APPLIES TO:

This System policy is applicable to Mission Health System, Inc., to include Angel Medical Center, Inc., Blue Ridge Regional Hospital, Inc., Highlands-Cashiers Hospital, Inc., Mission Hospital, Inc., The McDowell Hospital, Inc., and Transylvania Community Hospital, Inc.

POLICY:

All critical laboratory tests and critical laboratory test results require prompt notification to care providers including the read back process when appropriate to ensure patient safety. Critical tests and critical result value parameters are recommended by the Department of Pathology and Laboratory Services, based on medical care standards, and are approved by the Medical Staff.

All critical laboratory tests and critical test results are telephoned to the responsible caregiver defined in this policy. The goal for communicating this information is:

- Critical tests (where performed):
  - Frozen Section – within 20 minutes of receipt in laboratory
  - Intraoperative PTH – within 30 minutes of specimen collection
- Critical results - within 10 minutes of result verification for Inpatients, and 10-30 minutes for Outpatients

Care providers receiving telephone notification of the critical test values must implement the read back process when appropriate. In addition to telephonic reporting of critical laboratory values, numeric results are flagged as “critical” or “abnormal” in the electronic medical record, depending on the actual value.

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DEFINITIONS:

Critical Laboratory Tests:
Laboratory tests which will always require rapid communication of results regardless of the value or result (normal or abnormal). The key measure is the time from receipt in the Laboratory to reporting to patient care provider.

Critical Laboratory tests (where performed):
1. Surgical Pathology Frozen Section Testing
2. Intraoperative PTH (parathyroid hormone)

Critical Laboratory Test Results (Critical Values):
Laboratory or Point of Care values which will always require rapid communication. These results may present an imminent life-threatening danger to the patient and require immediate attention and possible clinical intervention. The key measure is the time of identification of the result as critical to reporting the result to the patient care provider.

Refer to 1LAB.AD.0511.01 Critical Value List.

Licensed Independent Practitioner (LIP): Physician or other licensed person who is able to provide an immediate response.

Advanced Practitioner (AP): Physician assistant, nurse practitioner, or other licensed person who is able to provide an immediate response

Licensed Caregivers: LIPs and Registered Nurses (RN). In the event that a RN is not available, another licensed healthcare provider may accept the result.

PROCEDURE:

Verification of Results:

1. Critical values are reported on initial run unless there is evidence that supports instrument issues may have contributed to an erroneous result and warrant repeat testing. Repeating the test does not ensure an accurate result, and in the interest of time and patient care should not be repeated unless there is a valid concern with instrument functions or testing trends.

2. The Technologist will review the results and initiate the notification procedure. The following exceptions apply at Mission Hospital; affiliate Laboratories may follow these exceptions or call results at the level that meets their medical staff’s needs:
   a. Sequential critical values on Inpatients may not need to be called but must be called on all Outpatient/Outreach patients:
      • To determine if a patient has previous critical values, while in ARE, highlight the critical value, right click and click on Previous Results.

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- If no previous critical values, or if 1LAB.AD.0511.01 Critical Value List indicates sequential values for that test are to be called, call critical value and document using CRITICAL template or Instrument Manager (IM) critical result auto comment field. If previous critical values are displayed on Inpatients and 1LAB.AD.0511.01 Critical Value List indicates sequential values for that test are not called, document as a previous critical using CRITPREV template.

b. Sequential critical potassium or glucose results do not need to be called to NICU (Neonatal Intensive Care Unit) after initial report. Exceptions also apply for other sub-populations; refer to 1LAB.AD.0511.01 Critical Value List.

c. Critical values for calcium do not need to be called if corrected calcium on the same specimen is not flagged as Critical in PathNet. Document using CRITCA template.

d. Limited critical values are called on Outpatient and Outreach patients after normal physician office hours. (See list below)

e. The system requires a Result Comment be entered before a Critical value can be verified. Use the CRITNC template to document an attempt to contact the provider when you need to get the result posted so caregivers can view it, before the clinician has been reached. When the provider returns your call/page, document reporting the results in an Order Comment (you may use the standard CRITICAL template).

**Reporting Critical Tests and Critical Results:**

1. Telephone *critical tests* to the care provider within 30 minutes of specimen collection. Telephone *critical results* within 10 minutes of result verification for Inpatients, and 10-30 minutes for Outpatients.

2. **Inpatients:**
   Telephone the result to a nurse or licensed caregiver on the patient’s floor. Critical results cannot be given to an unauthorized person (ie, unit clerk, Medical Assistant, CNA). Inform the person receiving verbal results that they are required to read back the test name and result to verify correct communication, and to provide their first and last name OR their user ID.

3. **Outpatient/Outreach:**
   Telephone the result to the ordering location and communicate the result to a responsible caregiver (M.D, P.A, N.P, R.N). *Health care facilities with 24-hour service should be treated in the same manner as in-house patients, however all sequential critical values must be called.* For physician’s offices *after hours*, call the following critical results (Mission Hospital: affiliate Laboratories may follow or call results at the level that meets their medical staff’s needs:

   - Bilirubin (patient <30 days old)
   - Potassium
   - Glucose
   - INR
   - Hemoglobin
   - Therapeutic Drugs (see list)
   - Platelet count
   - Blood Cultures Gram Stain
   - CSF Gram Stain

Phone the physician's answering service and have the physician paged to give him/her the critical result. Inform the person receiving the verbal result (physician or designated
caregiver) that they are required to read back the test name and result to verify correct 
communication. If there is no response in a timely manner, contact the Pathologist on call 
for instruction (or the ED physician at Mission affiliate hospitals). All other 
outpatient/outreach critical values will be called to the ordering location the following 
morning by day shift staff (including weekend mornings).

