Capital Health

INTERDISCIPLINARY CLINICAL MANUAL

Policy and Procedure

TITLE:	Diagnostic Tests - Requesting, Reporting of Results and Follow-up	**NUMBER:**	CC 85-017
Effective Date:	November 2014	Page	1 of 27
Applies To:	Holders of Interdisciplinary Clinical Manual		

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POLICY

Note – Refer to IC 02-001 (Reporting Notifiable Diseases and Conditions) for the reporting of diagnostic test results associated with notifiable diseases and conditions

1. Patients and Substitute Decision Makers (SDM) are to be involved in the patient's health care through discussion and mutual decision-making as to appropriate diagnostic tests to be ordered, anticipated turn-around time for results, and encouraging an active role in asking for test results.
2. For patient safety and optimum patient care, diagnostic areas are to have established processes for appropriate and timely reporting of test results.
3. Ultimately, it is the responsibility of the *authorized prescriber* (refer to definitions) to ensure appropriate follow-up and action on the diagnostic tests they have ordered.
   - 3.1. Authorized prescribers are required to review all test results and to develop processes to ensure that all actionable test results are followed up as appropriate.
   - 3.2. Confirmation that test results have been reviewed by the authorized prescriber is to be noted in the health record, or captured on the Capital Health Clinical Portal (hereafter referred to as the portal).
4. Individual diagnostic areas are to determine what constitutes actionable test results and are to immediately report those results.
   - 4.1. **Critical pathology** diagnoses are reported verbally.
   - 4.2. Some **critical laboratory** test results need not be reported verbally. (Refer to Appendix B – Critical Values Notification Exceptions).
   - 4.3. All results, whether actionable or not, are verified within the Laboratory Information System (LIS) which electronically transfers the result into the portal.
5. In the event that the authorized prescriber or delegate (including the family physician) cannot be reached in an appropriate timeframe (refer to department specific policies and procedures), the patient or SDM is to be called with the actionable test result (i.e., for patients who have been discharged, or who had testing done as an ambulatory care patient).
6. Documentation in the health record is to be recorded in the progress notes and ***not*** on paper reports from diagnostic areas, as these paper reports do not form part of the permanent health record (since the diagnostic results are also sent electronically to HPF).

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DEFINITIONS

Abnormal Test Result: Non-emergent, non-life-threatening results that need attention and follow-up action as soon as possible, but for which timing is not as crucial as critical results. They generate a mandatory notification in the electronic health record but are not required to be reported verbally.

The Joint Commission Journal on Quality and Patient Safety, 2010 36 (5)

Actionable Test Result: A result that could change the management of the patient by requiring a new treatment or diagnostic test or repeated testing, modification or discontinuation of a treatment or diagnostic testing, scheduling of an earlier follow-up appointment or referral of the patient to another physician or specialist.

Annals of Internal Medicine, 2005

Authorized Prescriber:

1. Qualified physicians and dentists registered to practice medicine or dentistry in their respective province or country
2. Nurse practitioner registered in the province of Nova Scotia and who has a collaborative practice agreement within Capital Health.

Note - Clinical Clerks are ***not*** authorized prescribers.

An ordering authorized prescriber is the authorized prescriber who has ordered a diagnostic test, and who is responsible for initiating follow-up of abnormal results.

Authorized Requestor: In addition to an authorized prescriber, anyone who has been delegated the authority to order a test through medical directives, delegated medical functions, expanded role designation, specific policies, etc. {E.g., Emergency Department medical directives, Expanded Role nurses (ordering Pap tests), Physiotherapists (ordering x-rays) etc}

Critical Test Result: Any result or finding that may be considered life-threatening or that could result in severe morbidity and require urgent or emergent clinical attention.

The Joint Commission Journal on Quality and Patient Safety, 2010 36 (5)

Critical Tests: Tests that require rapid communication of results, whether normal, abnormal or critical.

The Joint Commission Journal on Quality and Patient Safety, 2010 36 (5)

Diagnostic Areas: Pathology and laboratory medicine, imaging, cardiology, and other areas utilizing a diagnostic method that results in a report (e.g., EEG, pulmonary functions, Point-of-Care Testing,

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	etc.) *The Joint Commission Journal on Quality and Patient Safety, 2010 36* (5)
Point of Care Testing (POCT):	Medical diagnostic testing performed outside the clinical laboratory, where the result of the test is used for clinical decision making. (E.g.: glucometer, urine test strips, etc.)
Portal	A web-based application that provides Capital Health users access to patient data from multiple sources including Lab and Radiology Results, Horizon Patient Folder (HPF) and Pathways Healthcare Scheduling (PHS) schedules. Access to the tabs required to provide or support patient care is based on the user's Clinical Portal User Access profile. The portal is the foundation of the Electronic Medical Record at Capital Health.
Read Back:	The process where one healthcare provider receives the results of a critical or abnormal result of a critical test verbally from another healthcare provider. The person receiving the results verbally must write down the information, and then read it back to the individual who communicated it. *The Joint Commission Journal on Quality and Patient Safety, 2010 36* (5)
Substitute Decision Maker:	The legally appointed substitute decision maker able to make treatment decisions when the patient is incapable. *(For more information on determining the appropriate SDM, refer to the Consent to Treatment policy, CH 70-045)*

GUIDING PRINCIPLES AND VALUES

1. Research indicates that breakdown in communication and follow-up of abnormal diagnostic test results can lead to errors and undesired patient outcomes.
2. When multiple copies of test results have been ordered, it should be made clear who is responsible for following up the result. Unless otherwise specified, the responsible individual will be the authorized prescriber. If it is some other person, the authorized prescriber must have the agreement of that person before the responsibility is transferred.
3. The sharing of information such as test results serves to build trust with patients and supports shared decision-making with patients.
4. Effective communication is more than just information transfer, but rather requires a response from the ordering authorized prescriber and indication of follow-up actions.
   - 4.1. In the interest of person-centered care and patient safety, strong consideration should be given to communicating ***all*** diagnostic test results to patients or SDMs.
   - 4.2. The practice of communicating only abnormal results to patients is not deemed to be best practice.

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PROCEDURE

Communication of results is to be done in the most expedient manner – whether verbally (in person or by phone), by fax or electronically. When communicating by telephone directly to patients, adhere to the Interdisciplinary Telephone Practice policy (CC 90-050) as appropriate.

1. Ordering Tests (Refer to CC 85-018 *Clinical Laboratory Diagnostic Test Ordering*)

1.1. Discuss with patients/SDM and collaboratively determine the diagnostic tests to be ordered, and provide the expected turn-around time for results.

1.1.1. Advise the patient/SDM to follow-up with the appropriate health care professional if results not communicated when expected.

1.2. Authorized *requestor* ensures the authorized *prescriber's* contact information is provided on the test requisition.

2. Verbal reporting of Test Results:

2.1. Refer to specific departmental policy for required verbal reporting.

2.2. The employee providing the test results:

2.2.1. supplies their full name and designation

2.2.2. requests full name and designation of the employee receiving the test result

2.2.3. requests *Read Back* (refer to definitions) of the report

2.2.4. documents as per department specific procedures.

Pathology/Laboratory

3. Critical Pathology/Laboratory Test Results Reporting

3.1. Laboratory physician or technologist places a call to the requesting location, patient's current/most recent location, or the authorized prescriber:

3.1.1. **On-site Areas (Inpatients/ambulatory care)**

3.1.1.1. Provides verbal report as per Procedure #2.

3.1.1.2. Follows Laboratory and Anatomical Pathology procedures for documentation and additional actions as required. (Refer to Appendix C – Flow charts - Laboratory Critical Value Reporting Process Patient is on-site (In-patient or in an ambulatory setting and Anatomical Pathology Critical Value Reporting process).

