**TRAINING UPDATE**

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| **Lab Location:** | SGMC and WAH | **Date Implemented:** | 11.20.2017 |
| **Department:** | Processing | **Due Date:** | 12.11.2017 |

**DESCRIPTION OF PROCEDURE REVISION**

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| **Name of procedure:** |
| Specimen Receipt and Processing |
| **Description of change(s):** |
| 1. Format and wording of procedure were updated for clarity. 2. All specimens will be received using Sunquest GUI, function “Order receipt and modify” (primary method) or “Order entry” (alternate method). **Sunquest SmarTerm will no longer be available for receiving specimens.** 3. Specimens will be prioritized in the following order:    1. Specimens on ice    2. Irreplaceable specimens (body fluids, etc)    3. Green biohazard bags (pre-op)    4. Orange/red biohazard bags (ED)    5. Stat and timed specimens    6. Routine specimens |

Non-Technical SOP

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| Title | **Specimen Receipt and Processing** | |
| Prepared by | Samson Khandagale | Date: 3/20/2015 |
| Owner | Stephanie Codina | Date: 10/19/2017 |

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| Laboratory Approval | | |
| **Print Name and Title** | **Signature** | **Date** |
| *Refer to the electronic signature page for approval and approval dates.* |  |  |
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| Local Issue Date: | Local Effective Date: | |

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| **Review:** | | |
| **Print Name** | **Signature** | **Date** |
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# PURPOSE

This procedure describes the process for receiving specimens in the laboratory.

# SCOPE

All specimens that arrive in the laboratory will be received and processed for testing.

# RESPONSIBILITY

All laboratory staff members must understand and adhere to this procedure when receiving and processing specimens for testing.

# DEFINITIONS

**Irreplaceable specimen** – a specimen obtained by invasive means that is not easily obtained or replaced, i.e. CSF, body cavity fluids, fine needle aspirations, surgical biopsies, etc.

# PROCEDURE

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| **Step** | **Action** |
| 1 | Specimens will be transported to the laboratory in person (lab/hospital staff) or via pneumatic tube station. Specimens dropped off in the laboratory by non-laboratory personnel must be properly recorded on the specimen receipt log. |
| 2 | Specimens will be processed in the order in which they arrive (specimens delivered first will be processed first) and they will be prioritized as follows:   1. Specimens on ice will be prioritized first due to specimen stability. 2. Irreplaceable specimens (such as body fluids) will be prioritized second. 3. Specimens in green biohazard bags from pre-op (including L&D pre-op) will be prioritized third. 4. Specimens in red or orange bags from ED will be prioritized fourth. 5. Stat and timed specimens will be prioritized fifth. 6. Routine specimens will be processed last. |

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| **Step** | **Action** |
| 3 | Verify the specimen is labeled properly. Each specimen must include the following:   1. Patient’s full name 2. Patient’s medical record number    1. FIN may be used during periods of computer downtime for registered patients    2. Birthdate may be used for patients whose specimens were collected at outside locations such as Mercy Health, MobileMed, etc. 3. Date and time of collection 4. Collector’s initials or identification   Forward all blood bank specimens to blood bank for review. Blood bank staff will check labeling and adequacy.  The specimen will be rejected if the name and/or medical record number is incorrect or absent. The collector may come to the laboratory to fix specimens with missing or incorrect collection date/time and/or collector’s initials.  The laboratory will not return any specimens to the floor for any reason once received. All edits to specimen labels must be completed in the confines of the laboratory. |
| 4 | Verify that the specimen submitted meets the requirements for testing. Characteristics that should be considered when evaluating the adequacy of a specimen include, but are not limited to, the following.   1. Specimen container is within the manufacturer’s expiration date. Verify only if visible; do not remove labels to verify expiration date. 2. Correct specimen container 3. Correct anticoagulant for blood tubes 4. Adequate specimen volume 5. Timely specimen delivery (as outlined by the stability standards for the requested test(s). 6. Accurate blood-to-anticoagulant ratio as indicated by the collection tube and test requirements 7. Adequate visual inspection of the tube/container.    1. Specimen does not appear to be contaminated.    2. Specimen is not leaking.    3. Visual clots are not seen.    4. Gross hemolysis is not seen. 8. Accurate correlation of specimen collection time when timed specimens are collected. 9. The test code ordered should match the specimen type. Edit orders that correspond to the incorrect specimen type. 10. During periods of computer downtime, paper requisitions must be completely and accurately filled out. Information on the requisition must match information on the specimen label.   Cancel a specimen that is not adequate for testing per procedure. |

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| **Step** | **Action** |
| 5 | Receive specimens in Sunquest per one of the below procedures. Keep in mind the following:   1. Each accession number should contain only one specimen type (blood, urine, stool, etc.). 2. Miscellaneous tests require extra handling. Refer to the procedure. 3. Specimens received without orders should be documented per procedure. 4. Each microbiology specimen should be on its own accession number. Edit specimens that overlap accession numbers by receiving one specimen then cancelling and reordering the other tests on new accession numbers. 5. Microbiology specimens cannot have the same collect time or results will not post to Cerner. Separate the collect times by 1 minute in Sunquest if more than one specimen is received with the same collect time. |
| 6 | Relabel tubes with laboratory labels as needed per procedure. |
| 7 | Aliquot and label per procedure all urine specimens received in a cup within 2 hours of collection.   1. Yellow/red tiger top (urine preservative) tube for UA; stable for 24 hours without refrigeration. 2. Gray top urine culture and sensitivity tube; stable for 48 hours. 3. Plain yellow top tube for Urine Drugs of Abuse, HCG or urine Chemistry testing. 4. Urine samples in a cup collected **more** **than 2 hours** before receipt must be rejected for culture. 5. Offsite locations (ABH, ARH, and Mercy Health) refrigerate specimens prior to receipt and may be accepted for up to 24 hours. |
| 8 | Separate and delivery specimens to the appropriate section of the laboratory.   1. Specimens that require centrifugation should be placed into the centrifuge.    1. Chemistry, send out, and extra specimens are placed in the centrifuges between processing and chemistry.    2. Coagulation specimens are centrifuged in the coag area. 2. Blood bank armbands should be delivered to blood bank with specimens. |

**Receiving Specimens in Sunquest: Primary Method**

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| **Step** | **Action** |
| 1 | Access Sunquest GUI. |
| 2 | Select function “General Laboratory.”  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |

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| **Step** | **Action** |
| 3 | Select “Order Receipt/Modify” from the dropdown menu in the upper, left-hand corner of the screen.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 4 | Select “Patient ID” from the Access Option dropdown menu.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 5 | In the yellow box, enter the medical record number from the tube then click the “Get Orders” box.   1. Scan the MRN from the Cerner patient label.   C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.jpg  This barcode contains the MRN   1. Manually type the patient MRN from the lab label. |
| 6 | Click the “Display Orders” button.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 7 | The accessions and order codes pending for the patient will appear at the top of the screen. Click on the accession that corresponds to the specimen you would like to receive.   1. You can only receive one accession at a time. 2. Ensure you have received all tubes required to complete testing on the accession number. If you are missing a tube or cannot complete the testing, cancel that particular test and reorder per procedure. Do not receive testing for which you do not have a specimen.   C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |

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| **Step** | **Action** |
| 8 | Print a lab label if indicated. Print the label *prior* to receiving the specimen.   1. Click the “Reprint Labels” button. 2. All orders on the accession will display. 3. Highlight the orders for which you need a label or click “select all.” 4. Click the “Print” button. 5. The labels will print.   C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 9 | At the “Collection date” prompt, type the date the specimen was collected from the tube. **Pay special attention to this field if the sample was collected around midnight. If a sample was ordered before midnight and collected after midnight, the date will be incorrect and nursing/provider staff will not be able to see results.**  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.jpg |
| 10 | At the “Collection time” prompt, type the time the specimen was collected from the tube.  Note: If more than one microbiology sample is received with the same collect date and time, separate the collect times by 1 minute. Microbiology results will not cross into the patient’s electronic medical record if we duplicate collection date and time. |
| 11 | At the “Received date” press the “tab” key to default the current date or type a date in the field. |
| 12 | At the “Received time” press the “tab” key to default the current time or type a time in the field. |
| 13 | At the “Phlebotomist’s code” prompt, enter one of the following.   1. Type the tech ID if a phlebotomist collected the specimen. 2. Enter “850” for nurse collect. 3. Enter “860” for ED collect. 4. Enter “870” for physician collect. 5. Enter “880” for patient collect (such as urine). 6. Enter “905” for autotransfusion samples. |

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| **Step** | **Action** |
| 14 | At the “Order workload code” enter one of the following.   1. Enter “VP” for venipuncture if collected by a phlebotomist. 2. Enter “HS” for heelstick puncture if collected by a phlebotomist. 3. Enter “FS” for fingerstick puncture if collected by a phlebotomist. 4. Enter “RNC” if collected by nursing staff. 5. Enter “EDC” if collected by ED staff. 6. Enter “MDC” if collected by a physician. 7. Enter “PTNC” if collected by the patient. |
| 15 | If extra tubes are received, order barcodes for them by entering the mnemonic in the “Order code” area. |
| 16 | Review the accuracy of the information and correct as necessary. Then, press the “Save” button. |

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| **Step** | **Action** |
| 17 | Additional information is required for some tests. A pop-up screen will appear with prompts. The mnemonic will appear in yellow and the test definition will appear in the “Test” area below. Answer the prompts per procedure. Then, click the “Save” button.   1. Microbiology specimens will require that a source is entered.    1. Sunquest will prompt, “SDES.” At the “SDES” prompt, verify that the source listed in the LIS matches the source listed on the specimen.       1. If the source matches, proceed with receiving the order.       2. If the source does not match, modify the source in the LIS to match the source on the specimen.          1. Acceptable source codes may be found by typing a left bracket "[" followed by a few letters that describe the source. *Example*: "[nasal" will give the source code "NP"          2. Use a hyphen to add further descriptions *Example*: FOOT-RT for right foot    2. Sunquest may also prompt the “SREQ” special request field. This field will autofill as “HIDE.” Do not use this field. 2. Blood bank type and screen specimens require that an armband number is entered. Sunquest will prompt, “RN.” Enter through this prompt; blood bank staff will enter the armband number.   Note: Predefined English text codes (ETC) should be entered directly into the field and free-text results require a semi-colon “;” before the entry. **Do not enter a semi-colon before an ETC.** |

**Receiving Specimens in Sunquest: Alternate Method**

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| **Step** | **Action** |
| 1 | Access Sunquest GUI. |
| 2 | Select function, “Order Entry.”  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 3 | At the “Lookup by” prompt, select “Accession Number” from the dropdown menu.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 4 | At the “Value” prompt, type the accession number of the specimen to be received.  Then click the “Search” button.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 5 | Information about the specimen you selected will appear. Verify the information is correct, then click the “Select” button.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |

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| **Step** | **Action** |
| 6 | Complete all yellow fields.   1. Change the collect date and time to match the date and time of collection from the specimen. Pay close attention to the date in the hours after midnight. If the specimen was ordered before midnight and collected after midnight and the date is not changed, the results will not cross to Cerner correctly. 2. Press enter at the “Received date” to default the current date. 3. Press enter at the “Received time” to default the current time. 4. Enter one of the following in the “Phlebotomist code” field.    1. Type the tech ID if a phlebotomist collected the specimen.    2. Enter “850” for nurse collect.    3. Enter “860” for ED collect.    4. Enter “870” for physician collect.    5. Enter “880” for patient collect (such as urine).    6. Enter “905” for autotransfusion samples. 5. Enter one of the following in the “Workload code” field.    1. Enter “VP” for venipuncture if collected by a phlebotomist.    2. Enter “HS” for heelstick puncture if collected by a phlebotomist.    3. Enter “FS” for fingerstick puncture if collected by a phlebotomist.    4. Enter “RNC” if collected by nursing staff.    5. Enter “EDC” if collected by ED staff.    6. Enter “MDC” if collected by a physician.    7. Enter “PTNC” if collected by the patient.   C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 7 | Verify the tests ordered and add additional tests in the yellow boxes as needed.  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |
| 8 | If you need to reprint labels,   1. Click the “Reprint labels” button. 2. All orders on the accession will display. 3. Highlight the orders for which you need a label or click “select all.” 4. Click the “Print” button. 5. The labels will print.   C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |

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| **Step** | **Action** |
| 9 | Click the “Save” button to receive the order. |
| 10 | Additional information is required for some tests. A pop-up screen will appear with prompts. The mnemonic will appear in yellow and the test definition will appear in the “Test” area below. Answer the prompts per procedure. Then, click the “Save” button.   1. Microbiology specimens will require that a source is entered.    1. Sunquest will prompt, “SDES.” At the “SDES” prompt, verify that the source listed in the LIS matches the source listed on the specimen.       1. If the source matches, proceed with receiving the order.       2. If the source does not match, modify the source in the LIS to match the source on the specimen.          1. Acceptable source codes may be found by typing a left bracket "[" followed by a few letters that describe the source. *Example*: "[nasal" will give the source code "NP"          2. Use a hyphen to add further descriptions *Example*: FOOT-RT for right foot    2. Sunquest may also prompt the “SREQ” special request field. This field will autofill as “HIDE.” Do not use this field. 2. Blood bank type and screen specimens require that an armband number is entered. Sunquest will prompt, “RN.” Enter through this prompt; blood bank staff will enter the armband number.   Note: Predefined English text codes (ETC) should be entered directly into the field and free-text results require a semi-colon “;” before the entry. **Do not enter a semi-colon before an ETC.**  C:\Users\stephanie.l.codina\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\1.png |

# RELATED DOCUMENTS

Specimen Acceptability Requirements

Cancelling Tests or Orders

Miscellaneous Test Ordering

Specimens without Orders

Specimens without Orders Log (AG.F318)

Laboratory Specimen Receipt Log (AG.F323)

Specimen Labeling (Secondary)

# REFERENCES

Laboratory for Windows User’s Guide for Sunquest Laboratory, Software Version 7.1

# REVISION HISTORY

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| --- | --- | --- | --- | --- |
| Version | Date | Reason for Revision | Revised By | Approved By |
| 0 | 6/8/15 | Section 4: add SDES and SREQ  Section 5: Add detail to microbiology (step B.5), change clear tube to plain yellow top for other urine tests and stability for preservative tube (step C.5)  Section 6: Remove Microbiology Processing SOP | L Barrett | S Khandagale |
| 1 | 10/19/17 | Updated owner  Header: add other sites  Sections 1 & 2: Updated to reflect content  Section 3: Edited to include all staff  Section 5: Updated formatting and wording for clarity; added steps to receive specimens in the LIS (primary and alternate methods)  Section 6: Removed LIS SOPs, added secondary labeling | SCodina | NCacciabeve |

# ADDENDA AND APPENDICES

None