

Office of Health Care  
Root Cause Analysis Eva

**Hospital:** \_\_\_\_\_ **OHCQ Case Number:** \_\_\_\_\_

	<b>Element (All elements are required)</b>	<b>Guidelines</b>	<b>OHCQ Score</b>
1	Categorization Score- Must be present	Indicate which level (according to COMAR 10.07.06)	
		Level 1--An adverse event that results in death or serious disability.	
		Level 2--An adverse event that requires medical intervention to prevent death or serious disability.	
		Level 3--An adverse event that does not result in death or serious disability and does not require medical intervention to prevent death or serious disability.	
		Near Miss - a situation that could have resulted in an adverse event but did not, either by chance or through timely intervention.	
2	Multi-disciplinary RCA team COMAR 10.07.06.06A	List participants by title. Some participants but not necessarily all should have a knowledge of the processes or systems being analyzed.	met
3	Brief description of event	Include details of event, date, day of week and time event occurred, and the area/service involved. Include timeline if appropriate.	met
		Has a similar event occurred in the facility in the past? Look at previous outcomes to determine if actions were effective.	
4	Diagram or narrative analysis of cause and effect 10.07.06.06C	Identify which was used and identify whether diagram indicated process as it actually worked (or did not work) during adverse event, or if diagram indicates process as it should work. No need to include diagram with RCA submission.	Not met
5	Analysis of all available resources 10.07.06.06C 4	Has RCA team looked at all medical records, policies and procedures, maintenance logs, committee minutes, etc., necessary to identify all factors relevant to event. Have all pertinent staff been interviewed?	met
	Analysis of cause and effect through: 10.07.06.06C 3		

6	Analysis of human factors 10.07.06.06C 1	Includes communication, training, competencies, staffing, and fatigue/scheduling	Not met
7	Analysis of equipment and environment 10.07.06.06C 1	Includes availability of needed equipment, equipment performance and maintenance, and identification of uncontrollable environmental factors	Not met
8	Analysis of policies and procedures 10.07.06.06C 3	Includes identification of barriers to compliance with P&Ps	Not met
9	Identification of risks and possible contributing factors 10.07.06.06C 4	Include possible barriers to identifying, reporting, and responding to risks. Identify if risks or possible contributing factors to this adverse event continue to exist at the time of the RCA, or if all risks and contributing factors were eliminated in the immediate aftermath of the adverse event.	met
10	Analysis of related processes and systems 10.07.06.06C 2	Identify if risks or possible contributing factors may affect other areas/processes in the hospital.	Not met
11	Clearly identified Root Cause contributing factors 10.07.06.06C 4	List as many as applicable. Must (1) clearly show cause and effect,	Not met
		(2) be specific and accurate, avoid negative and vague words like wrong, bad, careless, etc	
		(3) identify the preceding cause(s) of human error, identify systems vs. people issues, avoid blame	
		(4) identify the preceding cause(s) of relevant procedure violations, identify normal operating procedures vs. ideal (as per policy).	

12	Identify corrective action 10.07.06.02B	Must include specific measures to correct problems or areas of concern and specific measures to address areas of system improvement	Not met
		<p><i>Actions can be defined as stronger, intermediate, or weaker actions and can be classified as controlling, eliminating, or accepting the root cause or risk. Identify mechanisms to compensate for uncontrollable environmental factors. Stronger actions include architectural/physical plant changes, tangible involvement &amp; action by leadership, simplifying the process, standardizing equipment or processes, and/or implementing a new device that's had usability testing performed. Intermediate actions include checklists, cognitive aids, staffing changes, readbacks, enhanced documentation and communications, software enhancements/modifications, elimination of look- and sound-alikes, and eliminating or reducing distractions.</i></p>	
		<p><i>Weaker actions include redundancy/double checks, warnings and labels, new procedures/ memorandum/ policy, training, and additional study and analysis. Wherever possible, develop actions that do not rely on the memories of staff members.</i></p>	
13	10.07.06.02B	Time frames for implementing specific measures.	met

14	10.07.06.02B	Title of person responsible for implementation and effectiveness.	met
15	Outcome measures 10.07.06.05A 5	Must be more than a restatement of the actions. Must be quantifiable with defined numerators, denominators, and thresholds. Set realistic and achievable thresholds for performance. Include any physical/operational changes to be implemented.	Not met
		Must measure impact on the root cause or adverse event. Measure effectiveness of actions, not steps in process to implement actions. For instance: Falls assessment will occur on 100% of patients admitted from nursing homes..., not: A falls assessment tool will be developed by..., staff will be trained by ..., etc.	
16	Feedback to staff 10.07.06.06E	The hospital shall provide feedback including changes to hospital policy or procedure resulting from the RCA to hospital employees and staff who were involved in the event or who could benefit from the feedback.	met
17	Leadership concurrence for corrective actions 10.07.06.03B 3	Leadership concurrence for corrective actions. Identify by job title/date. If this is through the committee structure, identify committee.	met
18	Relevant literature considered 10.07.06.06D 2	List relevant literature considered	Not met
<b>For Office of Health Care</b>			
	Date event reported to Office of Health Care Quality		
	Date of RCA		

Quality  
Evaluation Tool

**Date of Event:**

Comments
Level 1 delay in treatment
78 y/o patient admitted 7/13/xx with CAP and untreated COPD. Initially in hospital, then to IMC. Temp to 102.9 on 8/3. BC sent. On 8/4, patient lethargic, hypoxic with SaO2 <90, hypotensive. At change of shift, B/P to 50s, decision to transfer to ICU. Patient with agonal respirations when RN transferred him to ICU without monitor. Tele tech noted asystole and called RN and unit several times. Arrived to ICU pulseless and apneic. Could not be resuscitated
Narrative explains what happened but not why, and no analysis of cause and effect present.
However, RCA demonstrates a fairly shallow review

RCA has insufficient analysis of human factors. RCA mentions MD timing of order to transport to ICU, but does not explain what nursing staff were doing all day. Did the patient's nurse recognize the seriousness of his condition? Was charge nurse or nurse manager aware of situation. Did anyone call a RRT? This patient was quite sick all day with hypotension and hypoxia, why was the response so slow? Why did the intensivist and the hospitalist not communicate with each other? Why were so many assumptions made? Again, RCA explains what happened but not why. Why did so many presumably well-trained and skilled staff and MDs fail to treat this patient in a timely manner?

Why are all phones swapped out at the same time? What happened with the tele tech and why did no one respond to the phone calls from tele? Do the tele techs have the authority, training, etc. to call a code for a dire rhythm if they are not getting any response from the unit? What is the backup plan for change of shift? Are there other ways of communicating critical information that needs immediate action? Have you talked to your IT staff?

RCA contains no analysis of why policies were not followed.

However, corrective actions are insufficient to eliminate or overcome the barriers inherent in this event. Other patients remain at risk. The hospital has to make it easier for staff to do the safe thing and harder to do the unsafe thing.

The many system issues in the event such as supervision, chain of command, MD hierarchy, and lack of fault tolerance (systems are designed to compensate for human error) probably affect all areas of the hospital, but patients in acute areas such as ICUs, step-down units, ORs, and procedure areas are most at risk.

RCs noted are only first-level, sharp-end causes. No system problems noted in RCs.

Planned corrective actions are insufficient to prevent a recurrence. Actions are directed at the bedside. RCA contains no analysis of underlying system problems, therefore action items do not go deep enough to effect real change. For instance, Item no. 1 says that new policies and processes will be developed for change of shift. What specific changes do you plan to make? Will the new policies include back-up plans for the lack of phones? Will the telemetry techs have well-defined procedures for notifications in the event that they can't get the patient's nurse? Is it feasible to make them responsible for calling codes when they can't get a response. Can you switch out half the phones at 7AM and half at 7PM? What about the charge nurse's phone? What are the hospital's expectations regarding nursing supervision? Do your charge nurses and NMs actively engage staff during the shift to identify and remediate patient care problems before they become dire? Are the expectations regarding communication among team members well known and unambiguous? Systems have to be defined to compensate for human error. Staff expectations must be clear. Revised policies and staff education will not prevent a recurrence.

However, this event occurred Aug 4. Waiting until Oct. 31 to implement corrective actions is rather long considering the severity of the event.

The outcome measure listed are really process measures, in that they measure the completion of the process. The outcome measures must measure the impact of the corrective actions on the root causes. What do you expect to have happen as a result of these new policies and education? Are your expectations clear to the staff? What will you do with non-compliance? Can you measure the impact of these new behaviors on patient care? Can you identify patient-centric outcomes?

AVP of Quality and Med Staff and VP of Nursing on the RCA team.

Suggest review of literature related to team dynamics and communication along with fault tolerance.

**Quality use only**