ROOT CAUSE ANALYSIS AND ACTION PLAN FRAMEWORK TEMPLATE

The Joint Commission Root Cause Analysis and Action Plan tool has 24 analysis questions. The following framework is intended to provide a template for answering the analysis questions and aid organizing the steps in a root cause analysis. All possibilities and questions should be fully considered in seeking “root cause(s)” and opportunities for risk reduction. Not all questions will apply in every case and there may be findings that emerge during the course of the analysis. Be sure however to enter a response in the “Root Cause Analysis Findings” field for each question #. For each finding continue to ask “Why?” and drill down further to uncover why parts of the process occurred or didn’t occur when they should have. Significant findings that are not identified as root causes themselves have “roots”.

As an aid to avoid “loose ends,” the two columns on the right are provided to be checked off for later reference:

- “Root cause” should be answered “Yes” or “No” for each finding. A root cause is typically a finding related to a process or system that has a potential for redesign to reduce risk. If a particular finding is relevant to the event is not a root cause, be sure that it is addressed later in the analysis with a “Why?” question such as “Why did it contribute to the likelihood of the event” or “Why did it contribute to the severity of the event?” Each finding that is identified as a root cause should be considered for an action and addressed in the action plan.
- “Plan of action” should be answered “Yes” for any finding that can reasonably be considered for a risk reduction strategy. Each item checked in this column should be addressed later in the action plan.
When did the event occur?

<table>
<thead>
<tr>
<th>Date:</th>
<th>Day of the week:</th>
<th>Time:</th>
</tr>
</thead>
</table>

Detailed Event Description Including Timeline:

Diagnosis:

Medications:

Autopsy Results:

Past Medical/Psychiatric History:
<table>
<thead>
<tr>
<th>#</th>
<th>Analysis Question</th>
<th>Prompts</th>
<th>Root Cause Analysis Findings</th>
<th>Root cause</th>
<th>Plan of Action</th>
</tr>
</thead>
</table>
| 1 | What was the intended process flow?                                              | List the relevant process steps as defined by the policy, procedure, protocol, or guidelines in effect at the time of the event. You may need to include multiple processes. **Note:** The process steps *as they occurred in the event* will be entered in the next question. Examples of defined process steps may include, but are not limited to:  
  - Site verification protocol  
  - Instrument, sponge, sharps count procedures  
  - Patient identification protocol  
  - Assessment (pain, suicide risk, physical, and psychological) procedures  
  - Fall risk/fall prevention guidelines |                                                                            |                          |               |
| 2 | Were there any steps in the process that did not occur as intended?              | Explain in detail any deviation from the intended processes listed in Analysis Item #1 above.                                                                                                                                                                      |                             |            |                |
| 3 | What human factors were relevant to the outcome?                                 | Discuss staff-related human performance factors that contributed to the event. Examples may include, but are not limited to:  
  - Boredom  
  - Failure to follow established policies/procedures  
  - Fatigue  
  - Inability to focus on task  
  - Inattentional blindness/confirmation bias  
  - Personal problems  
  - Lack of complex critical thinking skills  
  - Rushing to complete task  
  - Substance abuse  
  - Trust |                             |                          |               |
<p>| 4 | How did the equipment performance affect the outcome?                            | Consider all medical equipment and devices used in the course of patient care, including AED devices, crash carts, suction, oxygen, instruments, monitors, infusion equipment, etc.                                                                                   |                             |            |                |</p>
<table>
<thead>
<tr>
<th>#</th>
<th>Analysis Question</th>
<th>Prompts</th>
<th>Root Cause Analysis Findings</th>
<th>Root cause</th>
<th>Plan of Action</th>
</tr>
</thead>
</table>
|   |                                                                                  | **In your discussion, provide information on the following, as applicable:**  
|   |                                                                                  |  
|   |                                                                                  |   - Descriptions of biomedical checks  
|   |                                                                                  |   - Availability and condition of equipment  
|   |                                                                                  |   - Descriptions of equipment with multiple or removable pieces  
|   |                                                                                  |   - Location of equipment and its accessibility to staff and patients  
|   |                                                                                  |   - Staff knowledge of or education on equipment, including applicable competencies  
|   |                                                                                  |   - Correct calibration, setting, operation of alarms, displays, and controls  
| 5 | What controllable environmental factors directly affected this outcome?          | **What environmental factors within the organization’s control affected the outcome?**  
|   |                                                                                  | Examples may include, but are not limited to:  
|   |                                                                                  |   - Overhead paging that cannot be heard  
|   |                                                                                  |   - Safety or security risks  
|   |                                                                                  |   - Risks involving activities of visitors  
|   |                                                                                  |   - Lighting or space issues  
|   |                                                                                  | The response to this question may be addressed more globally in Question #17. This response should be specific to this event.                                                                                                                                                                       |                                                                                                 |            |               |
| 6 | What uncontrollable external factors influenced this outcome?                    | **Identify any factors the organization cannot change that contributed to a breakdown in the internal process, for example natural disasters.**                                                                                                                                                                                                                     |                                                                                                 |            |               |
| 7 | Were there any other factors that directly influenced this outcome?              | **List any other factors not yet discussed.**                                                                                                                                                                                                                                                                                                                 |                                                                                                 |            |               |
| 8 | What are the other areas in the organization where this could happen?           | **List all other areas in which the potential exists for similar circumstances. For example:**  
|   |                                                                                  |   - Inpatient surgery/outpatient surgery  
|   |                                                                                  |   - Inpatient psychiatric care/outpatient psychiatric care  

Page 4
<table>
<thead>
<tr>
<th>#</th>
<th>Analysis Question</th>
<th>Prompts</th>
<th>Root Cause Analysis Findings</th>
<th>Root cause</th>
<th>Plan of Action</th>
</tr>
</thead>
</table>
| 9  | Was the staff properly qualified and currently competent for their responsibilities at the time of the event? | Include information on the following for all staff and providers involved in the event. Comment on the processes in place to ensure staff is competent and qualified. Examples may include but are not limited to:  
- Orientation/training  
- Competency assessment (What competencies do the staff have and how do you evaluate them?)  
- Provider and/or staff scope of practice concerns  
- Whether the provider was credentialed and privileged for the care and services he or she rendered  
- The credentialing and privileging policy and procedures  
- Provider and/or staff performance issues |                                                                           |                          |                |
| 10 | How did actual staffing compare with ideal levels?                               | Include ideal staffing ratios and actual staffing ratios along with unit census at the time of the event. Note any unusual circumstance that occurred at this time. What process is used to determine the care area’s staffing ratio, experience level and skill mix?                                                                                                               |                                                                           |                          |                |
| 11 | What is the plan for dealing with staffing contingencies?                         | Include information on what the organization does during a staffing crisis, such as call-ins, bad weather or increased patient acuity. Describe the organization’s use of alternative staffing. Examples may include, but are not limited to:  
- Agency nurses  
- Cross training                                                                 |                                                                           |                          |                |
<table>
<thead>
<tr>
<th>#</th>
<th>Analysis Question</th>
<th>Prompts</th>
<th>Root Cause Analysis Findings</th>
<th>Root cause</th>
<th>Plan of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Float pool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mandatory overtime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• PRN pool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Were such contingencies a factor in this event?</td>
<td>If alternative staff were used, describe their orientation to the area, verification of competency and environmental familiarity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Did staff performance during the event meet expectations?</td>
<td>Describe whether staff performed as expected within or outside of the processes. To what extent was leadership aware of any performance deviations at the time? What proactive surveillance processes are in place for leadership to identify deviations from expected processes? Include omissions in critical thinking and/or performance variance(s) from defined policy, procedure, protocol and guidelines in effect at the time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>To what degree was all the necessary information available when needed?</td>
<td>Discuss whether patient assessments were completed, shared and accessed by members of the treatment team, to include providers, according to the organizational processes. Identify the information systems used during patient care. Discuss to what extent the available patient information (e.g. radiology studies, lab results or medical record) was clear and sufficient to provide an adequate summary of the patient’s condition, treatment and response to treatment. Describe staff utilization and adequacy of policy, procedure, protocol and guidelines specific to the patient care provided.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>To what degree was the communication among participants adequate for this situation?</td>
<td>Analysis of factors related to communication should include evaluation of verbal, written, electronic communication or the lack thereof. Consider the following in your response, as appropriate: • The timing of communication of key information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Analysis Question</td>
<td>Prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|    |                                                                                  | • Misunderstandings related to language/cultural barriers, abbreviations, terminology, etc.  
• Proper completion of internal and external hand-off communication  
• Involvement of patient, family and/or significant other                                                                                                                                                                                                                       |
| 16 | Was this the appropriate physical environment for the processes being carried out for this situation? | Consider processes that proactively manage the patient care environment. This response may correlate to the response in question 6 on a more global scale.  
What evaluation tool or method is in place to evaluate process needs and mitigate physical and patient care environmental risks?  
How are these process needs addressed organization-wide?  
Examples may include, but are not limited to:  
• alarm audibility testing  
• evaluation of egress points  
• patient acuity level and setting of care managed across the continuum,  
• preparation of medication outside of pharmacy |
| 17 | What systems are in place to identify environmental risks?                       | Identify environmental risk assessments.  
