2025B Internal Case Review Form

Please use this form to submit your site's assigned internal peer reviews.

If you have any questions or experience difficulties completing the form, please contact:

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BMC2 Hospital Number:

_____
(Enter only 2 digits (i.e. 01, 15, 42))

BMC2 ID Number:

_____

NCDR Patient ID Number:

_____

NCDR Other ID Number (optional):

_____

Appropriateness of the Angiogram

1. Decision to proceed with angiography: Based on the clinical data provided, how would you rate the decision to proceed to diagnostic angiography?
(We are seeking your assessment of appropriateness. While it is expected that you would consider guidelines and appropriate use criteria, these do not cover all scenarios. Given the level of data provided, if you would almost always recommend angiography, please mark "appropriate." On the other hand, if you would almost never recommend angiography, please mark "rarely appropriate." If you would sometimes consider angiography, please mark "may be appropriate.")

◯ a. Appropriate
◯ b. May be appropriate
◯ c. Rarely appropriate

1a. If you chose C, please consider providing some feedback to the operator as to why you feel it was not appropriate to proceed with the coronary angiogram in this setting

2. Clinical Presentation: Based on the clinical information provided, how would you classify the etiology of the patient's shock?

◯ a. Acute myocardial infarction-cardiogenic shock related to STEMI
◯ b. Acute myocardial infarction-cardiogenic shock related to NSTEMI
◯ c. Heart failure-cardiogenic shock
◯ d. Cardiogenic shock secondary to valvular heart disease
◯ e. Shock related to a mechanical complication of acute myocardial infarction
◯ f. Mixed shock
◯ g. Can not determine based on the available information

3. Shock Presentation: Based on the clinical information provided, what is the stage of the patient's cardiogenic shock upon arrival to the cath lab?

◯ a. SCAI stage A (at risk)
◯ b. SCAI stage B (beginning-hypotension without evidence of end organ dysfunction)
◯ c. SCAI stage C (classical-hypotension with evidence of end organ dysfunction)
◯ d. SCAI stage D (deteriorating-worsening hypotension, end organ dysfunction despite attempt at stabilization with MCS, vasopressors or inotropes)
◯ e. SCAI stage E (extremis-pending cardiac arrest)
◯ f. Cannot determine based on the information available

4. Cardiac Arrest: Did the patient have a cardiac arrest within the 24 hours prior to arrival in the cath lab?

◯ Yes
◯ No

5. Shock stage after completion of the PCI: Based on the clinical information provided, how would you classify the patient's shock stage at the completion of the PCI? (Please indicate the SCAI shock stage prior to leaving the cath lab)

◯ a. SCAI stage A (at risk)
◯ b. SCAI stage B (beginning-hypotension without evidence of end organ dysfunction)
◯ c. SCAI stage C (classical-hypotension with evidence of end organ dysfunction)
◯ d. SCAI stage D (deteriorating-worsening hypotension, end organ dysfunction despite attempt at stabilization with MCS, vasopressors or inotropes)
◯ e. SCAI stage E (extremis-pending cardiac arrest)
◯ f. Cannot determine based on the information available

Appropriateness of PCI:

6. Decision to proceed to PCI: Based on the clinical data provided and the angiographic severity, how would you rate the decision to proceed to PCI?
((We are seeking your assessment of appropriateness. While it is expected that you would consider guidelines and appropriate use criteria, these do not cover all scenarios. Given the level of data provided, if you would almost always recommend PCI, please mark "appropriate." On the other hand if you would almost never recommend PCI, please mark "rarely appropriate." If you would sometimes consider PCI, please mark "may be appropriate."))

◯ a. Appropriate
◯ b. May be appropriate
◯ c. Rarely appropriate

6a. If you chose C, please consider providing some feedback to the operator as to why you feel it was not appropriate to perform PCI in this setting.

