, leaking).
   b. Central Processing should notify the ordering location if they note problems when processing the sample (short sample, wrong tube type).
   c. If the sample is short but can possibly be run, the sample should be marked with an “S” and the lab section alerted. Enter a Beaker Lab Comment to document a short sample was received (.sheme for short hematology or .schem for short chemistry).
   d. The testing lab should notify the ordering location if there is a sample problem identified after specimen is received at the testing bench (clot, QNS).
   e. The lab section that notifies the ordering location of a problem should document the problem in Beaker and cancel the received test with the appropriate reason. Reasons for canceling in Beaker include: Broken/spilled in transit, cancelled by provider, clotted, collected in wrong tube, correct test ordered, duplicate request, floor/clinic ordered incorrectly, improperly preserved/processed, lab duplicate order, lab ordered incorrectly, lost in transit, no sample received, not proper time for requested test, not received on ice, other, patient ID incorrect, physician cancelled order, sample not kept warm, sample not protected from light, specimen clotted, specimen mislabeled, specimen not labeled, stability limit exceeded when received, wrong tube/specimen type.
   f. Refer to Incident/Credit Reports procedure for further instructions on canceling tests and documenting incidents.

10. **Order Clarification:** After assuring patient specimen identification matches on all samples and requisitions, assure that all orders are clearly understood. Any questions must be resolved by calling the ordering location for clarification. Document that a call was made on the requisition or in Beaker, including the name of the person you spoke to, date and time, and your name.

11. **Aliquot Samples:** Samples poured off (aliquoted) must be identified with a minimum of the patient’s name, medical record number, and accession number.

a. In the event that there is minimal room to record this information (such as bullet tubes), the patient's last name and medical record number may be used.
b. The person pouring off the aliquot must initial the identification label placed on the aliquot to indicate their responsibility for verifying the identity of the aliquot sample from the primary tube.

12. **Extra samples:** When samples arrive without an order, check Beaker for any pending or outstanding orders.
    a. Do not assume that a particular test is wanted without verifying with the provider. Call if necessary and request that an order be placed.
    b. Staff should only be receiving tests that have been ordered.
    c. Extra tubes received in the lab that are ordered in Beaker as Extra Tubes include any pediatric bullet samples, and gold or lavender tubes from outreach or outpatient clients. Extra urine (UA or plain chemistry tubes) or urine culture tubes are also ordered in Beaker. See Attachment A for instructions on ordering extra tubes.
    d. Any urine remaining after aliquoting ED, OR, or Labor and Delivery patients is stored in the Spin refrigerator rack.
    e. Any body fluids remaining after aliquoting for testing are stored in the Spin refrigerator rack. Refer to Spin Procedure.
    f. Extra blood tubes from inpatients are kept at room temperature in a rack in Spin.
    g. Extra urine culture tubes, body fluid freeze and holds, and autopsy specimens are tracked in Beaker in Container Storage. Refer to Container Storage in Beaker procedure.

13. **Specimens should not be returned to the ordering location for any reason:**
    a. Once specimens are received in the lab, they may not be returned to an ordering location or given to non-lab personnel for any reason to take out of the lab.
    b. Extra specimens will be retained in the laboratory in the extra rack located at the Spin bench.
    c. Specimens sent to main campus in error should be evaluated by the pathology resident.

14. **Specimen Disposal:** All specimens received in the laboratory are considered biohazardous and should be handled according to the Laboratory Safety Manual.

15. **Sharps:** Specimens with attached needles should not be accepted in the lab. If the specimen is from a critical patient, caution the sender that needles should be removed at the collection site. Accept it and carefully remove the needle with hemostats.
    a. Urine cups with a built-in transfer device should not be accepted in the lab. The transfer device is a sharp and causes leaking of sample in transit.

16. **Blood Bank Segments:** Blood bank segments sent to Central Processing should have orders for sickle cell screens and are delivered to hematology.

17. **Blood Gas Samples:** Blood gas samples are sent via pneumatic tube system to the ICU Blood Gas Lab, Station 54.

18. **Release of Samples to Outside Agencies:** Blood and body fluid samples may be released to Federal, State, or Local Law Enforcement Agencies or other outside

agencies having statutory authority to obtain physical evidence such as: the North Carolina Industrial Commission, a Court Order, a Search Warrant, a North Carolina Industrial Commission Order, or other legal document recognized by the legal department.
Management (CP or Referral Testing) should be notified if there is a request.

19. **Handling Duplicate Test Orders:** Known duplicates are:
a. Two labels for the same test with two different accession numbers
b. Two labeled tubes with different accession numbers but the same test.
Cancel one of the accession numbers with reason “Floor duplicate order.”
Order an extra tube as appropriate. Refer to section 12.

REFERENCES

None

RELATED PROCEDURES/POLICIES (NAVEX)

None

ATTACHMENTS/LINKED DOCUMENTS (TITLE 21)

Attachment A: Ordering Extra Tubes

REVISION DATES: REVIEW CHANGE SUMMARY AS REPRESENTED IN TITLE 21.

Test code: LAB4193 Phlebotomist Extra Tube Order (Lab Use Only)

Section	Use When	Comments
A	Receiving Screen is up	Action tab to select Extra tube Use Extra tube order **
B	Only Tube, nothing to scan in	Manage Orders Use Extra Tube Order **
C	X locations (CareEvolve)	Use Requisition Entry Order test by tube color

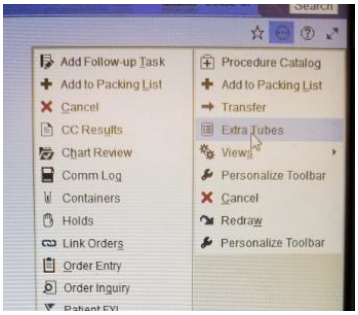
The Extra Tubes Navigator can be accessed from these activities.**

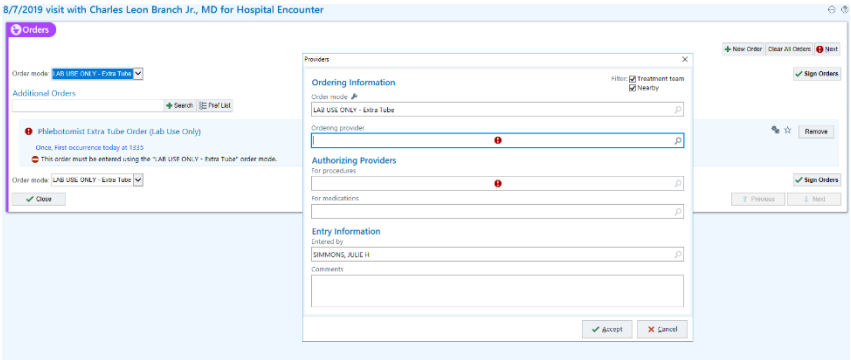
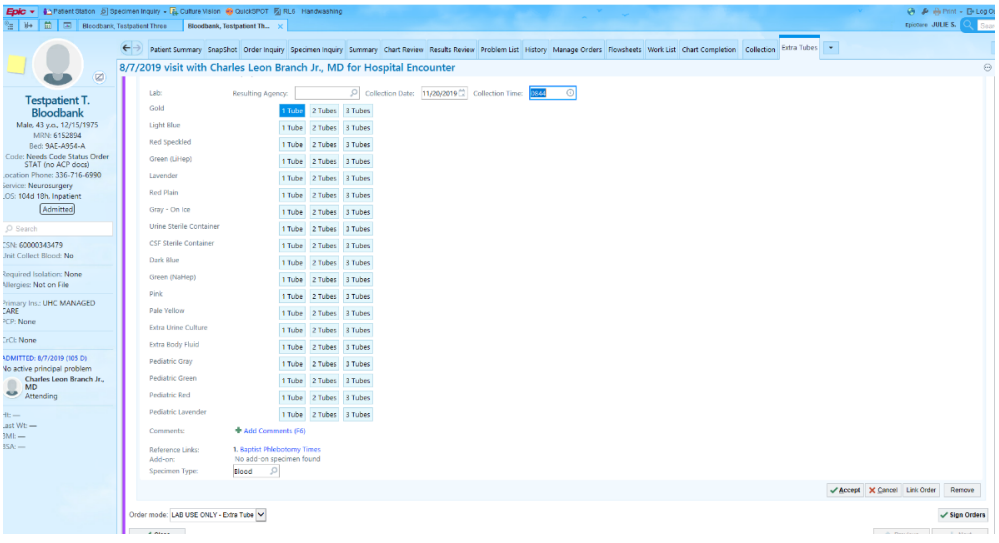
Section A: Ordering from the Receiving Screen. (There are other tubes available to receive.)