• Does the current environment meet codes, specifications, regulations?  
• Does staff know how to report environmental risks?  
• Was there an environmental risk involved in the event that was not previously identified?                                                                                                                                                                                                 |
| 18 | What emergency and failure-mode responses have been planned and tested?         | Describe variances in expected process due to an actual emergency or failure mode response in connection to the event.  
Related to this event, what safety evaluations |
<table>
<thead>
<tr>
<th>#</th>
<th>Analysis Question</th>
<th>Prompts</th>
<th>Root Cause Analysis Findings</th>
<th>Root cause</th>
<th>Plan of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>and drills have been conducted and at what frequency (e.g. mock code blue, rapid response, behavioral emergencies, patient abduction or patient elopement)? Emergency responses may include, but are not limited to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• External disaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mass casualty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Medical emergency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure mode responses may include, but are not limited to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computer down time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diversion planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facility construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Power loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Utility issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>How does the organization’s culture support risk reduction?</td>
<td>How does the overall culture encourage change, suggestions and warnings from staff regarding risky situations or problematic areas?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How does leadership demonstrate the organization’s culture and safety values?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How does the organization measure culture and safety?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How does leadership establish methods to identify areas of risk or access employee suggestions for change?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How are changes implemented?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>What are the barriers to communication of potential risk factors?</td>
<td>Describe specific barriers to effective communication among caregivers that have been identified by the organization. For example, residual intimidation or reluctance to report co-worker activity. Identify the measures being taken to break</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Analysis Question</td>
<td>Prompts</td>
<td>Root Cause Analysis Findings</td>
<td>Root cause</td>
<td>Plan of Action</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>down barriers (e.g. use of SBAR). If there are no barriers to communication discuss how this is known.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>How is the prevention of adverse outcomes communicated as a high priority?</td>
<td>Describe the organization’s adverse outcome procedures and how leadership plays a role within those procedures.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>How can orientation and in-service training be revised to reduce the risk of such events in the future?</td>
<td>Describe how orientation and ongoing education needs of the staff are evaluated and discuss its relevance to event. (e.g. competencies, critical thinking skills, use of simulation labs, evidence based practice, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 23 | Was available technology used as intended?                                      | Examples may include, but are not limited to:  
  - CT scanning equipment  
  - Electronic charting  
  - Medication delivery system  
  - Tele-radiology services |                              |            |               |
| 24 | How might technology be introduced or redesigned to reduce risk in the future?   | Describe any future plans for implementation or redesign. Describe the ideal technology system that can help mitigate potential adverse events in the future. |                              |            |               |
For each of the findings identified in the analysis as needing an action, indicate the planned action expected, implementation date and associated measure of effectiveness. OR …

If after consideration of such a finding, a decision is made not to implement an associated risk reduction strategy, indicate the rationale for not taking action at this time.

Check to be sure that the selected measure will provide data that will permit assessment of the effectiveness of the action.

Consider whether pilot testing of a planned improvement should be conducted.

Improvements to reduce risk should ultimately be implemented in all areas where applicable, not just where the event occurred. Identify where the improvements will be implemented.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Item #1:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #2:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #3:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #4:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #5:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #6:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #7:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item #8:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bibliography: Cite all books and journal articles that were considered in developing this root cause analysis and action plan.