3.1.1.3. If the report is taken by the ward clerk, the ward clerk notifies the health care provider (HCP) caring for the patient

3.1.1.4. The HCP verbally communicates the result to the authorized prescriber

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Note: In the event a resident was the authorized prescriber, and is no longer on the unit or service where the patient resides, call the new responsible resident or attending physician.

3.1.1.5. If paging or leaving a message, the HCP repeats the page or call every 15 minutes

3.1.1.6. If no response after 2 attempts, the HCP attempts to call the attending physician or on-call authorized prescriber; if unable to reach the attending physician or on-call authorized prescriber, notifies the Health Service Manager or delegate for further action as required

3.1.1.7. The HCP documents all actions taken to relay test results in the patient's health record

3.1.1.8. The authorized prescriber documents receipt of results and follow-up plan in the health record

Note: If results are viewed in an electronic portal or electronic health record, the record of the viewing is automatically documented within the electronic system

3.1.2. **Patients no longer on-site or discharged**

3.1.2.1. Laboratory physician or technologist calls the requesting location or patient's current/most recent location and relays the test result as per Procedure #2.

3.1.2.2. Follows Laboratory and Anatomical Pathology procedures for documentation and additional actions as required. (Refer to Appendix C – Flow chart - Laboratory Critical Value Reporting Process Patient no Longer on site or has been d/c and Anatomical Pathology Critical Value Reporting process).

3.1.2.3. The employee taking the call communicates the result to the authorized prescriber (refer to Procedures #3.1.1.4 and #3.1.1.5) and documents in Horizon Patient Folder (HPF) as an 'Addendum to Care' entry

Note: **If the health record is still on the unit** (normally held for 48 hours following discharge), document on the progress note as an addendum to care.

If the health record is no longer on the unit- the Ward Clerk prints a bar coded Progress Note from that patient encounter. The HCP documents as an Addendum to Care following which the Progress Note is sent to Medical Records to be scanned into HPF.

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3.1.2.4. As necessary, the HCP communicates the test results to the patient or SDM and advises them regarding appropriate follow-up (e.g., contact family physician; seek immediate medical attention etc.).

3.1.3. **Community Based Patients**

3.1.3.1. Laboratory physician or technologist calls the authorized prescriber. Provides verbal report as per Procedure #2.

3.1.3.2. If unable to reach the authorized prescriber within 30 minutes, notifies the Laboratory Divisional Physician on call who takes appropriate follow-up action.

3.1.3.3. Follows Laboratory and Anatomical Pathology procedures for documentation and additional actions as required. (Refer to Appendix C – Flow chart Laboratory Critical Value Reporting Process Community-Based Patient and Anatomical Pathology Critical Value Reporting process).

3.1.4. **Referred In Patients:**

Specimens referred from other non-Capital Health facilities (e.g. District Health Authorities (DHAs)1-8 / IWK Health Care Center)

3.1.4.1. Laboratory physician or technologist calls the district health authority laboratory and /or IWK Health laboratory.

3.1.4.2. Provides verbal report as per Procedure #2.

3.1.4.3. If unable to reach the referral lab within 30 minutes, notifies the Laboratory Divisional Physician on call who takes appropriate follow-up action.

3.1.4.4. Follows Laboratory and Anatomical Pathology procedures for documentation and additional actions as required. (Refer to Appendix C – Flow chart Laboratory Critical Value Reporting Process Referred In Patient and Anatomical Pathology Critical Value Reporting process).

Exception – Recurrent critical test results for specific scenarios (Refer to Appendix B)

Abnormal and Normal Test Results Reporting

3.2. Laboratory physician or technologist follows the process for verifying abnormal results in the Laboratory Information System (LIS)

- **Inpatients/ambulatory care** - Results electronically transfer to the portal
- **Community Based Patients** - Results will be printed, faxed or transferred electronically to the requesting physician's office.

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- **Referred in Patients –** Results will be printed, faxed or transferred electronically to the referring site.

Note: For patients registered in the Capital Health registration system, results will also electronically transfer to the portal.

3.3. Health care professionals, when alerted of an abnormal result, ensure follow-up with the authorized prescriber.

3.4. Authorized prescriber reviews results in the portal on a timely basis and takes appropriate follow-up actions as required (communicates with the patient and determine appropriate plan, or communicates results to the family doctor, to take appropriate action).

4. Preadmission Assessment Clinic

4.1. **Critical Results Reporting (laboratory)**

4.1.1. Laboratory physician or technologist calls the nurse in the pre-admit clinic and provides the verbal report as per Procedure #2.

4.1.2. The nurse contacts the anaesthesiologist who takes action as appropriate. (Refer to Procedure 3.1.1.4 to 3.1.1.7.)

4.2. **Abnormal – Pre-admission Clinic**

4.2.1. The nurse reviews the results in the portal and reports any abnormalities to the anaesthesiologist.

5. Emergency Departments

5.1. Laboratory physician or technologist calls critical reports to the Emergency department as per Procedure # 2.

5.2. The LIS sends verified results to the portal and to the Emergency Department Information System (EDIS).

5.3. The LIS runs a report every 2 hours;

5.3.1. Laboratory Central Reporting sends the report by fax to the inpatient floor if the patient has been admitted from Emergency

Diagnostic Imaging

6. Critical Test Results Reporting

6.1. Upon identifying a critical diagnostic test result, the radiologist:

6.1.1. Contacts the authorized prescriber

6.1.2. Provides verbal report as per Procedure #2

6.1.3. Follows DI specific processes if unable to contact the authorized prescriber in an appropriate time frame

6.1.3.1. Communicate the results to the family doctor and the patient/SDM as appropriate

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6.2. The ordering authorized prescriber or delegate upon receiving the report:

6.2.1. Repeats the patient's full name and encounter number

6.2.2. Repeats the diagnostic test result

6.2.3. Documents on the health record the nature of the call and planned follow-up

6.2.4. If a delegate has received the report, communicates to the authorized prescriber. The authorized prescriber documents as per Procedure # 7.2.3

7. Non-Urgent and Normal Test Results Reporting

7.1. Radiologist follows established DI process for verifying non-urgent and normal results in the DI Information system which electronically transfers the results into the portal

7.2. The authorized prescriber reviews reports and communicates to the patient/SDM, or family physician as appropriate.

Echocardiogram

8. Critical Results Reporting

8.1. Sonographer requests that the patient remain in the department

8.1.1. If before 1700 hours, the sonographer calls the physician assigned to the Echocardiogram department and provides verbal report as per Procedure #2

8.1.2. The physician reviews the results and takes appropriate action

8.2. If after 1700 hours, the sonographer calls the echocardiographer cardiologist on call and provides verbal report as per Procedure #2

8.2.1. The echocardiographer cardiologist reviews the results and takes appropriate action

9. Non-Urgent and Normal Test Results Reporting

9.1. The sonographer follows department procedure for generating the report (normally within 24 hours)

Note: All inpatients are reported the same day.

9.2. The authorized prescriber reviews reports and communicates to the patient/SDM, or family physician as appropriate

ECG, Holter, Stress

10. Critical or Abnormal Results Reporting

10.1. The technician contacts the authorized prescriber and provides verbal report as per Procedure #2.

10.1.1. The authorized prescriber reviews the results and takes appropriate action

10.2. If unable to contact the authorized prescriber, the technician contacts the on-call physician and provides verbal report as per Procedure #2.

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10.2.1. The on-call physician reviews the results and takes appropriate action

10.3. If unable to contact the on-call physician, the technician contacts the family physician and provides verbal report as per Procedure #2.

10.3.1. The family physician reviews the results and takes appropriate action

10.4. If unable to contact any of the above, the technician contacts the patient/SDM and provides verbal report as per Procedure #2.

10.4.1. Advises the patient/SDM to contact the family physician

11. Normal Test Results Reporting

11.1. The technician generates a preliminary report as per departmental procedure.

11.2. The authorized prescriber reviews reports and communicates to the patient/SDM, or family physician as appropriate.

Point of Care Testing (POCT) (e.g. Glucometer, Urinalysis, etc)

12. The authorized prescriber initiates written, electronic or verbal POCT requests or delegates to an authorized requestor.

13. Prior to testing, the HCP delivering POCT verifies that the test request(s) has been documented. {For additional information refer to Capital Health Policy CH 30-111 *Point of Care Testing (Laboratory Diagnostic Bedside Testing)*}

14. Upon performing any POCT, the HCP verbally notifies the authorized prescriber of any critical result.

14.1. When the HCP verbally reports POCT results to clinicians, the HCP also documents the results, units of measure and methods used to obtain those results in a written format and identified as POCT results.

15. Refer to Procedure 3.1.1.4 to 3.1.1.7 for further actions.

Portal

16. LIS or Diagnostic Information System sends the results to the portal

16.1. Result is flagged as New, S/A (**S**ignificantly **A**bnormal) or Panic

16.2. As an authorized prescriber/HCP views the result over a 14 day period, the portal records the name of the authorized prescriber/HCP and the date and time within the 14 day period the results were reviewed.

Note: This information is retained permanently within the portal and may be viewed by anyone accessing the portal; the identity of any authorized prescriber/HCP viewing the results after the 14 day timeframe will not be recorded.

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REFERENCES

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Berlin, B. (2002). Malpractice Issues in Radiology. *American Journal of Roentgenology.* 809 – 815.

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RELATED DOCUMENTS

Policies

CH 07-060 Transfer of Health Information

CH 30-045 Consent to Treatment policy

CH 30-111 Point of Care Testing (POCT)

CH 30-100 Privacy

CC 04-040 Clinical Documentation in the Health Record

CC 15-025 Hypoglycemia, Treatment for Reversal Mild, Moderate and Severe

CC 85-018 Clinical Laboratory Diagnostic Test Ordering

CC 90-050 Interdisciplinary Telephone Practice

IC 02-001 Reporting Notifiable Diseases and Conditions

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Appendices

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Appendix A
Lab Critical Value Table

Chemistry Critical Values		
Test	**Low Value**	**High Value**
Sodium	Less than 120 mmol/L	Greater than 160 mmol/L
Potassium	Less than 2.6 mmol/L	Greater than 6.5 mmol/L
Bicarbonate	Less than 10 mmol/L	Greater than 40 mmol/L
Glucose	Less than 2.2 mmol/L	Greater than 25.0 mmol/L Greater than 15 mmol/L less than16yrs
Creatinine		Greater than 400 µmol/L Greater than 200 µmol/L less than16yrs
Calcium	Less than 1.70 mmol/L	Greater than 3.25 mmol/L
Magnesium	Less than 0.4 mmol/L	Greater than 3.0 mmol/L
Phosphate	Less than 0.4 mmol/L	Greater than 3.5 mmol/L
Osmolality	Less than 250	Greater than 325
Troponin		Greater than 50 ng/L
pH	Less than 7.2	Greater than 7.5
pCO2	Less than 20 mm/Hg	Greater than 60 mm/Hg
pO2	Less than 60 mm/Hg Less than 80 for OR patients	
HCO3	Less than 10 mmol/L	Greater than 40 mmol/L
Ionized Ca	Less than 0.6 mmol/L	Greater than 1.5 mmol/L
Lactate		Greater than 4.0 mmol/L
HgB	Less than 70	
Oxygen Saturation	Less than 90	
COHb		Greater than 20
MetHb		Greater than 5 upper decision limit

Hematology Critical Values		
Test	**Low Value**	**High Value**
INR		Greater than or equal to 5.0
APTT		Greater than or equal to 80 seconds (with the exception of patients on Heparin/Argatroban/Pradax or Lupus Anticoagulant workups with a NORMAL APTT Dade result)
WBC	Less than 1.5 $x10^9$/L	Greater than 30.0 $x10^9$/L
Hemoglobin	Less than 70 g/L	
Platelet	Less than 30 $x10^9$/L	
CSF – WBC		Greater than or equal to 10.0 $x10^6$/L
New Acute Leukemia: Peripheral Blood		Blast count greater than 5%
New Acute Leukemia: Bone Marrow		Blast count greater than 20%

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Appendix A
Lab Critical Value Table
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Therapeutic Drug Critical Values		
Test		**Toxic Range**
Acetaminophen	No critical ranges, drugs are phoned if greater than the toxic range	Greater than 350 umol/L
Carbamezapine		Greater than 75umol/L
Digoxin		Greater than 3.0 nmol/L
Ethanol		Greater than 40 mmol/L
Lithium		Greater than 2.2 mmol/L
Phenobarbital		Greater than 250 umol/L
Phenytoin		Greater than 125 umol/L
Salicylate		Greater than 2.2 mmol/L
Theophylline		Greater than 130 umol/L
Valproate		Greater than 1400 umol/L

Blood Transfusion Critical Values
TEST
Serious transfusion reactions
Serious errors
Serious product recalls
Issues causing blood or blood products to be unavailable within the expected time frame due to supply issues, specimens problems, delays in antibody identification, lack of appropriate type of blood products, etc.
Complex serological problems including incompatible units

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Appendix A
Lab Critical Value Table
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Anatomical Pathology Critical Values
TEST
Crescents in greater than 50% of glomeruli in a kidney biopsy specimen
Renal transplant biopsies with positive diffuse C4d reaction
Vasculitis, clinically unexpected
Uterine contents without villi or trophoblast from “missed abortions”
Fat in an endometrial curettage specimen
Mesothelial cells in a heart biopsy specimen
Fat in colonic endoscopic polypectomy specimens
Acute transplant rejection
Acute graft-versus-host disease
Malignancy in superior vena cava syndrome
Neoplasms causing paralysis
CJD in surgical specimen
Suppurative inflammation in a synovial or bone biopsy
Micro-organisms associated with serious infections, for example: • Bacteria or fungi in cerebrospinal fluid cytology in immunocompromised or immunocompetent patients • Pneumocystis organisms, fungi, or viral cytopathic changes in bronchoalveolar lavage, bronchial washing, or brushing cytology specimens in immunocompromised or immunocompetent patients • Acid-fast bacilli in immunocompromised or immunocompetent patients • Fungi in FNA specimen of immunocompromised patients • Bacteria in heart valve or bone marrow • Herpes in Papanicolaou smears of near-term pregnant patients • Any invasive organisms in surgical pathology specimens of immunocompromised patients • In brain biopsy of suspected malignancy • Any other serious/life threatening infection
Any other finding deemed urgent by the pathologist
Immunopathology • ANCA positive serology • GBM positive serology