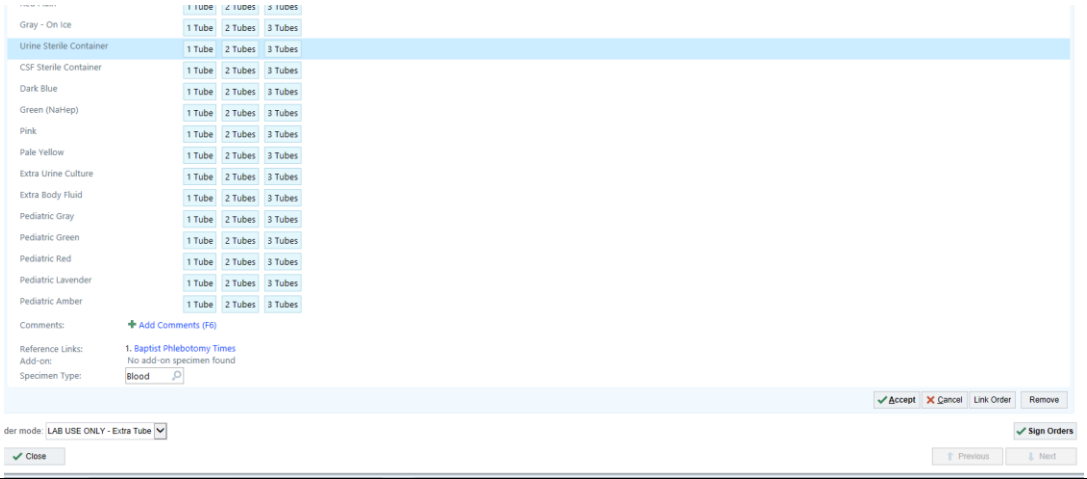
<table>
<tr><th>STEPS</th><th>INSTRUCTIONS</th></tr>
<tr><td>1.0</td><td>Scan labels to receive tubes that have orders.

NOTE: If there are no current tubes – you can re-print a label from a previous test and scan to bring up the patient in the receiving screen. VERIFY that the correct patient has been pulled up before proceeding.</td></tr>
<tr><td>2.0</td><td>Go to Patient Inquiry and Order Inquiry to verify that there are no outstanding orders requiring the tube that has been sent.

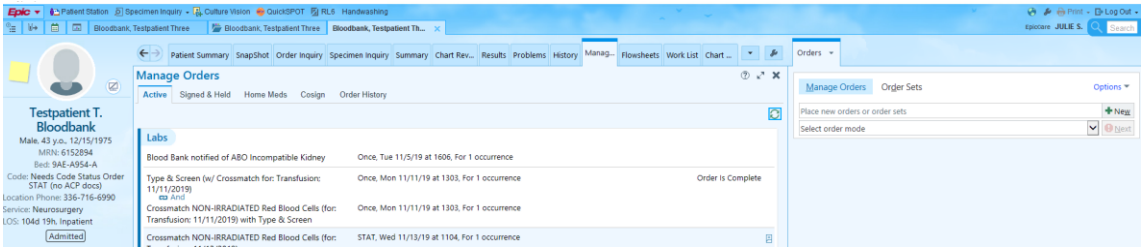
2.1 IF:

<table>
<tr><th>NO ORDERS</th><th>HAVE ORDERS</th></tr>
<tr><td>a. Go to Step 3.</td><td>a. Collect the tube so that the label prints.
b. Verify label is for correct patient.
c. Label tube so that name on original label on tube is visible.
d. Scan tube to receive.</td></tr>
</table>
</td></tr>
<tr><td>3.0</td><td>Click the action  tab and select Extra Tubes by clicking.
 