7. Culprit Lesion: Based on your review of the clinical information and angiogram, the culprit lesion is:

◯ a. Clear and contributed to the patient's shock presentation
◯ b. Clear and with the patients comorbidities could contribute to the patient's shock presentation
◯ c. Unclear, and there is a likely an alternative etiology for the patient's shock presentation
◯ d. Unclear

8. Based on the clinical data available, would you have treated this/these lesion(s) in the same manner?

◯ a. Yes
◯ b. Yes, but I would have also used (select from list)
◯ c. No, but I would have also used (select from list)

8a. Please select items that reflect how you would have treated the lesion

☐ a. Larger stent
☐ b. Smaller stent
☐ c. Longer stent
☐ d. Shorter stent
☐ e. Higher inflation pressure
☐ f. Lower inflation pressure
☐ g. Different guide
☐ h. Different lesion prep
☐ i. Different access site
☐ J. Thrombectomy
☐ k. Treated additional lesions
☐ l. Treated less lesions
☐ m. Different anticoagulant or antiplatelet strategy
☐ n. Other

8b. If "Other"

9. Was IVUS or OCT used for optimization during the procedure?

◯ Yes
◯ No

9a. If "Yes":

◯ a. lesion was thoroughly assessed
◯ b. lesion assessment was incomplete
◯ c. not able to see IVUS/OCT images

10. Based on the clinical and procedural data available, would you have used IVUS or OCT to optimize the treatment of this lesion?

◯ Yes
◯ No

Quality of Shock Management

11. Based on the clinical data available, would you have managed the patient's shock in the cath lab in the same manner?

◯ Yes
◯ Yes, but I would have also used (select from list below)
◯ No-I would have managed differently (select from list below)

11a. Please select the items you would have used/used differently

☐ a. Right heart catheterization
☐ b. Different initial mechanical support strategy
☐ c. Timing of placement of mechanical support
☐ d. Alternative vasopressor/inotrope
☐ e. More frequent metabolic monitoring (e.g. ABG's, lactate)
☐ f. Airway management
☐ g. Vascular access management
☐ h. Escalation of mechanical support (patient was under supported by device in place upon exit of cath lab)
☐ i. Other-please indicate

11b. If, "Different initial mechanical support strategy" and/or "Escalation of mechanical support" please select the support device(s) you would have utilized.

☐ a. IABP
☐ b. Impella CP
☐ c. ECMO
☐ d. Tandem Heart
☐ e. Right ventricular support

11c. If "Other" please indicate which other devices and/or technique(s) you recommend:

12. Based on the clinical data available, would you have managed the patient's shock after the procedure in the same manner?

◯ Yes
◯ Yes, but I would have also uses (select from list below)
◯ No-I would have managed differently (select from list below)

12a. Please select the items you would have used/used differently

☐ a. Different initial mechanical support strategy
☐ b. Timing of placement of mechanical support
☐ c. Alternative vasopressor/inotrope
☐ d. More frequent metabolic monitoring
☐ e. Airway management
☐ f. Vascular access management
☐ g. Escalation of mechanical support (patient was under supported by device in place after initial PCI procedure)
☐ h. Other-please indicate

12b. If, "Different initial mechanical support strategy" and/or "Escalation of mechanical support" please select the support device(s) you would have utilized.

☐ a. IABP
☐ b. Impella CP
☐ c. ECMO
☐ d. Tandem Heart
☐ e. Right ventricular support

12c. If "Other" please indicate which other devices and/or technique(s) you recommend:

Procedural Complications

13. Was there a procedural complication (cardiac arrest, vascular complication, no reflow, other)?

◯ Yes
◯ No

13a. Cardiac arrest

◯ Yes
◯ No

13a.1 Of the options below, what do you consider the cardiac arrest was most related to?

◯ a. The complication was related to the operator's technique and was something that most operators could have avoided
◯ b. The complication was related to patient factors but was something that most operators could have avoided
◯ c. The complication was related to patient factors and not avoidable

13a.2 Was the cardiac arrest appropriately treated? (please pick one)

◯ a. Yes, the complication was appropriately recognized and treated.
◯ b. No, the treatment was delayed or inadequate and could have resulted in patient harm.
◯ c. No, the complication was inadequately treated and resulted in patient harm.

13b. Vascular Complication

◯ Yes
◯ No

13b.1 Of the options below, what do you consider the vascular complication was most related to?

◯ a. The complication was related to the operator's technique and was something that most operators could have avoided
◯ b. The complication was related to patient factors but was something that most operators could have avoided
◯ c. The complication was related to patient factors and was not avoidable

13b.2 Was the vascular complication appropriately treated? (please pick one)

◯ a. Yes, the complication was appropriately recognized and treated.
◯ b. No, the treatment was delayed or inadequate and could have resulted in patient harm.
◯ c. No, the complication was inadequately treated and resulted in patient harm.

13c. No reflow

◯ Yes
◯ No

13c.1 Of the options below, what do you consider the no reflow was most related to?

◯ a. The complication was related to the operator's technique and was something that most operators could have avoided
◯ b. The complication was related to patient factors but was something that most operators could have avoided
◯ c. The complication was related to patient factors and not avoidable

13c.2 Was the no reflow complication appropriately treated? (please pick one)

◯ a. Yes, the complication was appropriately recognized and treated.
◯ b. No, the treatment was delayed or inadequate and could have resulted in patient harm.
◯ c. No, the complication was inadequately treated and resulted in patient harm.

13d. Other

◯ Yes
◯ No

13d + Please enter what other type of complication you noted.

_____

13d.1 Of the options below, what do you consider the "other" complication was most related to?

◯ 1. a. The complication was related to the operator's technique and was something that most operators could have avoided
◯ b. The complication was related to patient factors but was something that most operators could have avoided
◯ c. The complication was related to patient factors and not avoidable

13d.2 Was the "other" complication appropriately treated? (please pick one)

◯ a. Yes, the complication was appropriately recognized and treated.
◯ b. No, the treatment was delayed or inadequate and could have resulted in patient harm.
◯ c. No, the complication was inadequately treated and resulted in patient harm.

Comments:
((Please provide some comments on what you think caused the complication or what the operator could have done to prevent or better treat the complication (e.g. different anticoagulation strategy, access management strategy, etc.))

Overall Procedural Results

14. Was the procedure result suboptimal and/or unsuccessful?

◯ Yes
◯ No

14a. If "Yes," please mark if any or all of these factors apply
(Mark if any of these contributed or apply (select as many of the factors that you believe contributed to the suboptimal result)

☐ a. Ventricular support strategy- The operator's ventricular support strategy (device type, timing) was wrong and contributed to the patient's complication or outcome.
☐ b. Shock management- the operator's integration of hemodynamic and metabolic data (intracardiac hemodynamics, ABG, lactate) was wrong or absent and contributed to the patient's complication or outcome.
☐ c. Vascular access- the operator's vascular access technique was incorrect and contributed to the patient's complication or outcome.
☐ d. Ventricular support escalation- The operator's initial ventricular support strategy left the patient undersupported without a plan for escalation (transfer, consultation for ECMO/Impella 5.5 or RV support) and this contributed to the patient's complication or outcome.
☐ e. Anticoagulant or antiplatelet strategy- The operator's anticoagulant or antiplatelet strategy (drug, drug dose, both) was wrong and contributed to the patient's complication
☐ f. Procedural technique- The operator's procedural technique (guide catheter selection, wire choice, lesion preparation, stenting strategy) was wrong and contributed to the patient'scomplication or outcome.

Please provide some feedback to the operator or the institution on what you feel should have been done differently in this setting (e.g. specific guiding catheter choices that might work, use of a more/less potent anticoagulant, etc.)

15. Please rate the overall intervention on a scale of 1-5:

◯ 1. The procedure performance and outcome are great and I would be delighted with this if it was my patient, my family member, or myself.
◯ 2. The procedure result is acceptable and while some operators might have performed the procedure differently, the overall results are acceptable
◯ 3. The procedure result is adequate, but most operators would have performed the procedure differently
◯ 4. The procedure is suboptimal and should be discussed at M and M
◯ 5. The procedure needs peer review

If you chose 3-5, please consider providing some feedback: