

CRITICAL VALUES – FIRST CRITICAL TROPONIN OR CK-MB

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|---|---|--|
| <input checked="" type="checkbox"/> St. Joseph Medical Center, Tacoma, WA | <input checked="" type="checkbox"/> St. Anthony Hospital Gig Harbor, WA | <input type="checkbox"/> Harrison Medical Center, Bremerton, WA |
| <input checked="" type="checkbox"/> St. Francis Hospital, Federal Way, WA | <input checked="" type="checkbox"/> St. Elizabeth Hospital Enumclaw, WA | <input type="checkbox"/> Harrison Medical Center, Silverdale, WA |
| <input checked="" type="checkbox"/> St. Clare Hospital Lakewood, WA | <input type="checkbox"/> Highline Medical Center Burien, WA | <input type="checkbox"/> PSC |

PURPOSE

To provide instructions for calling critical troponin (Tnl) and/or CK-MB results when the Tnl and/or CK-MB are critical for the first time during an encounter, or if the patient had prior critical levels but they had returned to baseline and are now critical again.

BACKGROUND

“Fliers” are false positive results due to fibrin strands that form when tubes aren’t properly mixed at the time of the blood draw. While rare (~0.007%), these fliers occur during the first (and sometimes second) immunoassay performed on the DXI and Access, which is often a troponin and/or a CK-MB and can cause critically high results. Thus, all first time critical Tnl and CK-MB values must be confirmed by re-spinning and re-running the specimen to ensure accurate results.

RELATED DOCUMENTS

- R-PO-AD0551 Critical Value Policy – Laboratory
- R-PR-AD0550 Critical Value Process
- R-W-CH1825 DXI & Access CK-MB
- R-W-CH1826 DXI (Tnl) Troponin I
- R-PO-AD0730 Error Management Policy

STEPS

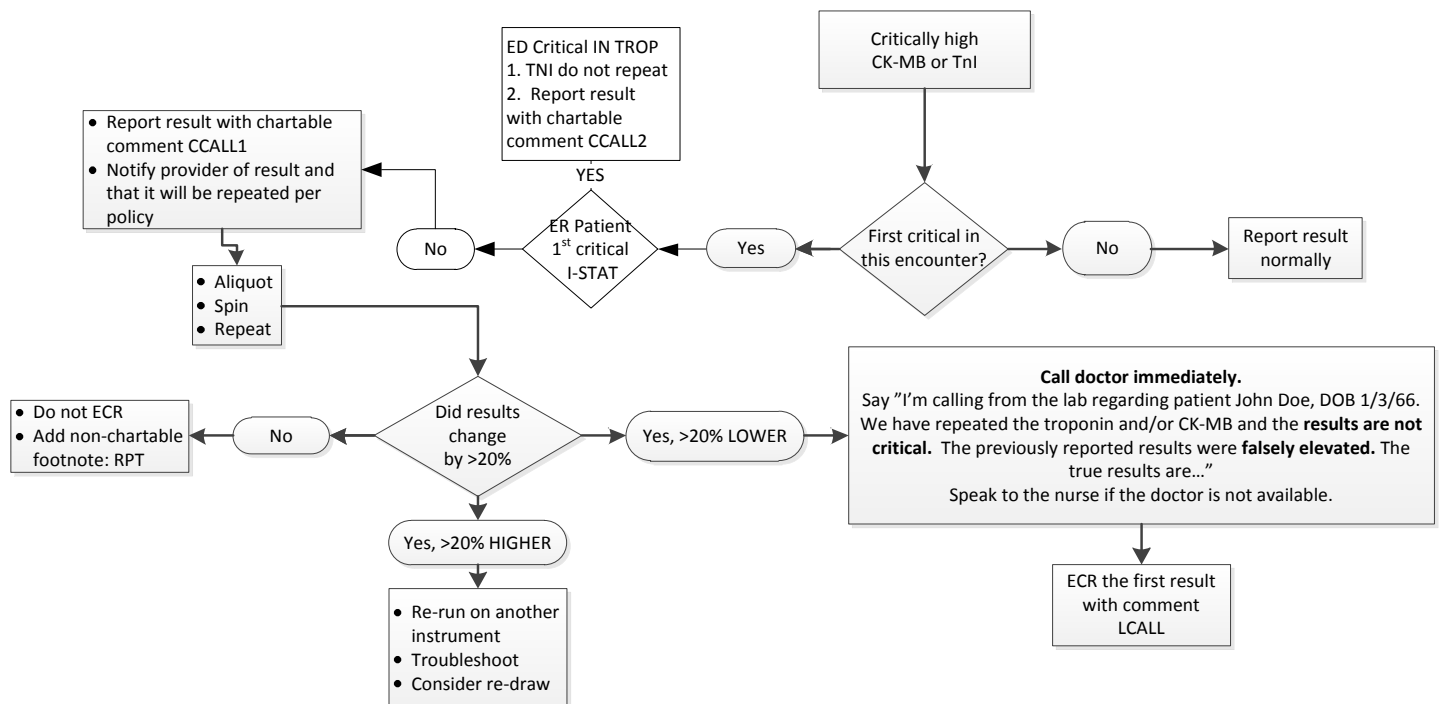
Patient with critically high Tnl and/or CK-MB

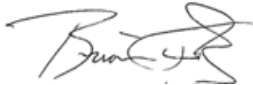
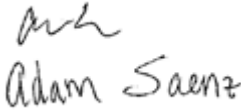

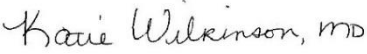
- 1) Check RES for prior results.
- 2) If this is the first critically high Tnl and/or CK-MB in this admission or encounter (or if the patient had prior critical levels but they had returned to baseline and now are critical again) proceed with the following:
- 3) If “IN TROP” (ER order code for i-Stat troponin) is critical, the IN TROP may serve as the “first critically high Tnl”. In such circumstances, the lab methodology serves as confirmation. Call the critical Tnl to the ED and document using the chartable comment CCALL2 “CRITICAL VALUE(S) for _ CALLED/READ BACK to _ (LOC:_) at _ by _ . Tnl not repeated in lab due to critical I-STAT result.”

First time critically high Tnl and/or CK-MB

- 1) Call the provider and report the results.

- 2) Tell the provider, "per lab policy, all first time critical troponin and CK-MB results are repeated for confirmation. I will notify you if the results are different."
- 3) Aliquot the specimen, spin it, and re-run the assay(s). If possible, begin re-spinning and re-running the specimen as you attempt to call in order to avoid delays. Ask your co-workers for help if necessary. This repeat needs to be done as quickly as possible.
- 4) Document your critical call in Cerner as chartable comment CCALL1 "CRITICAL VALUE(S) for _ CALLED/READ BACK to _ (LOC:_) at _ by _ . Per laboratory policy, all first critical troponin and/or CK-MB results will be repeated. The provider will be notified of any discrepant results."
- 5) If the new results increase by more than 20%, there may be an issue with the instrument. Re-run the specimen on a different instrument. Consider asking for a re-draw and/or troubleshooting the instrument to determine the cause.
- 6) If the new results are within 20% and still critical, enter non-chartable comment RPT ("verified by repeat analysis") on Tnl and/or CK-MB.
- 7) If the troponin and/or CK-MB repeat testing shows that the true results are not critically high (the results are lower by >20% and there is a change in interpretation (critical to indeterminate or critical to negative), call the doctor immediately and say "I'm calling from the lab regarding patient John Doe, DOB 1/3/66. We have repeated the troponin and/or CK-MB tests and the results are **not critical**. The previously reported results were **falsely elevated**. The true results are ---." Do your best to speak directly with the doctor. If the doctor is unavailable, report the information to the nurse and ask her to notify the doctor immediately.
- 8) Ask for a read back. ECR the first results and footnote chartable comment LCALL "____ notified with read back at ___ hrs on __/__/__."
- 9) If you are told that a patient with a flier had an invasive procedure because of the false positive result, call the on call clinical pathologist.



DOCUMENT APPROVAL Purpose of Document / Reason for Change:			
Added #3 to include CCALL2 in steps and to flowchart.			
<input type="checkbox"/> No significant change to process in above revision. Per CAP, this revision does not require further Medical Director approval.			
Committee Approval Date		<input checked="" type="checkbox"/> Date: 9/24/15 <input type="checkbox"/> N/A – revision of department-specific document which is used at only one facility	
SAH Lab Medical Director Approval (Electronic Signature)	 2/22/2016	SCH Lab Medical Director Approval (Electronic Signature)	 2/19/16
SFH and SEH Lab Medical Director Approval (Electronic Signature)	2/18/16 	SJMC Lab Medical Director Approval (Electronic Signature)	 2/16/16