Cytology Critical Values
TEST
The following is a list of diagnostic findings that should prompt urgent reporting to the most responsible physician. Micro-organisms associated with serious infections, for example:
• Bacteria or fungi in cerebrospinal fluid cytology in immunocompromised or immunocompetent patients
• Pneumocystis organisms, fungi, or viral cytopathic changes in bronchoalveolar lavage, bronchial washing, or brushing cytology specimens in immunocompromised or immunocompotent patients
• Fungi in FNA specimen of immunocompromised patients
• Herpes in Papanicolaou smears of near-term pregnant patients

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Any other serious/life threatening infection

Appendix A
Lab Critical Value Table
(Continued)

Microbiology Serology, Positive Cultures and stains
TEST
▪ **Direct Gram stain results :** o Positive Critical Specimens - Positive blood, stem cells - Positive CSF - Positive normally sterile fluids or tissue - Blood products from cases of suspected contamination (transfusion reaction) - Specimens with specific diagnosis of gas gangrene o - Urines
▪ **Positive Diagnostic Test Results:** o Critical specimens as noted above o Further/New information from critical specimens o Positive results from the Public Health Reportable Disease List A o Recipient Tissue bank, eye bank, fetal neural tissue bank and fresh knee specimens o Outbreak situations
▪ **Antibiotic levels – out of range:** o Gentamicin: Pre - Greater than or equal to 2.0 mg/L Random Greater than 2.0 mg/L o Tobramycin: Pre - Greater than or equal to 2.0 mg/L Random Greater than 2.0 mg/L o Vancomycin: Greater than or equal to 25.0 mg/L
▪ **Positive PCP**
▪ **Positive Cryptococcal antigen**
▪ **When requested on requisition from a sterile site**
▪ **Influenza positive – LTC, Inpatient**
▪ **RSV positive – LTC, Inpatient**

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Appendix B
Laboratory Critical Values Notification Exceptions

Laboratory Critical Values Notification Exceptions	
Test	**Exception**
Absolute Neutrophil Less than 0.50 x 10^9/L	Critical results are called: 1. The first time encountered and every 7 days thereafter should the Absolute Neutrophil result remain critical, or 2. If a Absolute Neutrophil result was previously critical, becomes non-critical then re-enters the critical range. Exceptions to the above include: 1. Patient encounters from Medical Day Unit (MDU) 2. 8A and 8BB unless a newly admitted patient 3. Critical results for patients referred by a Hematologist and Hematology Clinic patients are relayed as follows: a. If ordering status is Routine, expedite to Urgent. b. Monday to Friday 0830 – 1700, results are faxed to the Hematology Clinic at 902-473-4600. c. Afterhours, the Hematopathologist On-Call is contacted with the critical result.
Anatomical Pathology Tests	Critical values are reported directly to the attending physicians or their office, not to nursing units/clinics.
APTT Greater than or equal to 80 sec (not on Heparin) APTT	First time critical result phoned with the exception: 1. Medical Day Unit (MDU) 2. Hematology Clinic (HEM) between 8:30 – 16:00. NOTE: If routine (RT) status expedite to STAT. – If the samples are from MDU or Hematology Clinic place a footnote in non-chartable referring to the location the report was to go to so it is not questioned why the results were not phoned. After 16:00 Monday to Thursday, call the Physician. - After 15:00 Friday, call the Physician. - If their office is closed, then call the Staff (Not resident) Clinical Hematologist on call, by calling locating at 473-2222 for the appropriate pager number. - If the Staff Clinical Hematologist does not return the page, call the Lab Hematopathologist on call *(refer to 'On Call List).*
Blood Gas	Critical blood gas results are not phoned to Emergency departments except for critical Bicarbonate and Hemoglobin at all sites and pCO2 and Lactate at CCHC.
Creatinine	Critical creatinines are not phoned to the following units: Renal Dialysis Unit, 6B, CAPD, Nephrology Clinic, Hemodialysis Clinic (HD), or for known renal patient with a previous creatinine greater than 400 µmol/L
Ethanol	Not phoned to Emergency departments
Gentamycin	Not phoned to Emergency departments
Glucose	Phone glucose results less than 2.2 mmol/l immediately before repeating.

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Laboratory Critical Values Notification Exceptions	
Test	**Exception**
Hemoglobin **Less than 70 g/L**	Critical results are called: 1. The first time encountered and every 7 days thereafter should the Hemoglobin result remain critical, or 2. If a Hemoglobin result was previously critical, becomes non-critical then re-enters the critical range. Exceptions to the above include: 1. Patient encounters from Medical Day Unit (MDU) 2. 8A and 8BB unless a newly admitted patient 3. Critical results for patients referred by a Hematologist and Hematology Clinic patients are relayed as follows: a. If ordering status is Routine, expedite to Urgent. b. Monday to Friday 0830 – 1700, results are faxed to the Hematology Clinic at 902-473-4600. c. Afterhours, the Hematopathologist On-Call is contacted with the critical result.
INR Greater than or equal to 5.0 **INR Greater than or equal to 5.0 (continued)**	All critical results phoned with the exception: 1. Medical Day Unit (MDU) 2. Hematology Clinic (HEM) between 8:30 – 16:00. NOTE: If routine (RT) status expedite to STAT. – If the samples are from MDU or Hematology Clinic place a footnote in non-chartable referring to the location the report was to go to so it is not questioned why the results were not phoned. After 16:00 Monday to Thursday, call the Physician. - After 15:00 Friday, call the Physician. - If their office is closed, then call the Staff (Not resident) Clinical Hematologist on call, by calling locating at 473-2222 for the appropriate pager number. - If the Staff Clinical Hematologist does not return the page, call the Lab Hematopathologist on call *(refer to 'On Call List).*
Magnesium	Not phoned to Emergency departments
Microbiology Reportable Isolates	Follow reporting guidelines from the Department of Health and Wellness
Microbiology Tests	Microbiology doesn't get the receiver to read back the results as they are very difficult words; they fax/expedite a copy of the chart.
Osmolality	Not phoned to Emergency departments except CCHC.
Platelet **Less than 30 x10^9/L**	Critical results are called: 1. The first time encountered and every 7 days thereafter should the Platelet result remain critical, or 2. If a Platelet result was previously critical, becomes non-critical then re-enters the critical range. Exceptions to the above include: 1. Patient encounters from Medical Day Unit (MDU) 2. 8A and 8BB unless a newly admitted patient 3. Critical results for patients referred by a Hematologist and Hematology Clinic patients are relayed as follows: a. If ordering status is Routine, expedite to Urgent. b. Monday to Friday 0830 – 1700, results are faxed to the Hematology Clinic at 902-473-4600. c. Afterhours, the Hematopathologist On-Call is contacted with the critical result.

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Laboratory Critical Values Notification Exceptions	
Test	**Exception**
Potassium	Pre-dialysis patients only phoned if result is less than 2.6 or greater than 7.0 mmol/L
Tobramycin	Not phoned to Emergency departments
Troponin	Critical result only called once. Critical result is not phoned to any Cardiac unit.
Urea	Critical result not phoned for inpatients
Vancomycin	Not phoned to Emergency departments
WBC **Less than 1.5 or Greater than 30.0 x10^9/L**	Critical results are called: 1. The first time encountered and every 7 days thereafter should the WBC result remain critical, or 2. If a WBC result was previously critical, becomes non-critical then re-enters the critical range. Exceptions to the above include: 1. Patient encounters from Medical Day Unit (MDU) 2. 8A and 8BB unless a newly admitted patient 3. Critical results for patients referred by a Hematologist and Hematology Clinic patients are relayed as follows: a. If ordering status is Routine, expedite to Urgent. b. Monday to Friday 0830 – 1700, results are faxed to the Hematology Clinic at 902-473-4600. c. Afterhours, the Hematopathologist On-Call is contacted with the critical result.

