PATHOLOGY & LABORATORY MEDICINE SERVICE

Reporting Critical Laboratory Test Results and Read Back Policy version 2
General Procedure # GEN00011

PURPOSE: The VA Maryland Health Care System (VAMHCS) measures, assesses, and if appropriate takes action to improve the timeliness of reporting and the timeliness to receipt by the responsible licensed caregiver of critical results/values. All critical results notified by Pathology and Laboratory Medicine Service (P&LMS) are to those responsible for the care of a patient, in a period that is achievable and reasonable for proper evaluation and treatment.

POLICY: The time delay between the ordering of a test/procedure and the conveyance of that result/value may have an effect on the care given a patient and the ultimate clinical outcome, especially if that result reflects poor prognosis or imminent harm. This policy, which applies to all healthcare providers who perform diagnostic testing and /or report diagnostic test results, defines the acceptable time between the availability of a critical result/value and receipt of that information by the ordering Provider or Licensed Independent Practitioner (LIP).

RESPONSIBILITY: Laboratory personnel are responsible for identifying, communicating, and ensuring that critical results/values are communicated within the timeframe established in this policy, or within two hours if not defined, from the time the result is obtained to the time it is communicated to the ordering Provider/LIP.

ACTION: There is a two-tiered system of reporting Critical Test Results from the clinical and anatomic laboratories:

(1) 'Critical Test Result' that is notified verbally- These are a test results that require immediate clinical intervention, and therefore urgent verbal notification.
   (a) The tests in this category are defined and maintained in VistA® (Veterans-Health Information System and Technical Architecture) by the laboratory supervisors.

   (b) Some tests are called regardless of the test outcome. These tests include the Anatomic Frozen Section, Intra-operative Cytology, Intra-operative PTH, and the Rapid Anti HIV-1 (HIV Needle stick Source) test results.

(2) 'Critical Test Result' that is not notified verbally- The tests in this category do not require immediate clinical intervention and do not require notification. However, they do

mandate a higher level of response by the clinician than a non-critical test result. Thus, notification by Electronic Alert is used to alert the clinician (see section c. below). It is recommended to providers to turn on the "Alert me" option on CPRS when entering orders. An automatic electronic notification is sent once the laboratory staff verifies results. Examples include 'Positive Hepatitis B Surface Antigen' and urine wet mount positive for Trichomonas.

a. Critical Test Results are reported and verified immediately in VistA®, before attempting verbal notification.

b. Notification by 'Electronic Alert' of all Critical Test Results:

Pathology and Laboratory Medicine Service Critical Results/Values:

(1) Anatomic Pathology (AP): The pathologist has the option, during the process of signing a critical anatomic report, of sending an Electronic Alert to the ordering Provider or others.

(2) Clinical Pathology (CP): An Electronic Alert is sent automatically to the ordering provider immediately upon verification of a critical test result, regardless of the 'verbal' notification status for that test. The Alert will be obvious when the ordering provider next uses VistA® or CPRS (Computerized Patient Record System). Thus, 'rapid notification' of Critical Test Results is accomplished as defined by The JCO.

(a) When to Initiate Verbal Notification: Notify and document critical test results within 2 hours from the time results are available, but sooner if possible. Note exceptions within this SOP.

(b) What is Communicated Verbally: The ordering Provider/LIP is given the Full Patient Name, the last 4 of Social Security Number (SSN), the Name of the Laboratory Test and the Test Result. The Provider is asked to READ BACK the notified result. This signifies the clinician verbally repeated the Test Result.

(c) How to Document Verbal Notification: Document verbal notification in the patient's report in VistA® Comments, documentation includes: 'PV2' (which expands to: RESULTS CALLED AND READ BACK BY), Test Name, Name of the Provider/LIP notified, Date and Time of notification, Initials of the laboratorian initiating notification and READ BACK.

(d) Verbal Notification Monitor: Notification guidelines must be documented and satisfied in at least 95% of cases.

Whom or What Provider to Notify Verbally:

(1) Note that Registered and Licensed Practical Nurses may not receive Critical Test Results from the Anatomic or Clinical Laboratory. Only the ordering Provider or Licensed Independent Practitioner (LIP) is authorized to receive these results, e.g. a clinician that can legally sign orders at the VAMHCS (physician, resident/intern, nurse practitioner, etc.).

(2) Anatomic Pathology (AP) – Anatomic Pathology will contact the ordering 'M.D. Provider' of Critical Test Results. The Provider's name and contact information (telephone and/or beeper number) found on the Tissue Examination Form (SF-515) submitted with the specimen is used for notification. If these are not provided or are illegible, CPRS or VistA® are used to identify the Provider. Failing this, the on-call Section Pathologist or the Chief, P&LMS are contacted to identify the Provider and the contact information.

(3) Clinical Microbiology – Critical test results/values are only notified to the ordering 'M.D. Provider, Nurse Practitioner, or Physician Assistant' from Microbiology and Immunology.

(4) Immunology – Results called for the 'Rapid Anti HIV-1' to the Needle stick Hotline. These results are not released to any other clinician or the affected employee.

(5) Clinical Pathology (CP), (Chemistry, Hematology and Coagulation) Critical Test results are called as follows:

(a) Call the ordering Provider first. If no direct phone number is available, then page the ordering Provider, attempt page at least twice.

(b) In-Patient Medical Floors will direct the laboratory to the patient's Physician Team.

(c) Primary Care Clinic (PCC) and Specialty Clinic Providers are called directly with Critical Test Results for patients seen in their respective clinics.

(d) For Clinic Patients 'After Business Hours', those listed as being On-Call are notified:

1. The Primary Care Clinic (PCC) has an on-call LIP that is called for their patients.
2. The Specialty Clinics have On-Call 'Fellows' that are called for their patients.

(1) Cascade for Identifying the Provider to Notify: There are several names associated with each patient. Below is the order of preference in reporting Critical Test Results:

(a) The Provider in the 'Provider' field in ^EA or ^EM in VistA.

(2) For an Active Inpatient in ^Patient Inquiry in VistA (in the following order):

(a) The Provider in the 'Provider' field.

(b) The Provider in the 'Attending' field.

(c) The Provider in the 'PC Provider' field.

(d) The Provider in 'Who Entered' field in ^Review by Order Number.

(3) For an Inactive Inpatient (Clinic Patient) in VistA®, ^Patient Inquiry:

(a) Contact the clinician associated with that day's clinic appointment (if an On-Call clinician for that specific clinic). Only call the Primary Care Attending for patients seen in PCC.

(b) After Business Hours: Contact the on-call ATTENDING for PCC, or the on-call FELLOW for that Medical Specialty Clinic.

(4) Locating a Clinician's Phone or Beeper Number (Order of Preference):

(a)The 'On-Call Schedules' page is found on the Intranet, http://vaww.maryland.va.gov/.

(b) The VistA® 'PHON' option.

(d) Printed On-Call Lists kept at the Chemistry laboratory's Front Desk in the On-Call binder. Call both the clinician beeper and the team-room telephone

number.

(d)The VAMHCS 'Phone Directory', found on the Intranet, http://vaww.maryland.va.gov/.

(e) The VA Telephone operator is asked to voice page a clinician, or is asked for an On-Call phone number.

(5) Failed Notification: If verbal notification is not successful within 2 hours of initiation, print a report of the Critical Test Result, and contact a supervisor or the Pathologist On-Call.

Monitoring the effectiveness of notification policy:

(1) In Anatomic Pathology (AP), the Chief, Quality Assurance Section, Anatomic Pathology compares the logbook for surgical pathology reports in which `FROZEN' appears, but for which no `READ BACK' is documented in the patient's electronic medical record. This is reported at the Laboratory Staff Meeting (P&LMS) and to the Invasive Procedures Review Committee (IPRC) monthly. Quarterly summaries of these findings are also reported to the IPRC. The minutes of the IPRC are forwarded to the Executive Committee of the Medical Staff (ECMS).

(2) In Clinical Pathology (CP), the Service Chief has a monthly report submitted for the P&LMS staff meeting of timely result notifications. These minutes are forwarded to the ECMS.

(3) The Point of Care Template is used to monitor glucose critical results. Results <50 mg/dL and >300 mg/dL are monitored and reported at the monthly P&LMS meeting and biannually at Executive Performance Improvement Council (EPIC).

DETAILED PROTOCOLS:

a. Anatomic Pathology:

(1) In Anatomic Pathology, the attending pathologist who e-signs/verifies the case is responsible for notification of the results in the case.

(2) Urgent Notification of Anatomic Results:

(a) Frozen Section Slide: a single slide is verbally reported within Twenty (20) minutes from time of receipt, and recorded in the logbook that is maintained in the sign- out room.

(b) Intra-operative Cytology (Fine-Needle Aspirations): each slide is examined for its "Adequacy" which is verbally reported within Thirty (30) minutes from time of receipt, and recorded in the final cytology report in CPRS.

b. Clinical Microbiology & Immunology:

(1) In Clinical Microbiology and Immunology, the laboratorian who verifies the Critical Test Result is responsible for verbal notification of the result, which is documented in VistA® comments and on the worksheet.

(2) Critical 'Positive' Microbiology Test Results requiring verbal notification every time:

(a) Normally Sterile Sites (excluding urines), i.e. Body Fluids: Positive Smears and Cultures

(b) Blood Cultures: Positive Smears and Cultures

(c) Stool Culture: Presumptive Enteric Pathogen isolated

(d) Neisseria gonorrhoeae "Gonococcal (GC)": Positive Cultures

(e) Ova and Parasite: Positives, including Cryptosporidium and Giardia antigens

(f) Resistant Micro-organisms, e.g., Vancomycin-resistant Enterococcus (VRE), Methicillin-resistant Staphylococcus aureus (MRSA), extended-spectrum beta-lactam-producer (ESBL), etc.

(g) AFB: Positive Smear and Culture (after notifying the MD State Health Department)

(h) Possible Bio-Terrorist organisms

(i) Reportable Diseases, as defined by the Maryland State Health Department. The current listing may be found at: http://ideha.dhmh.maryland.gov/IDEHASharedDocuments/what-to-report/ReportableDisease_Lab.pdf

(3) Critical 'Positive' Immunology Test Results requiring verbal notification every time:

(a) Rapid Anti HIV-1 (HIV Needle stick Source) NOTE: Positive and Negative Anti-HIV results are called to the Needle stick Hotline (only) within 60 minutes of test completion.

(b) Anti-Syphilis EIA Test

(c) Venereal-Disease-Research-Laboratory (VDRL) Test

(d) Toxoplasma Immunoglobulin M (IgM) Test/ Mycoplasma IgM / CMV IgM

(e) Clostridium difficile toxin (C. diff), by PCR (Polymerase Chain Reaction)

(f) Influenza A / B / H1N1 Test

(g) Western Blot Test

c. Immunohematology (Blood Bank): Critical Test Results that are associated with a Transfusion Reaction and require immediate notification to the ordering Provider or LIP are:

(1) Gross, Visible Hemolysis in the post-transfusion reaction specimen.

(2) Positive DAT (post-transfusion), when the pre-transfusion specimen is *Negative.*

(4) Cross-match Incompatibility with the post-transfusion reaction specimen.

d. Clinical Pathology (Chemistry, Hematology and Coagulation): The notification procedure for numeric and qualitative critical test results is described below:

(1) In Clinical Pathology (CP): the laboratorian who verifies the Critical Test Result is responsible for verbal notification of the result, which is documented in VistA® Comments.

(2) The Intra-operative PTH (Parathyroid Hormone) assay result is called immediately after test completion, but within 60 minutes of specimen receipt, and regardless of the test result.

(3) All Critical Potassium, pH, pCO2, and pO2 Test Results are notified immediately.

(4) Positive Pregnancy Test Results (both urine and serum) are notified.

(5) All other Critical CP Test Results are also called. The only exception to this is if a previous Critical Test Result (same assay and similarly low or high) was successfully notified and documented in VistA® within the past 24 hours, then the new result is not called.

(6) The VistA® computer will automatically identify both numeric and qualitative Critical Test Results, at the time of 'Auto' and "Manual' Data Verification by the laboratorian. Then it:

(a) Places the words 'CRITICAL HIGH' or 'LOW' after the report.

(b) Sends an Electronic Alert to the ordering Provider (previously described).

REFERENCES:

1. VAMHCS Policy Memorandum 512-00/PS-007, subject: Communicating Critical Results/Values

2. VAMHCS Transfusion Service Procedure 2-18, subject: Reporting Critical Test Results in the Blood Bank

3. College of American Pathologist-All Common Check list: Critical Result Notification, COM.30000, COM.30100-07/28/2015.

Laboratory Information Systems- VistA Options

1. VERIFICATION FLAGGING in VISTA®

Select LABORATORY MENU Option: ^EM or ^EA

SMITH, IMA	SSN: 000-00-1010	LOC: BT ED
(1) PROVIDER:	BRAHMS, JOHANNES Phone: 1234	Voice Pager: Digital Pager: 410-447-0000
ACCESSION:	BCH 0123 45 1/23 15:35d	
GLUCOSE	560 H * MG/DL	CRITICAL HIGH!!

