

## Assessment Tool for a Problem-Solving (Proposal) A3

**A3 Title:** (Ex. 1) Where's the Cath??? Increasing outside cardiac cath films arriving with transferred patients

**Author:** XXXXX

**Reviewer:** XXXXX

**Date:** XXXXX

Items (based on A3 Template) and Rating Scale	Rating
<b>Background</b> <i>Why is the problem important?</i>	
<p>1. <b>Negative consequences</b> (e.g., harm, frustration, waste): how specific is the clearest statement of a negative consequence of the problem?</p> <p>0. Not addressed      1. Unclear      2. General (eg, "harm," "difficulties," "waste")      3. Specific type of consequence</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Rating.</u> 3. Specific type of consequence</p> <p><u>Explanation.</u> The Background identifies several types of consequences: "delays in care...with potential for <u>harm to patients</u>," "<u>financial consequences to institution</u>," "<u>less satisfied patients and families</u>," and "<u>frustrated staff</u>." One clearly specified negative consequence is sufficient for rating "3. Specific type of consequence."</p> <p>Would be "2. General" if negative consequences were identified broadly without clarifying the specific type of consequence (e.g., "difficulties for patients" rather than "increased complication rate," "problems for the institution" rather than "financial consequences to institution)."</p> </div>	
<p>2. <b>Individuals/groups</b> impacted by the negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement identifying an impacted individual, group/unit, or organization?</p> <p>0. Not addressed      1. Unclear      2. General (eg, "staff," or "patients," but not which)      3. Specific individual, group, or organizational unit</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Rating.</u> 3. Specific individual, group, or organizational unit</p> <p><u>Explanation.</u> The Background identifies several impacted entities: "delays in care...with potential for harm to <u>patients</u>," "<u>financial consequences to institution</u>," "<u>less satisfied patients and families</u>," and "<u>frustrated staff</u>." One clearly specified impacted entity is sufficient for rating "3. Specific individual, group, or organizational unit."</p> <p>Would be "2. General" if impacted individuals or entities were identified broadly without clarifying the specific type of individuals/entities (e.g., "patients" rather than "patients transferred from outside the hospital to the cardiology service").</p> </div>	
<p>3. <b>Severity</b> of the negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement of the severity (e.g., extent/amount) of at least one negative consequence?</p> <p>0. Not addressed      1. Unclear      2. General (eg, significant harm)      3. Specific extent/amount</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Rating.</u> 3. Specific extent/amount</p> <p><u>Explanation.</u> The Background clearly specifies the extent/amount of some impacts: "repeat procedures [average of 6/month], with unnecessary healthcare costs [average of \$3,200/study]" and "we lose &gt; \$350,000 in revenue <u>annually</u> from blocked Cardiology admissions." The Background also provides descriptions of the extent of consequences: "delays in patient care of hours to several days, with <u>potential for harm to patients</u>," "repeat procedures [average of 6/month], with associated <u>potential for clinical complications</u> for patients," "<u>less satisfied patients and families</u>," and "<u>frustrated staff</u>." One clearly specified extent/amount of severity is sufficient for rating "3. Specific extent/amount."</p> <p>Would be "2. General (e.g., significant harm)" if the impacts were described only in general terms (e.g., potential for harm, potential for clinical complications, less satisfied or frustrated individuals, increased cost) without indicating the extent of harm, extent of lowered satisfaction, or amount of cost.</p> </div>	
<p>4. <b>Frequency</b> of the negative consequences (e.g., harm, frustration, waste): how specific is clearest statement of the frequency (# events/unit of time) of at least one negative consequence?</p> <p>0. Not addressed      1. Unclear      2. General (eg, rare, often)      3. Specific frequency (eg, events per unit of time)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Rating.</u> 3. Specific frequency (e.g., events per unit of time)</p> <p><u>Explanation.</u> The Background specifies the frequency of some negative consequences: "repeat procedures [average of 6/month]" and "we lose &gt; \$350,000 in revenue <u>annually</u>." However, frequency is not clear for other negative consequences: "delays in patient care of hours to several days," "potential for harm," "potential clinical</p> </div>	

complications, "less satisfied," "frustrated." One clearly specified frequency of negative outcomes is sufficient for rating "3. Specified."