</td></tr>
</table>

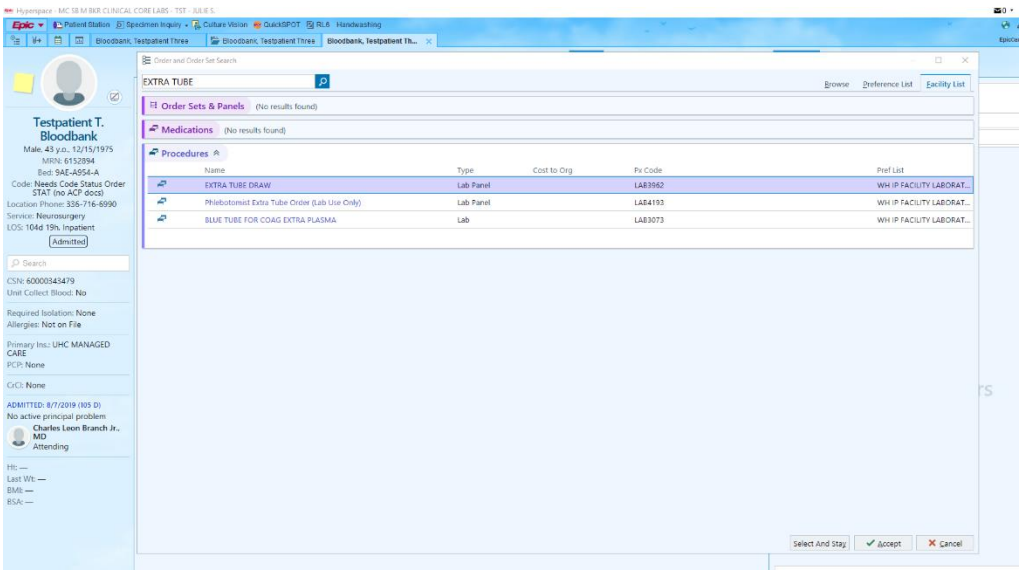
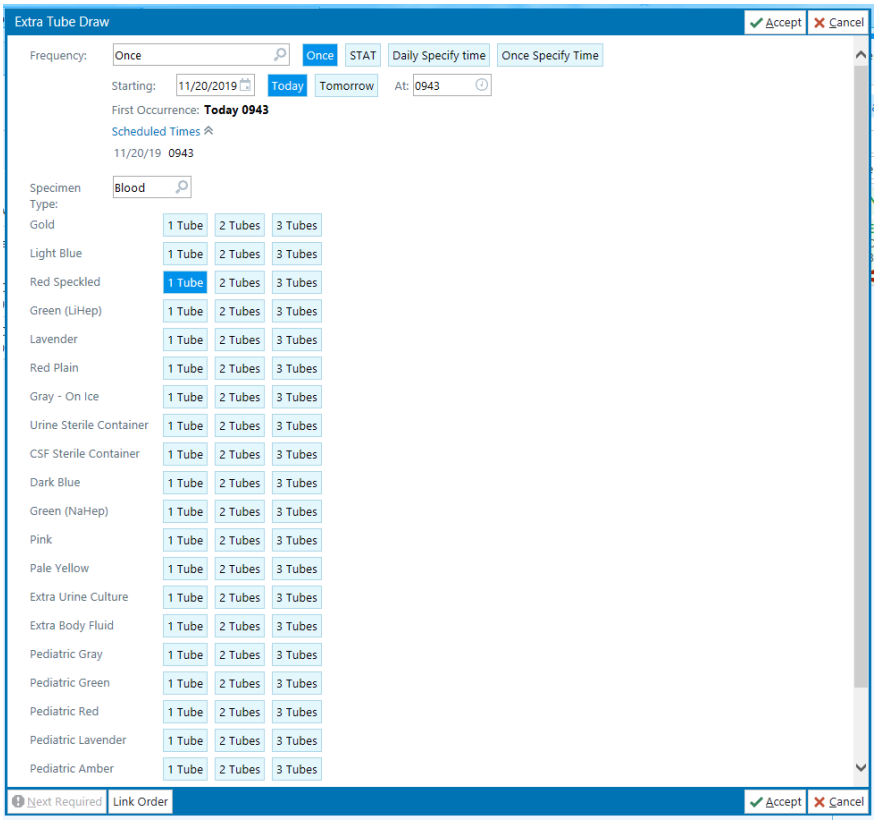
STEPS	INSTRUCTIONS
4.0	**Select the Order Mode option: LAB USE ONLY EXTRA TUBE from drop down window. Provider window opens.**  4.1 Hit spyglass beside ordering provider to add ordering provider information. a. Provider if physician will default in. b. Note: If provider is Physician Assistant (PA) - will not be in there. • Type in provider name and search. • May need to clear filters and search (based on who ordered other tests.) 4.2 Click Accept when provider information has been added. 4.3 Click NEXT.
5.0	**Enter the collection information from the tube you have received and select the number and color/type tube by highlighting.** 5.1 Enter date and time of collection. a. Use T for today or select the date. b. Use N if just collected or enter correct time if different.  NOTE: Verify that you have NOT ordered the Extra tube as a future order. If it is a Future order – then need to change it or the label will not print.

