UNC HEALTH CARE	Policy Name	**Critical Tests and Critical Values/Results**
	Policy Number	**ADMIN 0199**
	Date this Version Effective	**December 2015**
	Responsible for Content	**Medical Staff Executive Committee**

I. Description

To assure the results of critical tests and critical values are reported in a timely manner.

II. Rationale

The UNC Health Care system recognizes the importance of effective and timely communication of critical tests and critical values/results in patient safety. It is the policy of UNCHCS to report the result of a critical test or critical value/result to a licensed independent practitioner (LIP), and in the case of critical tests/value results for patients located in Intensive Care Units, Burn Center, Dialysis, Labor and Delivery, PACU and BMTU, to a responsible licensed caregiver.

Any test performed under the immediate supervision of a responsible physician (including but not limited to: cardiac stress testing, cardiac catheterization, TEE, or EEG for brain death) are not subject to this policy as the physician is immediately aware of values/results.

III. Policy

A. Purpose

1. To define critical tests and critical results/values.
2. To define by whom and to whom critical tests and results are reported.
3. To define the acceptable length of time between the availability and reporting of critical tests and critical values/results and diagnostic procedures.

B. Definitions

1. Critical Tests

Those tests that will always require rapid communication of the results, even if normal. (See Attachment A)

2. Critical Values/Results

A critical value/result is defined as any value/result or interpretation where a delay in reporting may result in a serious adverse outcome for the patient. (See Attachment B)

C. Procedure

a. The value/result generating area (e.g. clinical laboratories, radiology, electrocardiography etc.) will contact the ordering LIP or if (s)he is not available, a designated on-call LIP. In the case of critical value/results for patients located in Intensive Care Units, Burn Center, Dialysis, Labor and Delivery, PACU and BMTU, a responsible licensed caregiver will be contacted.

b. All critical tests will be reported to the appropriate LIP or responsible licensed caregiver within the time specified in Attachment A.

c. All critical values/results in Attachment B will be reported to the appropriate LIP or responsible licensed caregiver within one hour of the generating area determining the final value/result.

d. Once the LIP or responsible licensed caregiver has been notified of the initial critical value/result, subsequent critical values/results do not need to be reported, unless specifically requested by an LIP or if the subsequent values/results worsen.

e. All laboratory values/results are immediately available to the LIP in the electronic medical

record.

D. Documentation

1. Each value/result generating area documents the results of critical tests and critical values in the electronic medical record.

2. In the event of a downtime procedure when the electronic system is not available, the responsible licensed caregiver receiving the result will:

   a. Write it down;

   b. Read back the complete result;

   c. Verify that the read back result is correct;

   d. Note verification in the progress note.

3. In case of emergency (such as a code or in the O.R.), repeating the result to the caller is acceptable.

ATTACHMENT A

Critical Tests

Service	Test	Turnaround Time From Ordered to LIP
Heart and Vascular Services	ECG for chest pain ordered as STAT in the ED	10 minutes
Radiology	CT Scan for s/s of stroke in ED or inpatient unit	≤ 45 minutes
Radiology	CXR s/s of stroke in ED or inpatient unit	≤ 45 minutes
Heart and Vascular Services	ECG s/s of stroke in ED or inpatient unit	≤ 45 minutes
McLendon Laboratories	Complete Blood Cell Count, PT and APTT, and Blood Chemistries are most commonly ordered critical tests. Critical tests may depend upon the clinical situation. The availability of stat tests and-turn around-times is provided on the UNCH intranet McLendon Laboratories website: Depts/McLendon Laboratories/Laboratory/Test Information (http://www.uncmedicalcenter.org/uncmc/professional-education-services/mclendon-clinical-laboratories/)	CBC ≤ 30 minutes PT/APTT≤ 60 minutes Chemistries ≤ 60 minutes (TAT's once specimen received in McLendon Labs)

ATTACHMENT B

Critical Value/Result

Radiology	Radiologists will only treat these conditions as "critical" if: • There is a high degree of certainty that the patient has one of these conditions • There is a reasonable chance that the ordering provider was not aware of the condition when the test was ordered o Aortic Dissection, Acute o Ectopic Pregnancy o Pulmonary Embolism: Acute o Aneurysm Rupture o Acute or unexpected Bowel perforation o Cervical fracture with significant displacement o Acute Epiglottis o Tension Pneumothorax o Brain or Cord tumor with significant Mass effect o Intracranial Hemorrhage o Ovarian or Testicular Torsion o Life Threatening misplaced Tube or line
Echocardiography	• Aortic dissection • Pericardial effusion with Tamponade • Acute chordial tear
EKG	• Third degree heart block • Ventricular tachycardia • Complete Heart Block
Vascular Ultra Sound	• Carotid artery dissection
Clinical Microbiology/Immunology Laboratories	• Specific Bodies Physicians are notified of first-time positive smear, positive culture or positive molecular detection results (bacterial, fungal, mycobacterial, or viral) from the following sites: - Amniocentesis Fluid - Blood - Bone Marrow - Cerebrospinal Fluid (CSF) - Pleural Fluid - Specimens from any normally sterile site such as brain, liver, kidney, etc. • Specific Isolates Physicians are notified of first-time isolates of the following organisms: - Acid Fast Bacilli - Bacillus anthracis. - Francisella sp. - Yersinia pestis - Burkholderia pseudomallei and mallei • Other Results Physicians are notified of first time positive results from the

	following tests: - Clostridium botulinum toxin - CMV molecular detection, from infants (<3mo.) - Human Immunodeficiency Virus ELISA, following confirmation by Western Blot - Acute HIV RNA PCR - Malaria or blood filariae
Anatomic Pathology	• Immediate Clinical Consequences: - Crescents in >50% of glomeruli in a kidney biopsy - Leukocytoclastic vasculitis - Products of conception without villi or trophoblasts - Fat in an endometrial curettage - Mesothelial cells in a heart biopsy - Fat in colonic endoscopic polypectomies - Transplant rejection (phone call for rush cases, prompt reporting of non-rush cases) - Neoplasms causing superior vena cava syndrome - Neoplasms causing paralysis • Unexpected or Discrepant Findings: - Significant disagreement between frozen section and final diagnosis - Significant disagreement between immediate interpretation and final FNA diagnosis - Unexpected malignancy - Significant disagreement between primary pathologist and outside pathologist consultation about a UNC case • Infections: - Bacteria or fungi in CSF cytology - PCP, fungi, or vial cytopathic changes in BAL, bronchial wash/brush - AFB - Fungi in FNA of immunocompromised patients - Bacterial in heart valve or bone marrow - Herpes in Pap smears of near-term pregnant patients - Any invasive organisms in Surgical Pathology specimens
Hematopathology	• Diagnosis of new/relapsing malignancy with immediate (less than 24 hours) therapeutic impact for the patient. This will most commonly represent acute leukemia or high-grade lymphoma. Other situations will be at the discretion of the attending hematopathologist. • Significant discrepancy between outside report and UNC review of material.
Core Laboratory	• The Core Laboratory critical values are available on the

	Intranet on the McLendon Laboratories site: Depts/McLendon Laboratories/Laboratory/Test Information (http://www.uncmedicalcenter.org/uncmc/professional-education-services/mclendon-clinical-laboratories/)