*Note: the Background does specify the frequency of the performance problem "imaging studies . . . arrive less than half [329/744] of the time", however, if negative consequences do not occur every time the performance problem occurs, the frequency of the performance problem does not indicate the frequency of negative consequences, and the frequency of negative consequences must be separately addressed.*

Would be "2. General (e.g., rare, often)" if only a general sense of frequency of the resulting harm (e.g., occasionally, majority of the time) were indicated.

➤ Extent to which important negative consequences (e.g., harm, frustration, waste) are identified?

None      Inadequate      Adequate      Thorough      Cannot assess

Cannot assess

*Background – reviewer comments:*

**Current Situation** *What is actually happening?*

5. Current level of performance

0. Not addressed      1. General words, but no data      2. Some data      3. Thorough and robust data

3

Rating. 3. Thorough and robust data

Explanation. In Background: "imaging studies...arrived before or with the patient less than half (329/744) of the time." In Current State, the table includes three months of baseline data for transfers arriving with films available.

Would be "2. Some data" if a general quantitative statement were made about performance (e.g., less than half of the time) were made or if data were questionable (e.g., based on a very small number of patients).

6. How is work done (process/workflow)?

0. Not addressed      1. Addressed, but unclear      2. Illustration/ description somewhat clear      3. Illustration/ description very clear

3

Rating. 3. Illustration/description very clear

Explanation. In Current State: The process map shows the process steps, their sequence, and who carries out each step. Problems and delays in the process are highlighted. The map would be even more informative if the time delays were quantified.

Would be "2. Illustration/description somewhat clear" if a process map or other description were present that included most key process steps and usually indicated who would perform them.

7. Clear identification of who is involved in performing the work?

0. Not addressed      1. Unclear      2. Somewhat clear      3. Very clear

3

Rating. 3. Very clear

Explanation. The process map in Current State includes who is involved in performing each step of the work.

Would be "2. Somewhat clear" if individuals (e.g., nurses, residents) involved in performing the work were indicated for some parts of the work, but not for other parts of the work.

8. Performance problem/gap?

0. Not addressed      1. Unclear      2. Partially specified      3. Clearly specified/quantified

3

Rating. 3. Clearly specified/quantified

Explanation. In Background "...less than half (329/274) of the time". In Current State data are provided for three months. In Problem Statement the performance gap is clearly articulated ("Only 44% of outside hospital transfers . . .").

Would be "2. Partially specified" if the performance problem/gap were written with some general language (e.g., "less than half") or did not state the time frame for the measurement.

➤ Extent to which the A3 author demonstrates direct observation of the work process?

Not observed      A little      Some      All      Cannot assess

Cannot assess

➤ Extent of demonstration of learning from the people involved in the process?

None      A little      Some      All      Cannot assess

Cannot assess

*Current Situation – reviewer comments:***Goal** *What target condition or specific performance is desired? By when?*9. How specific is the goal?

0. Not addressed      1. Vague      2. Somewhat specific      3. Very specific

3

Rating. 3. VeryExplanation. In Goal: "Increase % of transfer patients arriving with outside catheterization study films from 44% to >75%..."

Would be "2. Somewhat specific" if the goal were stated quantitatively in relative terms (e.g., improve the availability of cath films by 55 percentage points) without specifying the baseline or actual target goal.

10. Is the goal measurable?

0. Not addressed      1. Not measurable      2. May be measurable      3. Clearly measurable

3

Rating. 3. Clearly measurableExplanation. In Goal: "... from 44% to >75%" is a rate that has been measured in the past and therefore is likely to be measurable in the future.

Would be "2. May be measurable" if the goal were to improve an aspect of performance that has not been measured (e.g., no baseline data), but may be measurable from routinely available data sets (e.g., in an electronic health record).

➤ How achievable is the goal?

Not achievable      Unlikely      Possibly      Probably      Cannot assess

Cannot assess

11. How relevant is the goal to addressing the problem?

0. Not addressed      1. Not relevant      2. Somewhat relevant      3. Very relevant

3

Rating. 3. Very relevantExplanation. In Goal: "To increase % of transfer patients arriving with outside ...films" directly addresses the gap identified in Problem Statement: "Less than half of outside hospital transfers to the Cardiology Service arrive with necessary catheterization study films".

Would be "2. Somewhat relevant" if the goal were only generally related to the problem statement (e.g., goal discussed improving some aspect of communication with an outside hospital around the transfer process, but did not specifically relate to obtaining outside films).