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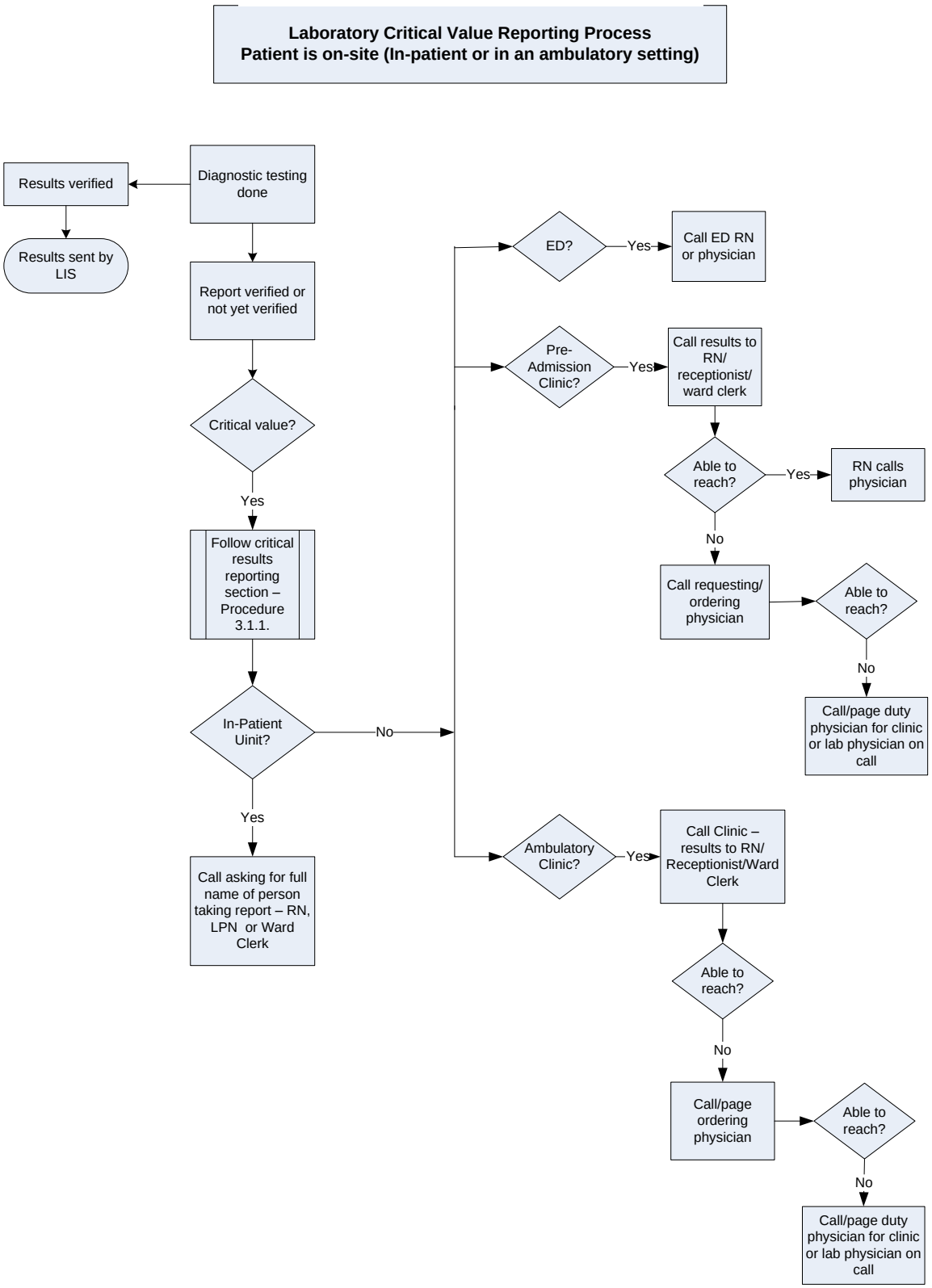
Appendix C
Flow Charts of Processes



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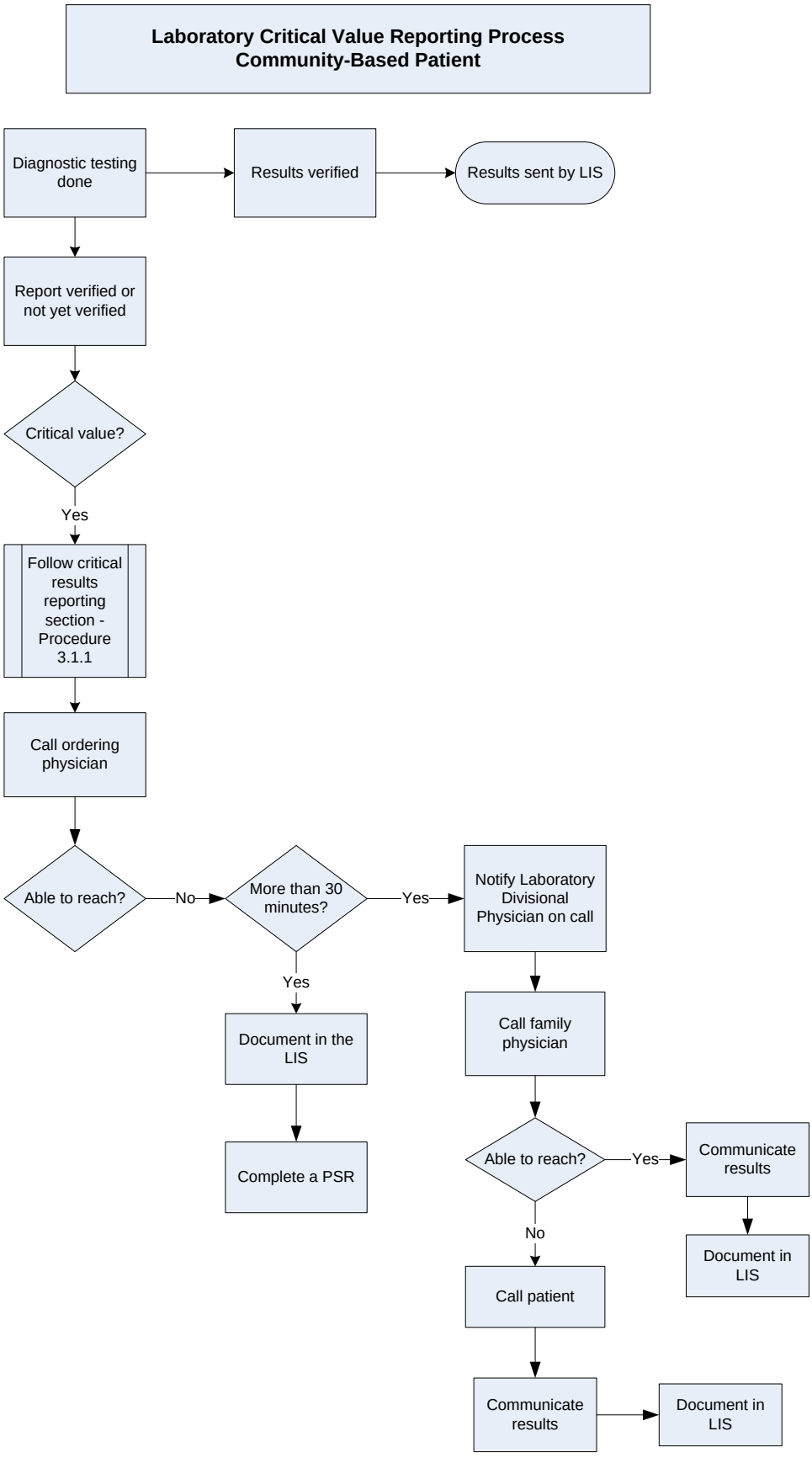

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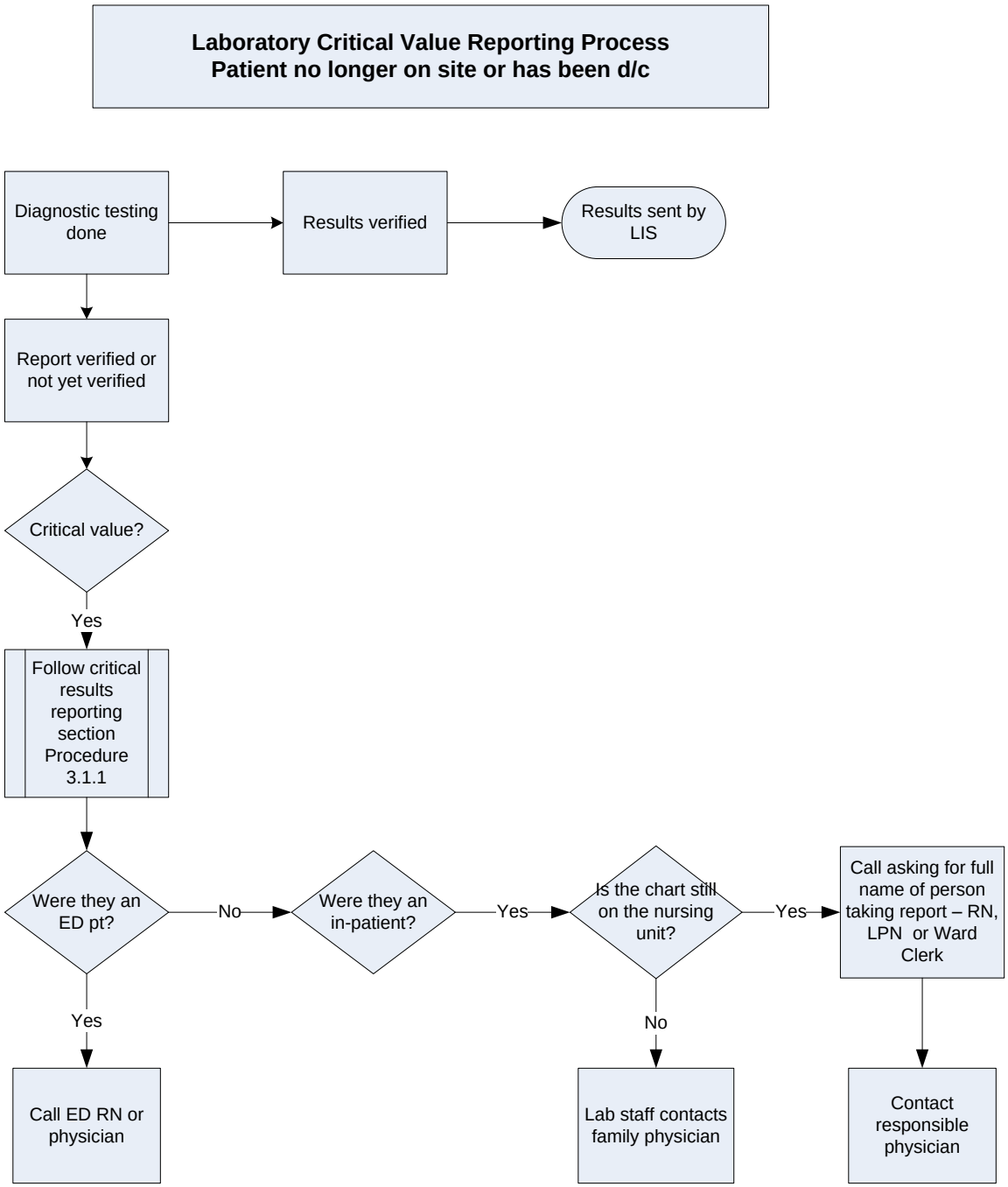

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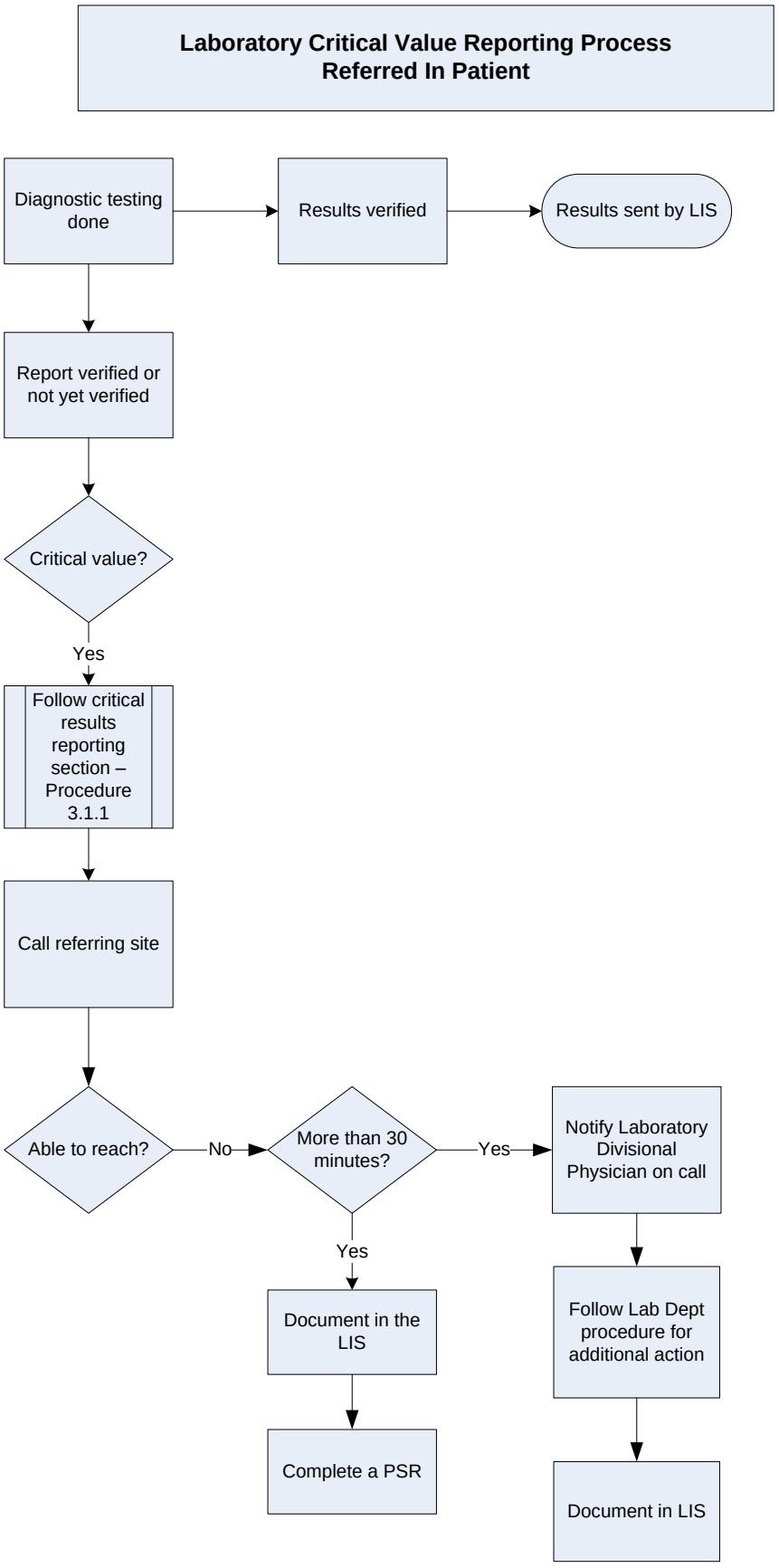

