# CRITICAL VALUES – FIRST CRITICAL TROPONIN OR CK-MB

☒ St. Joseph Medical Center Tacoma, WA ☒ St. Clare Hospital Lakewood, WA ☒ St. Elizabeth Hospital Enumclaw, WA
☒ St. Francis Hospital Federal Way, WA ☒ St. Anthony Hospital Gig Harbor, WA ☐ PSC

## PURPOSE

To provide instructions for calling critical troponin (TnI) and/or CK-MB results when the Tni 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 TnI 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 & Access Troponin |
| R-PO-AD0730 | Error Management Policy |

## STEPS

### Patient with critically high TnI and/or CK-MB

1) Check RES for prior results.

2) If this is the first critically high TnI 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:

### First time critically high TnI 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.”

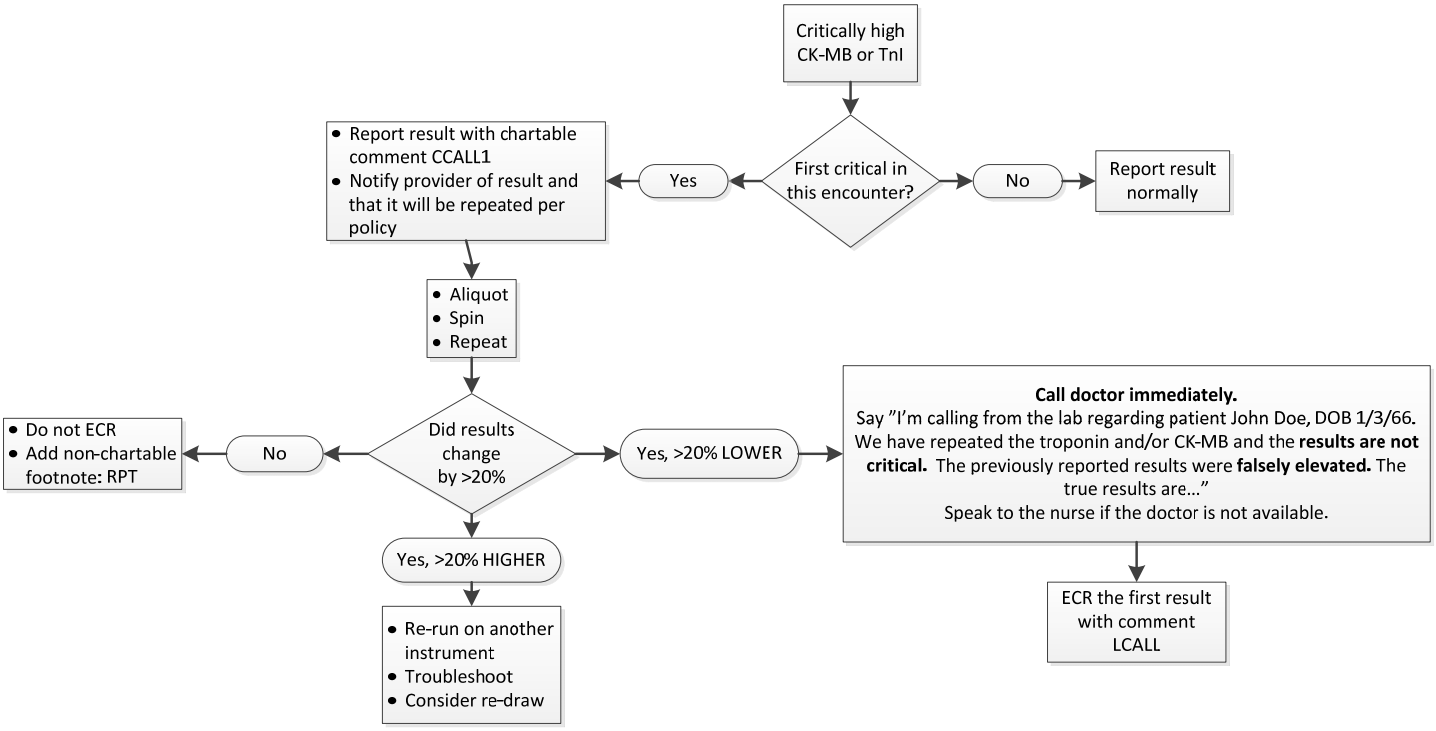
5) If the new results increase by more than 20%, there may be an issue with the instrument. Re-run the specimen on a different instrument. Consider asking for a re-draw and/or troubleshooting the instrument to determine the cause.

6) If the new results are within 20% and still critical, enter non-chartable comment RPT (“verified by repeat analysis”) on TnI 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: | | | |
|---|---|---|---|
| New document for new procedure | | | |
| ☐ *No significant change to process in above revision. Per CAP, this revision does not require further Medical Director approval.* | | | |
| **Committee Approval Date** | ☒ Date: 2/27/14<br>☐ N/A – revision of department-specific document which is used at only one facility | **Medical Director Approval** *(Electronic Signature)* | Katie Wilkinson, MD 3/11/14 |