12. How time-bound (clear timeframe for accomplishment) is the goal?

0. Not addressed      1. Unclear      2. Somewhat clear (eg, relative timeframe)      3. Very clear (eg, date specified)

3

Rating. 3. Very clearExplanation. In Goal: "...by April 2018." sets a clear, specified deadline. By April 1, 2018 or by April 30, 2018 would be even clearer.

Would be "2. Somewhat clear" if the goal were to state a more relative timeline (e.g., 6 months "following countermeasure implementation").

Goal – reviewer comments:

### Analysis *What is contributing to the problem? What are its root causes?*

13. Is the display of method(s) for analyzing root causes easy to understand? (E.g., fishbone diagram, “5-whys”/root cause tree diagram, Pareto chart)

0. Not displayed      1. Not understandable      2. Partially understandable      3. Easy to understand

3

Rating. 3. Easy to understand

Explanation. In Analysis: Fishbone diagram with clear categories---easy to understand.

Would be “2. Partially understandable” if some parts of the visuals were understandable and some of the logic could be followed, but other parts were unclear (e.g., if a fishbone was included, but “ribs” were not labeled).

14. How clear are the identified root causes?

0. Not addressed      1. Unclear      2. Somewhat clear      3. Very clear

3

Rating. 3. Very clear

Explanation. In Analysis: the fishbone diagram identifies 7 root causes of the problem that are arrayed by category.

*Note: The analysis would be even stronger if the frequency of various causes were displayed in a Pareto chart or identified some other way.*

Would be “2. Somewhat clear” if from the written statements and visuals you could understand some of the indicated root causes, but not others.

➤ Extent to which important root causes are identified?

- None      Inadequate      Adequate      Thorough      Cannot assess

Cannot assess

Analysis – reviewer comments:

### Countermeasures *What options/alternatives were considered? What countermeasures/strategies are proposed?*

15. How many options for countermeasures were considered?

0. None      1. One      2. Two      3. Three or more

3

Rating. 3. Three or more

Explanation. In Proposed Countermeasures and Future State: three countermeasures are proposed. A map of how their implementation would change the work is included.

Would be “2. Two” if two countermeasures were included.

*Note: This item emphasizes considering options for more than one or two countermeasures. In the two supplementary items at the end of the Countermeasures section, someone familiar with the local circumstances can indicate whether proposed countermeasures (however many) are feasible and are likely to achieve the goal.*

16. Identify the strongest countermeasure considered. How strong is it?

0. No counter-measures      1. Weak (e.g., policy change, education and training)      2. Intermediate (e.g., standard work/roles, just-in-time reminders, or visual/cognitive aids)      3. Strong (e.g., “forcing function” that ensures work done right way)

3

Rating. 3. Strong

Explanation. In Countermeasures: the required field in the electronic transfer note template forces collection of information needed to perform the next step of the work in a timely and complete manner.

Would be “2. Intermediate (e.g., standard work/roles, just-in-time reminders, or visual/cognitive aids)” if the only countermeasure were “new Resident Assistant standard work.”

*Note: Although strong countermeasures are often not feasible, combining two or more weak or intermediate countermeasures may be sufficient.*

17. How many of the proposed countermeasures are linked to identified root causes? (Review each countermeasure and see if it addresses a root cause identified in the Analysis Section.)

0. None linked to causes      1. Minority linked to causes      2. Majority linked to causes      3. All linked to causes

3

Rating. 3. All linked to causes

Explanation. The color-coded stars in the Analysis section and in the Countermeasures section show the linkage between types of causes in the Analysis section to the countermeasures addressing those causes.

Would be “2. Majority linked to causes” if the majority (i.e., more than half), but not all of the countermeasures were explicitly linked to (address) root causes.

➤ To what extent are countermeasures feasible to carry out?

Not feasible      Unlikely      Possibly      Highly likely      Cannot assess

Cannot assess

➤ How likely will countermeasures result in achieving the goal?

Not possible      Unlikely      Possibly      Highly likely      Cannot assess

Cannot assess

*Countermeasures – reviewer comments:*

**Action Plan** *To pilot & implement the selected countermeasures: what, who, when?*

18. For the action plan on the A3, how clearly are activities described (i.e. “what” is to be done)?

0. Not addressed      1. Unclear      2. Somewhat clear      3. Very clear

3

Rating. 3. Very clear

Explanation. In Action Plan the column labeled “What” lists 7 sets of activities to be performed.

