TRA-MINW
Guideline for Communicating Critical Results

(Revised June, 2023)

Purpose: The purpose of this document is to provider a guideline for notification of a patient's healthcare provider when a radiologist determines that an imaging study has new or unexpected findings that could result in mortality or significant morbidity.

Guideline:

1. Radiology findings may warrant **direct notification** of a member of the **patient's care team** (defined as a healthcare professional immediately responsible for the care of the patient, including requesting physician, covering physician, attending physician, physician assistant, nurse, or nurse practitioner):

   Critical: a new/unexpected radiologic finding that could result in mortality or significant morbidity if appropriate diagnostic and/or therapeutic follow-up steps are not undertaken. Examples of potential critical results are listed on page 2 of this document.

2. Timelines for notification: Attempts to communicate critical results should be initiated as soon as possible after identification. For truly critical results (new/unexpected findings that are potentially immediately life-threatening, such as tension pneumothorax, ischemic bowel, or intracerebral hemorrhage):

   These results may warrant **immediate notification** of the ordering physician, covering physician, or other care team member who can initiate the appropriate clinical action for the patient. In such cases, notification should be within **60 minutes** of discovery of findings, where possible.

3. Mode of Communication: In most cases, critical results should be communicated verbally via **face-to-face, telephone contact, or HIPAA-compliant electronic communication**.

   If electronic communications are used, **prompt receipt of the message must be verified**.

4. The radiologist communicating the critical radiological finding should be certain that the member of the patient care team is **aware of the critical nature of the findings**.

5. The details of the communication should be clearly **documented in the radiology report**, preferably in or immediately following the impression section of the report or as an addendum if the report was finalized before communication was complete. Documentation should contain the following information:

   a. Name of the recipient of the notification.
   b. Date and time of communication.
   c. Application used if electronic communication, such as Epic, Telmediq, or VizAI.
   d. If the person that communicated the result is not the radiologist dictating the final report, the name of the person that communicated the findings should be documented. An example would be a preliminary interpretation communicated by Dr. X, with final report dictated by Dr. Y.
   e. Sample statement: "***Results were communicated to Dr. A at 5 PM on December 15, 2017 via Telmediq".***

6. The QIC may monitor compliance with this guideline, with feedback to radiologists as appropriate.

Note: The following critical results list is considered neither completely inclusive of all potential critical results nor universally applicable to all potential presentations/variations of the included diagnoses. Rather, this is intended to serve as a guideline for radiologist reference, and clinical judgement still should be applied to each individual patient and each specific clinical scenario.

List of Potential Critical Results

Neuro:

- Any result for a "code neuro" head CT (patient with stroke and candidate for thrombolytics)
- Acute intracranial or intraspinal hemorrhage
- New acute CVA for patients that may be candidates for stroke intervention
- Acute or significantly worsening brain herniation
- Brain tumor with significant or worsening mass effect
- Significantly depressed skull fracture or traumatic pneumocephalus
- Brain death/absent cerebral perfusion on nuclear brain scan
- Acute spinal cord compression
- Acute cervical spine fracture or unstable thoracic/lumbar spine fracture
- Epiglottitis or other cause of significant upper airway obstruction

Body:

- Unsuspected, enlarging or tension pneumothorax
- Significant tracheal obstruction
- Unexplained pneumoperitoneum
- Hemoperitoneum
- Active GI bleeding
- High grade bowel obstruction or probable ischemic/strangulated bowel
- High-grade intra-abdominal organ injury and/or bowel injury post trauma
- Acute testicular/ovarian torsion

Cardiovascular:

- Acute pulmonary embolism or high probability for PE on VQ scan
- Pneumopericardium, hemopericardium or tamponade
- Aortic or other arterial rupture or leaking aneurysm
- Acute arterial dissection
- Acute large or medium artery thrombosis
- Unsuspected acute venous thrombosis (e.g. diagnosed on CT for other indication)
- Larger acute myocardial infarction/ischemia on cardiac perfusion study

OB:

- Ectopic pregnancy
- Placental abruption
- Uterine rupture
- Fetal distress, BPP<5

Pediatrics:

- Findings suspicious for non-accidental trauma
- Midgut malrotation with volvulus
- Ileocolic or suspected pathologic intussusception

Musculoskeletal:

- Necrotizing fasciitis
- Suspected compartment syndrome
- Impending pathologic fracture

Miscellaneous:

- Significant misplacement of tubes or catheters (e.g., ET tube or enteric tube in bronchus)
- **Any other finding that the interpreting radiologist determines requires immediate physician notification**