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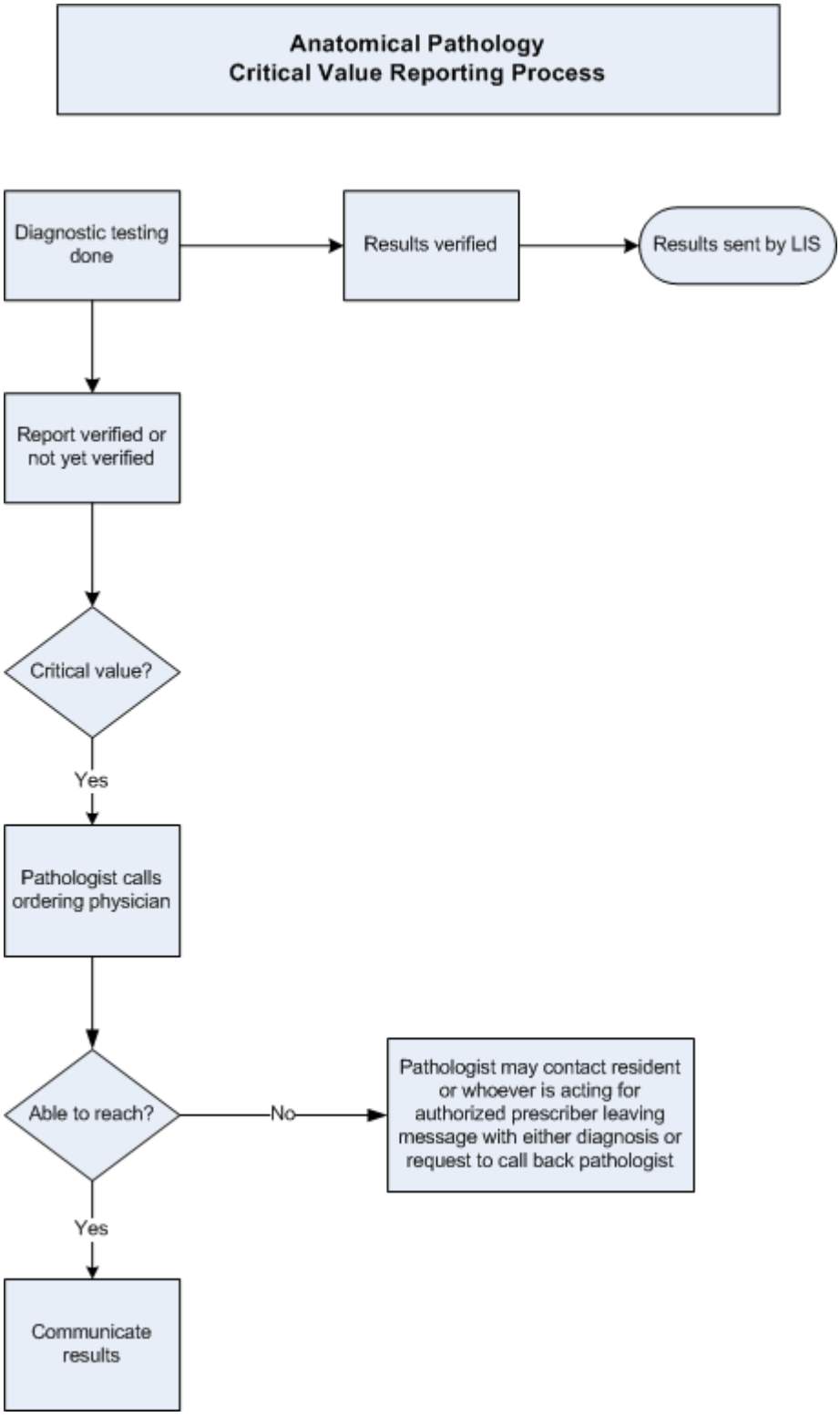

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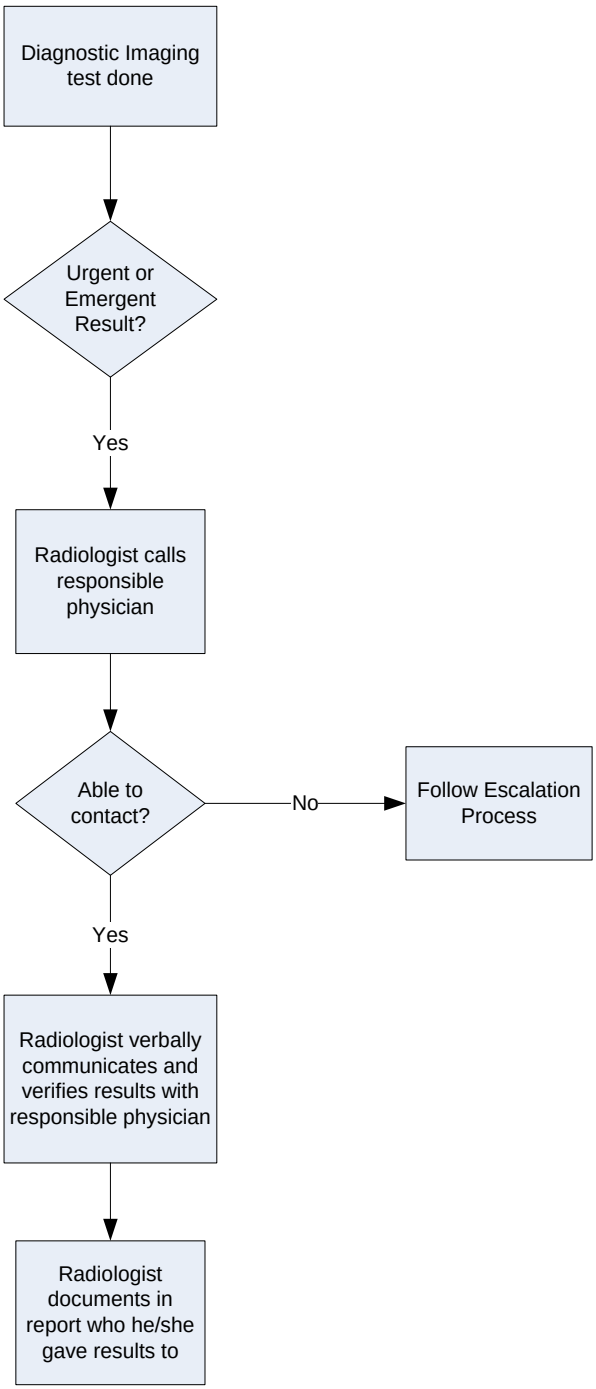
Critical Result Reporting Process
Diagnostic Imaging