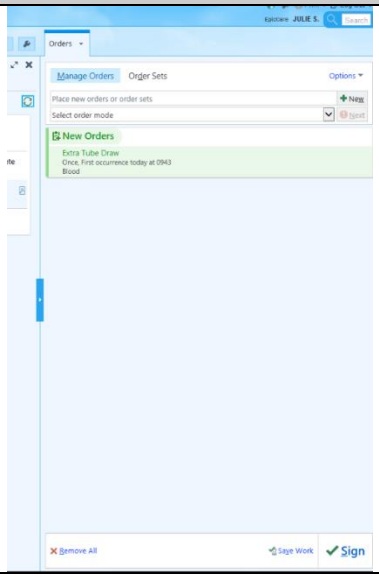
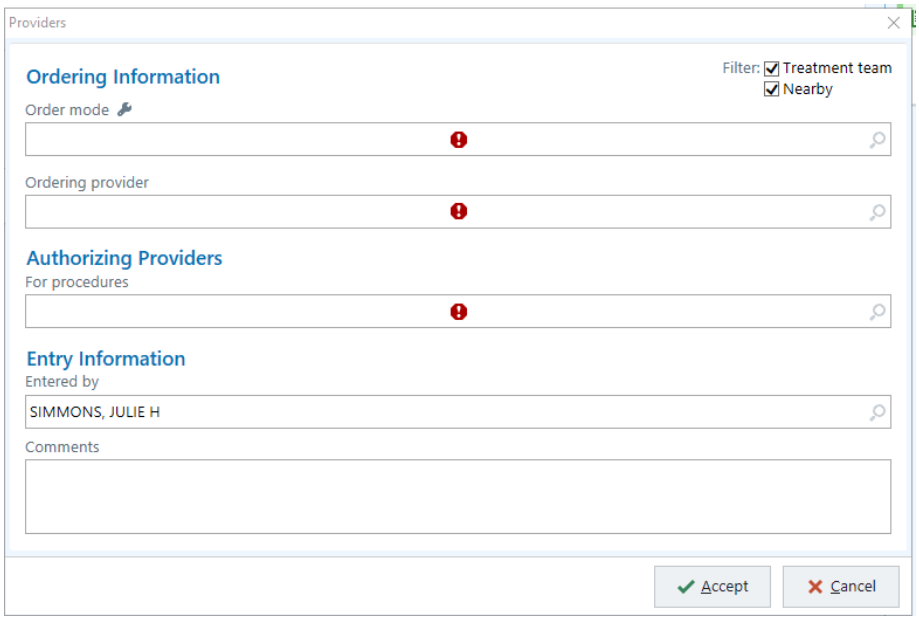
STEPS	INSTRUCTIONS
	NOTE: Occassionally if you are ordering you may be prompted to answer diagnosis question. Check all and it will automatically fill in the boxes. 5.2 Review the specimen type at the bottom of the screen. a. It defaults to blood. If urine or body fluid– have to change. 5.3 Click Accept. 
6.0	**Cick the 'Sign Orders' button and label should print.**
7.0	**Verify label is for correct patient.** 7.1 **SCAN** label for 'Extra tube' to receive.

Section B: Ordering from Manage Orders when there are no orders – no tubes are available to scan in the Receiving screen.