SELECT ('E' to Edit, 'C' for Comments, 'W' Workload)
Approve for release by entering your initials: JXP

2. ACTIVE INPATIENT STATUS in VISTA®, ^PATIENT INQUIRY

Select LABORATORY MENU Option: ^PATIENT INQuiry

SMITH, IMA 000-00-1010 AUG 3, 1922

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COORDINATING MASTER OF RECORD: BALTIMORE MD VAMC

Address: 10 North Greene Street
C/O VAMHCS
Baltimore, MD 21201
County: Baltimore City (510)
Phone: LKFD Phone: Not Applicable
Office: unspecified
POS: Vietnam Era Claim #: 000110000
Relig: unanswered Sex: Male
Race: unanswered Ethnicity: unanswered

Primary Care Team: BT TEAM C Phone: 605-7000 ext 5018

PC PROVIDER: WELBY, MARCUS Position: PHYSICIAN-ATTENDING
Pager: 1234 Phone: 9876

Status: ACTIVE INPATIENT-on WARD
Admitted: DEC 11,2001@17:19:20 Transferred:
Ward: BT 4CC Room-Bed: CICU-03A

PROVIDER: BRAHMS, JOHANNES Specialty: CICU

ATTENDING: BACH, JOHANNES

Currently enrolled in BT PCC WELBY,

Future Appointments: Date Time Clinic
12/17/2001 10:00 BT PCC WELBY
01/16/2002 09:30 GB NURSING EDUCATION CLINIC

3. REVIEW BY ORDER NUMBER in VISTA®

Select LABORATORY MENU Option: ^REVIEW BY order number

Order Number or UID: 99999999
ORDER #: 99999999PAT: SMITH, IMA SSN: 000-00-1010
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(1) WHO ENTERED: NIGHTINGALE, FLOSS TYPE OF COLLECTION: WC

COLLECTOR: CURIE, MARIE W COLLECTION STATUS: C
DRAW TIME: 12/17/2001@15:35 ORDERING LOCATION: LAB
LAB ARRIVAL: 12/17/2001@15:35

SPECIMEN: BLOOD RED (SST) PROVIDER: BRAHMS, JOHANNES
Visit Number(s): 1234567;

TEST: GLUCOSE ROUTINE BA-CHEMISTRY 123
Order has already been accessioned.

INACTIVE INPATIENT STATUS in VISTA®, ^PATIENT INQUIRY

Select LABORATORY MENU Option: ^PATIENT INQuiry

SMITH, IMA 000-00-1010 AUG 3, 1922

4. COORDINATING MASTER OF RECORD: BALTIMORE MD VAMC

Address: 10 NORTH GREENE STREET
C/O VAMHCS
BALTIMORE, MD 21201
County: BALTIMORE CITY (510)
Phone: LKFD Phone: Not Applicable
Office: unspecified
POS: Vietnam Era Claim #: 000110000
Relig: unanswered Sex: Male
Race: unanswered Ethnicity: unanswered

Primary Care Team: BT TEAM C Phone: 605-7000 EXT 5018
PC PROVIDER: WELBY, MARCUS Position: PHYSICIAN-ATTENDING
Pager: 1234 Phone: 9876

Status: INACTIVE INPATIENT-on WARD
Admitted: DEC 11, 2000@17:19:20 Discharged: DEC 19,2000@14:00:15
Ward: BT 4CC Room-Bed: CICU-03A

PROVIDER: BRAHMS, JOHANNES Specialty: CICU

ATTENDING: BACH, JOHANNES

Currently enrolled in BT PCC WELBY

FUTURE APPOINTMENTS:

	DATE	TIME	CLINIC
(1)	12/17/2001	10:00	BT PCC WELBY
	01/16/2002	09:30	GB NURSING EDUCATION CLINIC
	06/21/2002	08:00	LR DIABETIC EYE SCREENING

Remarks:

	VETERANS ADMINISTRATION MARYLAND HEALTH CARE SYSTEM BALTIMORE DIVISION 10 NORTH GREENE STREET BALTIMORE, MD 21201	GEN00011.2

DATE ADOPTED	*Author of Procedure/Policy*	Chief of Service
1/25/2005	*Paul D. Gruver, MT/Karla Peralta, MT ASCP*	Signature: Dong H. Lee M.D.

Policy/Procedure(s) Retired: Version 1	Orders Read Back	Date retired: 10/30/2017

Review Date	Version Number	Signature of reviewer

REVISION HISTORY

Date revised	Revision #	Changes made	Signature
10/30/17	2	Merged Orders Read Back Policy and Reporting of Critical Values Policy	11/8/17