**Purpose**

The purpose of this policy is to define:

- **Critical tests** and **critical results/values** for Cleveland Clinic United States locations.
- Acceptable length of time between ordering of critical tests and reporting to a responsible licensed caregiver.
- Acceptable length of time between the availability of critical results/values and receipt by a responsible licensed caregiver.
- Establish accountability and ensure proper and timely notification of critical tests and critical results/values.

**Policy**

1. Tests, results/values listed in Appendix 1 are considered 'critical' and will be communicated to a responsible licensed caregiver within the designated time frame.

   Measurement time frame:

   b. Critical Results/Values: results known to reporting time

2. Critical results/values must be communicated to a responsible licensed caregiver within 60 minutes of the result known.

3. Specific organizational certifications or accreditations requiring a critical test time frame less than 60 minutes will override this policy.

   - Critical Test: Brain Attack CT for stroke. Image must be completed and results communicated to or reviewed by the responsible licensed caregiver within 45 minutes of the test being ordered.

4. Communication for both critical tests and critical results/values includes:

   - Two approved patient identifiers.
   - A 'Read-Back' action.
   - Documentation to include: time the critical result was reported to a responsible licensed caregiver or his/her authorized agent (does not apply to critical results called directly to Surgery); and identification to whom the critical result was reported (for example, first initial and last name or employee number).

5. Assigned personnel or physicians in testing departments must communicate the results directly to the licensed caregiver, such as physician, advanced practice nurse or physician assistant, or his/her authorized agent, such as the nurse, nurse manager or in the office setting, the physician’s nurse or medical assistant. A Respiratory Therapist may accept an arterial blood gas critical result.
6. Critical Values/Results, in the following circumstances, do not automatically require immediate communication with the licensed caregiver:
   
   - Terminal/end of life patient with abnormal values.
   - Level obtained during trauma/code situation.
   - Established diagnosis with values trending toward normal and a documented plan in place.

7. Fail Safe Notification

   Individual sites must have a fail safe notification procedure in the event the established communication procedures cannot reach a responsible licensed caregiver or his/her authorized agent within the designated timeframe.

   At the Cleveland Clinic Main Campus, the clinical area can activate AMET (Adult Medical Emergency Team), PMET (Pediatric Medical Evaluation Team), or CMET (Cardiac Medical Emergency Team) by dialing 122 to initiate the appropriate clinical action for the patient.

   At the Cleveland Clinic Regional Hospitals, refer to hospital specific policy regarding Chain of Command, for hospital specific chain of escalation, to ensure quality patient care, or implement the Rapid Response Team. Response to outpatient results is institution specific.

**Oversight and Responsibility**

1. It is the responsibility of each hospital, institute, department and discipline providing direct patient care to implement the policy and to draft and operationalize related procedures to the policy if applicable.

2. The enterprise Patient Safety Committee (ePSC) is responsible for reviewing, revising, and updating this policy to maintain compliance with regulatory or other requirements.

3. The ePSC is responsible for data analysis, as indicated, at the system level to drive related performance improvement initiatives.

4. Each organizational Patient Safety Committee is responsible for local level data analysis, as indicated, to drive related performance improvement initiatives.

**Definitions**

**Cleveland Clinic health system**
Includes main campus, regional hospitals, plus the Children's Rehabilitation Hospital

**Critical Results/Values:** Those results/values that indicate the patient is in danger of death unless treatment is initiated immediately. These results/values require immediate interruptive notification of the responsible licensed caregiver who can initiate the appropriate clinical action for the patient.
**Critical Test**: A critical test is one where the indication for the test suggests the patient is in danger of death unless treatment is initiated immediately. These tests require immediate interruptive notification of the responsible licensed caregiver, whether normal or abnormal, so appropriate clinical action for the patient can be initiated.

**Responsible Licensed Caregiver**: A licensed independent practitioner, Resident or Fellow who is able to act upon a critical test or critical result/value.

**Policy References**
CAMH for Hospitals, Joint Commission National Patient Safety Goals
   NPSG.02.03.01: **Report critical results of tests and diagnostic procedures on a timely basis.**
Cleveland Clinic Policy [Patient Identification Policy](#)
Cleveland Clinic Policy [Read-Back: Verbal Orders and Critical Test Results/Values Policy](#)

*Refer to Appendix 1 (below) for tests, values/results reporting grid*

**Issuing Office**
Quality and Patient Safety Institute

**Approved By**: Medical Executive Committee 5/25/11
**Date Last Approved/Reviewed**: 8/24/11

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**Appendix 1**
<table>
<thead>
<tr>
<th>Laboratory Medicine Critical Values / Results</th>
<th>Low Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>&lt; 40 mg/dl</td>
<td>none</td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 7.2 units</td>
<td>none</td>
</tr>
<tr>
<td>pO2</td>
<td>&lt; 50 mmHg</td>
<td>none</td>
</tr>
<tr>
<td>Potassium</td>
<td>&lt; 2.5 mmol/L</td>
<td>&gt; 6.0 mmol/L</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>&lt; 15 %</td>
<td>none</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>&lt; 6 g/dL</td>
<td>none</td>
</tr>
<tr>
<td>Platelet Count</td>
<td>&lt; 10 K/ul</td>
<td></td>
</tr>
</tbody>
</table>

**Radiology Results / Findings**

- Acute Intracranial Hemorrhage
- Aortic Dissection
- Aortic Rupture
- Cardiac Tamponade
- Large Pulmonary Embolism
- Leaking Aneurysm (Cerebral, abdominal, or thoracic)
- Pneumothorax
- Ruptured Ectopic Pregnancy
- Severe Intracranial Mass Effect
- Large Placental Abruption
- Biophysical Profile Score ≤2
- Reversed End Diastolic Flow on Umbilical Artery Doppler Study
<table>
<thead>
<tr>
<th>12 Lead EKG (Excludes: ICU's, Procedure Areas, and Emergency Department)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECG with ST segment elevations or depressions suggestive of acute injury or ischemia</td>
</tr>
<tr>
<td>Ventricular tachycardia or Torsades de Pointes</td>
</tr>
<tr>
<td>Bradycardia &lt; 30 beats/minute</td>
</tr>
<tr>
<td><strong>Critical Tests</strong></td>
</tr>
<tr>
<td>Brain Attack CT for Stroke</td>
</tr>
</tbody>
</table>