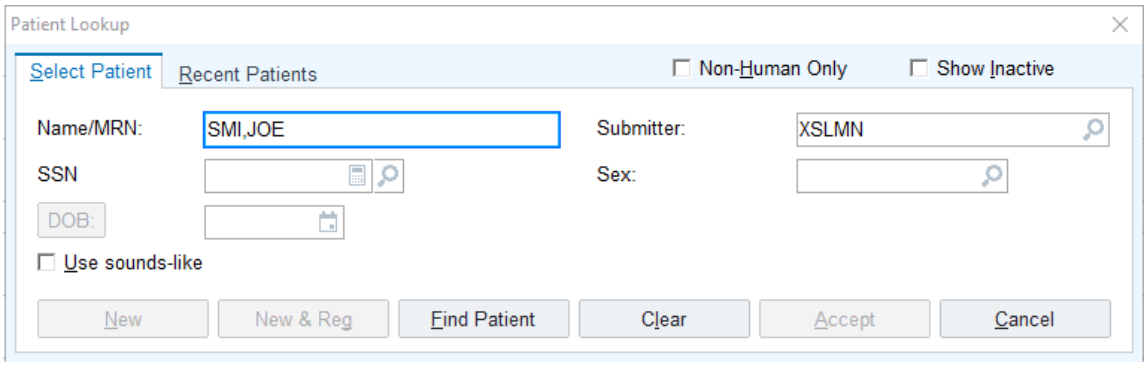
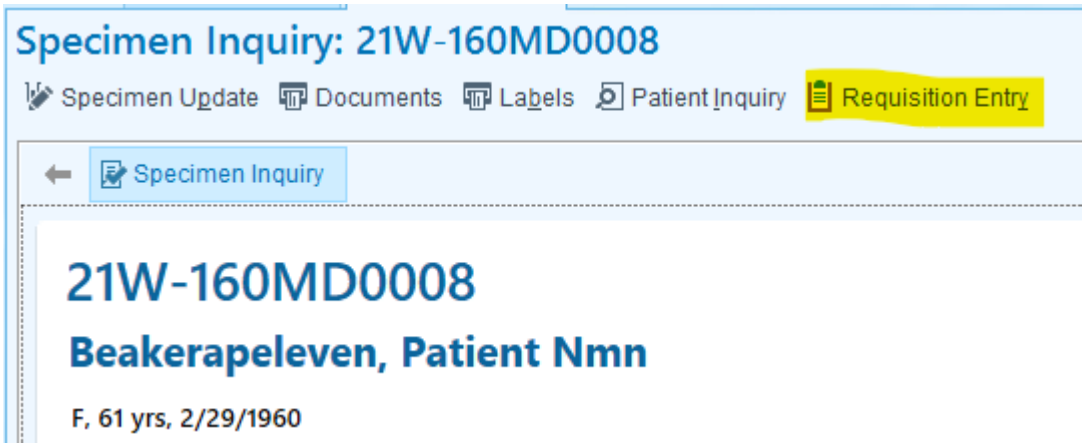
<table>
<tr><th>STEPS</th><th>INSTRUCTIONS</th></tr>
<tr><td>1.0</td><td>Go to Patient Inquiry and Order Inquiry to verify that there are no outstanding orders requiring the tube that has been sent.
<table>
<tr><th>NO ORDERS</th><th>HAVE ORDERS</th></tr>
<tr><td>a. Go to Step 2.</td><td>a. Collect the tube so that the label prints.
b. Verify label is for correct patient.
c. Label tube so that name on original label on tube is visible.
d. Scan tube to receive.</td></tr>
</table>
1.1 IF:</td></tr>
<tr><td>2.0</td><td>Enter Extra Tube in the ‘Place new orders or order sets’ box and enter.
 

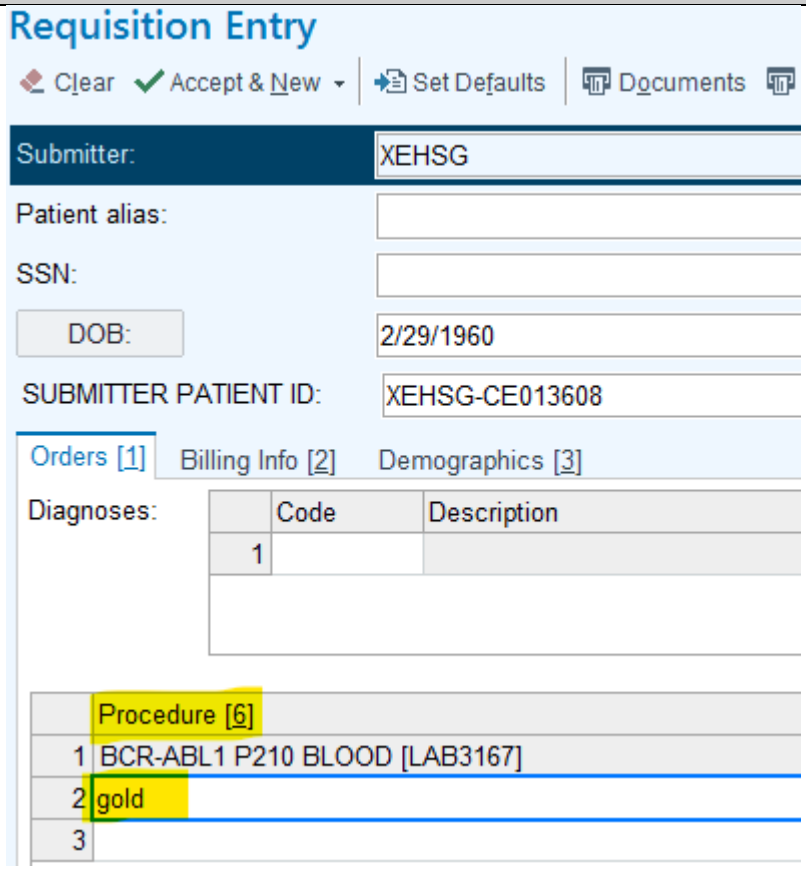
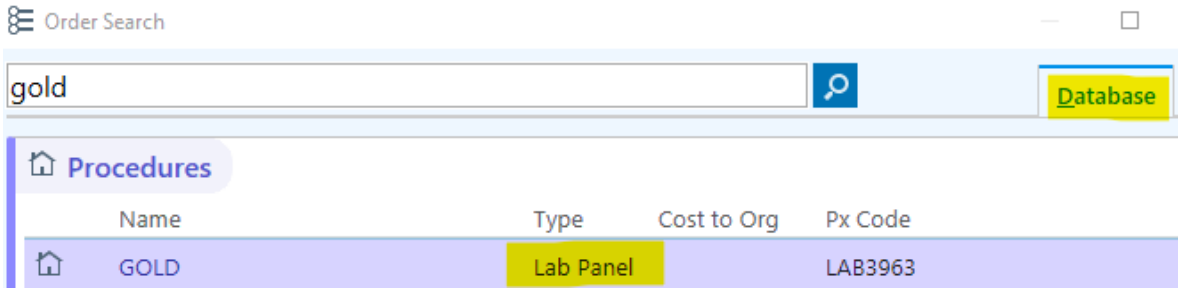
2.1 A window should open and EXTRA TUBE DRAW should be highlighted.</td></tr>
</table>

STEPS	INSTRUCTIONS
3.0	**Click Accept.** 
4.0	**Enter the collection information and select the correct extra tube type/number by highlighting.**  4.1 Click Accept to return to manage orders screen.

STEPS	INSTRUCTIONS
5.0	**Click Sign.** 
6.0	**Complete Ordering informatioin in the box that pops up.** 6.1 Order mode: LAB USE ONLY – Extra Tube 6.2 Ordering provider: Select 
7.0	**Click Accept and label should print.**
8.0	**Scan Extra tube label to receive.**

C. Using Requisition Entry when extra tube is from "X" location.

STEPS	INSTRUCTIONS
1.0	**Go to Specimen Inquiry by Patient.**
2.0	**Type "X" location in submitter box and the first three letters of patient's last and first name in Name/MRN box. i.e. XSLMN for Salemtowne; SMI, JOE for Joe Smith.** 2.1 Click find Patient.  2.2 Review patient that is displayed and Click Accept if correct patient.
3.0	**Click on a current specimen. Specimen Inquiry will open.** 3.1 In Specimen Inquiry screen, click on Requisition Entry button. 
4.0	**In Requisition Entry, scroll through the lists of tests ordered for the patient (in Procedure section) until you reach an 'empty' box.** 3.1 Type in the tube color in the Procedure box. (i.e. "Gold" or "Lav")

STEPS	INSTRUCTIONS
	 a. Make sure you are in the database tab to find these extra tube types by color. 
5.0	**Click "Create Specimens."** 4.1 Label should automatically print.
6.0	**Go to Receiving screen and scan label to receive.**