Would be “2. Somewhat clear” if an action plan has some statements about what is to be done that are vague and others that are clear.

19. Are individuals identified to be responsible for each action item to be carried out (i.e. “who”)?

0. Not addressed      1. For the minority      2. For the majority      3. For all

3

Rating. 3. For all

Explanation. The Action Plan is set up with headings in “What/Who/When” format. All major activities (“what” is to be performed) are listed with an owner (“who”) to see that they are carried out.

Would be “2. For the majority of action items” if individuals were identified to carry out the majority (more than half, but not all) of the actions.

20. Are estimated completion dates identified for each action item (i.e. “when”)?

0. Not addressed      1. For the minority      2. For the majority      3. For all

3

Rating. 3. For all

Explanation. The Action Plan is set up with headings in “What/Who/When” format. All major activities (“what” is to be performed) are listed with an estimated date for completion.

Would be “2. For the majority of action items” if estimated completion dates were identified to carry out the majority (more than half, but not all) of the actions.

21. How clear is the plan for monitoring the implementation of actions in 18-20 above (what will be monitored, by whom, when)?

3

- |                  |   |   |   |
|------------------|---|---|---|
| 0. Not addressed | 1. Plan unclear (no or minority of actions monitored – what, who, when) | 2. Plan partially clear (majority of actions monitored – what, who, when) | 3. Plan clear (all actions monitored – what, who, when) |
|------------------|---|---|---|

Rating. 3. Clear (for all action plan activities, “what will be monitored, by whom, and when” is clear)

Explanation. The Action Plan lists five action activities (i.e. “what” to monitor). The Monitoring Plan lists four monitoring activities on whether action items are performed, with the first monitoring activity addressing both of the first two action items. Each of the monitoring activities identifies “what” is to be monitored, “who” is the lead for checking, and by “when” the checking will occur.

Would be “2. Plan partially clear” if only three or four of the action activities (majority of the five action activities) were monitored (what is to be monitored, by whom, when).”

➤ How adequate is the action plan?

Not adequate      Possibly      Probably      Very likely      Cannot assess

Cannot assess

*Action plan – reviewer comments:*

### Follow-up Plans *Checking whether desired goal(s) was achieved?*

22. Is follow-up planned to measure achievement of the desired goal(s) (what will be measured, by whom, when)?

3

- |                  |   |  |                                   |
|------------------|---|--|-----------------------------------|
| 0. Not addressed | 1. Plan unclear (no more than one of “what, who, when”) | 2. Plan partially clear (two of “what, who, when”) | 3. Plan clear (“what, who, when”) |
|------------------|---|--|-----------------------------------|

Rating. 3. Clear

Explanation. In Follow Up, the measure on “performance on cath study film availability” (“what”) to assess achievement of the desired goal (> 75%% of transfer patients arriving with outside catheterization study films). The follow-up plan also addresses “who will measure when”: the QI Analyst (“who”) will report cath film availability metric on division Quality dashboard monthly beginning 1/1/18 (“when”).

Would be “2. Partially clear” if the check on whether the desired goal is achieved identified only two of “what, who, and when.”

### Across A3 Sections

23. How clearly does the title identify the problem to be addressed?

0. No title      1. Unclear      2. Somewhat clear      3. Very clear

3

Rating. 3. Very clear

Explanation. Title: “Where’s the cath??? Increasing the % of outside cardiac catheterization films arriving with transferred patients” describes the problem to be addressed.

Would be “2. Somewhat clear” if a title were listed and it indicated the general area of concern (e.g., “Where are the cath films?” without further information in the title).

➤ How often does the logic flow clearly from one section of the A3 to the next section?

Not at all      Occasionally      Majority      Always      Cannot assess

Cannot assess

➤ In general, how informative are the visual illustrations?

None used or not informative      Not very informative      Somewhat informative      Very informative      Cannot assess

Cannot assess

*Across A3 Sections – reviewer comments:*

**OVERALL RATING** (items 1 – 23)

Total points (max = 69)

69

Mean (divide total by 23 items)

*Note: check that all 23 numbered items have been answered. Missing answers are coded "0."*

3.0