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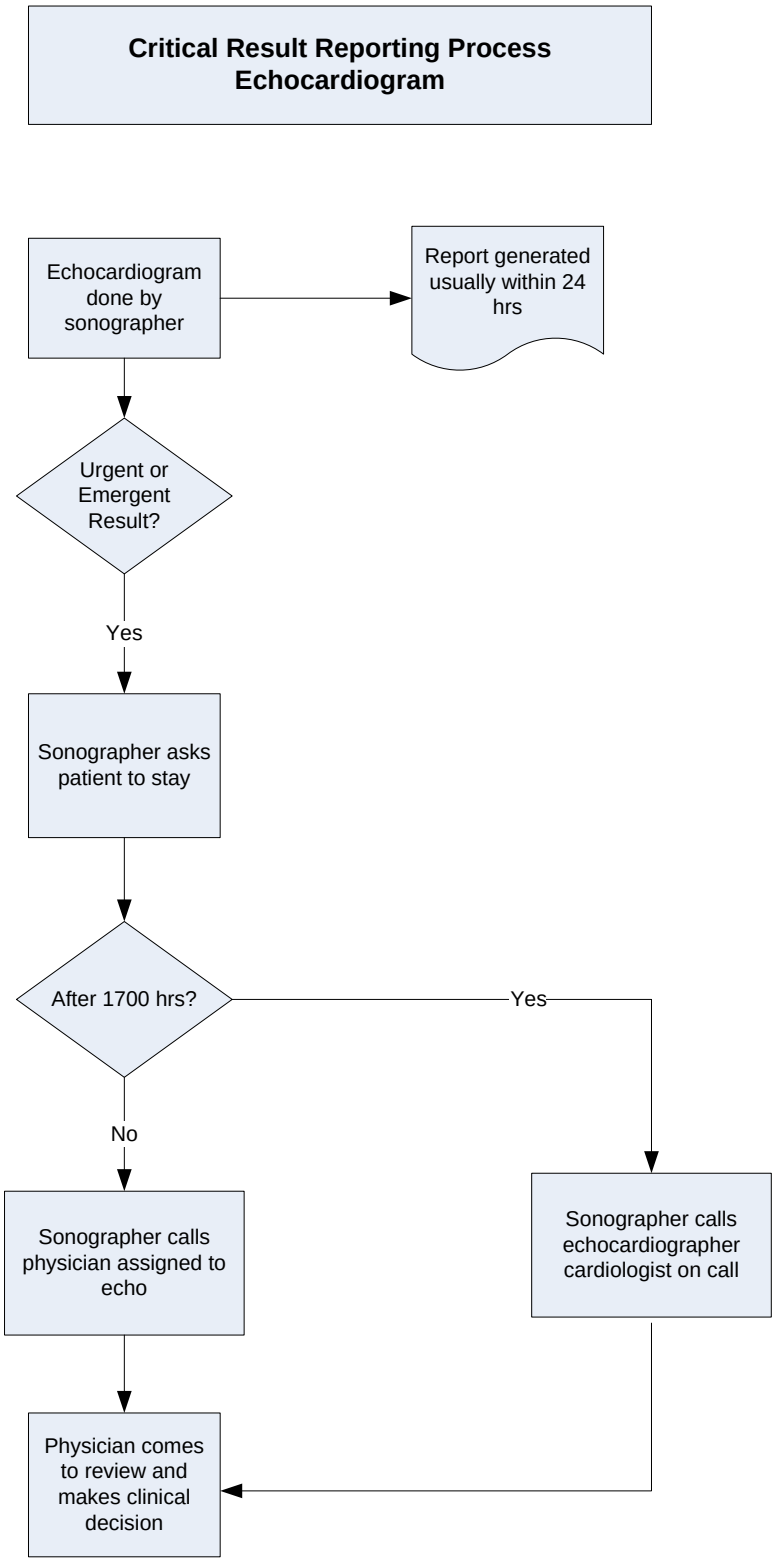

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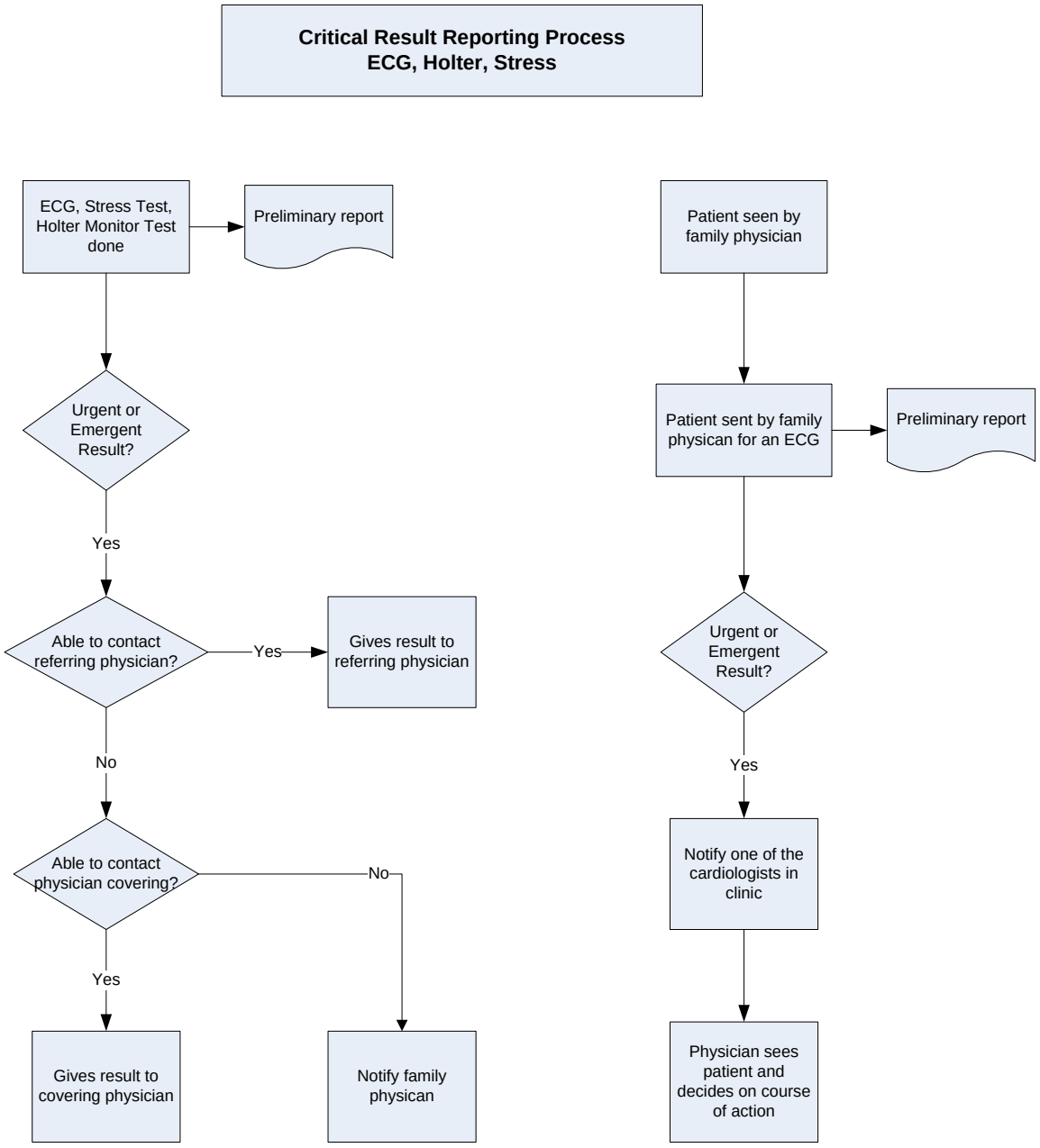

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