4. **Referral Laboratory Critical Tests:**
   
   Upon verbal notification from the referral laboratory of a critical value, import the template 
   CRITREF as an Order Comment on the appropriate order. Complete the template. Notify 
   the caregiver if the patient is an inpatient or at a 24/7 facility. If an outpatient or at a non-
   24/7 facility, leave a voice message on the Referral Testing phone extension (35159). 
   Referral Testing staff will phone the caregiver the next morning.

5. If a critical value is noted on a test referred to Mission Laboratory on a patient at an affiliate 
hospital, the Tech at Mission Lab will contact the affiliate Lab to obtain the phone number of 
the nursing unit where the patient is bedded. The Mission Tech will call the result to the 
affiliate caregiver with readback.

6. If a critical result is noted on a test at an affiliate lab on a patient who has been transferred to 
Mission hospital, the Tech at the affiliate Lab will contact Mission Lab to obtain the phone 
number of the nursing unit where the patient is bedded. The affiliate lab Tech will call the 
result to the affiliate caregiver with readback.

7. Document all action taken in PathNet under Result Notes, i.e., specimen checked for clots, 
time of medication verified with the floor, etc.

**Documentation of General Lab Critical Results, including Read Back:**

All critical results must have supporting documentation in Pathnet. The technologist will 
document in the Result Comment field using the appropriate template; Referral test criticals are 
documented in Order Note. Critical values for tests performed on Abbott Chemistry analyzers 
are initiated and documented in Instrument Manager.

<table>
<thead>
<tr>
<th>Mnemonic</th>
<th>Template</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRITICAL</td>
<td>Called to _ with R/B _.</td>
<td>Use to document a called critical result, including the read back process (with R/B). Include the first and last name (OR user ID) of the person notified, the date/time of notification and Tech initials.</td>
</tr>
<tr>
<td>CRITREF</td>
<td>Date/time Referral Lab called: _ Name of Referral Lab Personnel: _ Referral Lab Contact Phone#/Ext: _ Critical Test: _ Critical Test Result: _ Caregiver notified by _ at _ Voicemail left for Send Outs by: _ at: _</td>
<td>Enter in Order Note field (result has already interfaced to Pathnet). Use to document the call received from the referral lab, and the called critical result to the caregiver using same information as above.</td>
</tr>
</tbody>
</table>

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| CRITPREV | Not called, previous known critical value. | Use to document that previous result was verified as a Critical and current result was not called. Include Tech initials and date/time. |
| CRITEXC | Not called, exception per policy. | Use to document an exception that would otherwise be called as critical, i.e., Mtn Kidney patient (creatinine). |
| CRITCA | Not called, Corrected Calcium not critical. | Use to document that Corrected Calcium is not critical, and Calcium result was not called. Include Tech initials and date/time. |
| CRITNC | Critical Value – Provider not contacted | Use to document an attempt to reach the provider. A Result Note or Comment is required before verifying the result; use this comment when verifying a result before the clinician can be reached. |

To add the Result Comment:
- Enter one of the mnemonics above and press the F9 key.
- Use the F3 key to move to the next blank field that requires completion.
- Use the F5 key to insert the current date/time.
- Enter user initials.

Example: Called to Jane Doe, RN with R/B 6/23/2009 16:25 DSM.

**EXCEPTION:**

Cerner requires a Result Comment or Note be entered before additional testing can proceed. Example: If a critical result is displayed on the automated differential and a manual differential is necessary, follow these instructions to perform manual testing:
- Place a “.” in the Result Note field and press Perform. The period serves as a place holder and allows testing to continue.
- Proceed with manual differential.
- Call critical result, if necessary.
- Document critical notification in Result Comment (see above).

**AUTOMATED CHEMISTRY - using Instrument Manager (IM):**

In the Instrument Manager (IM) database, critical results are highlighted in yellow. A critical call template will appear to the right of the critical result.
- Before verifying the result, call the critical value to the appropriate caregiver.
- Document the call in the critical call template. Enter the full name of who was called in the first blank of the template and the date/time of the call and tech initials in the second blank space of the template. User must delete/backspace the blank lines in the template as they are only space holders.
• Once the comment is completed, release the result with the comment to Cerner to be autoverified.

Previous critical results or critical calcium results that have normal corrected calcium results, are resulted by adding the correct template (CRITPREV or CRITCA) in Cerner.

In the Instrument Manager (IM) database, the first elevated Troponin result will have a "Courtesy Call" comment automatically appear to the right of the result

• Before verifying the result, call this Troponin value to the appropriate caregiver.
• Document the call in the Courtesy Call template. Enter the full name of who was called in the first blank of the template and the date/time of the call and tech initials in the second blank space of the template. User must delete/backspace the blank lines in the template as they are only space holders.
• Once the comment is completed, release the result with the comment to Cerner to be autoverified.

MICROBIOLOGY:

Refer to 2LAB.MIC.0115.00 Microbiology Notification for the policy regarding Microbiology critical values and reporting.

OTHER RELATED DOCUMENTS:

1LAB.AD.0511.01 Critical Value List
2LAB.MIC.0115.00 Microbiology Notification
2LAB.TFS.0106.00 Transfusion Service Critical Values Policy

REFERENCES: