Development and Validation of an A3 Problem-Solving Assessment Tool and Self-Instructional Package for Teachers of Quality Improvement in Healthcare

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Supplemental Digital Content

A3 Assessment Tool and Instruction Package

The "A3 Assessment Toolkit" is a self-instruction package for individuals teaching quality improvement in healthcare to learn about creating A3s and about assessing them. The package provides opportunity to practice assessing A3s and to check the assessments. After learning and practicing (about 2 hours), individuals with some familiarity with A3s and with teaching quality improvement should provide reasonably reliable/consistent assessments and feedback. Individuals with less experience may need more review and practice.

The self-instruction package is available at A3 Problem-Solving Resources – Center for Healthcare Improvement & Patient Safety I University of Pennsylvania Perelman School of Medicine (https://chips.med.upenn.edu/resources/a3-problem-solving-resources/). The materials in the self-instruction package, including the A3 Assessment Tool, are included here, except as noted for items already accessible to readers of the main article.

Page # (lower right corner) Learn about the self-instruction package, assessment tool, and using them: Instructions for Assessing Problem-Solving A3s (Proposal Stage) [2 pages] 2 Learn about A3s and assessing them: A3 Template [1 page] - reproduced in main article as Figure 1 A3 Content Guide [5 pages] 4 A3 Assessment Tool [4 pages] 9 A3 Assessment Tool with Description of Response Options for Each Item [8 pages] 13 Practice assessing A3s and check your assessments: Example 1 – A3 [1 page, 11"x17"] 21 Example 1 – Assessments/explanations [7 pages] 22 Example 2 – A3 [1 page, 11"x17"] 29 Example 2 - Assessment tool to use [4 pages] - copy of A3 Assessment Tool, not reproduced here Example 2 – Assessments/explanations [7 pages] 30 Example 3 – A3 [1 page, 11"x17"] 37 Example 3 – Assessment tool to use [4 pages] – copy of A3 Assessment Tool, not reproduced here Example 3 – Assessments/explanations [7 pages] 38 **Feedback Form for Study Raters** 45

This 2-page structured feedback form with 19 open-ended items was distributed to raters at the time of the orientation phone call. Raters provided written feedback when they submitted their A3 ratings. An investigator had a debriefing phone call with each rater during which raters could clarify and elaborate their comments.

Contact for Further Information

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Instructions for Assessing Problem-Solving A3s (Proposal Stage)

Background

Healthcare professionals are now expected to improve the quality of the care they provide. Many healthcare systems and healthcare educators teach Lean Thinking as quality improvement (QI) methodology to their learners. An A3 proposal is a lean practice to summarize and document a problem-solving effort on one page. As the use of "problem solving" A3s increases in healthcare settings, the need is also increasing for a systematic method to assess their quality. Individuals developing A3s need coaching on their problem-solving skills and guidance concerning what information to include. Individuals teaching the use of A3s need to assess and provide feedback concerning the content and quality of information in A3s developed by learners individually or in teams.

Purpose. We have designed an assessment tool and supporting materials to provide structured guidance, ratings, and feedback concerning the content and quality of problem- solving A3s. Properties of the assessment tool are being studied with the goal of sharing the tool widely.

A3s and their authors. Problem-solving A3s communicate to others the nature of a problem and its importance, current state, root causes, goal for improvement, recommended countermeasures, proposed action plan, and follow up steps.

Authors of A3s may be at any stage of experience in developing A3s. However, the assessment tool will most frequently be used to assess A3s developed by learners in formal training programs. Such programs often require assessment of an individual's or team's accomplishment in carrying out a quality improvement (QI) project or QI project proposal. A3s in development can be assessed to provide formative feedback. Completed A3s can be assessed for final or summative evaluation.

Individuals assessing A3s. In order to evaluate a problem-solving A3, the assessor needs to understand the principles of Plan-Do-Check-Act/Adjust (PDCA) based problem solving and have experience developing A3s. Also desirable is experience teaching or mentoring others to develop problem-solving A3s.

The assessment tool and associated materials presented here highlight important aspects of developing A3s, but they are not a substitute for a formal introduction into the purpose and development of A3s.

Sources for training and general instructional materials for developing A3s are presented below in the A3 Content Guide in the section titled "Resources."

A3 Assessment Toolkit

The "A3 Assessment Toolkit" includes six coordinated items: (1) these instructions, (2) A3 template, (3) A3 content guide, (4) A3 assessment tool, (5) description of response options for each item in the tool, and (6) three A3 assessment examples.

Instructions for assessing A3s at the proposal stage of problem solving. The instructions that you are reading introduce the purpose of the toolkit and the use of the other components.

A3 template. Sections of the A3 template provide a location to organize and highlight key information in the problem-solving process. This template has been adapted from versions in use at two academic medical centers, which were adapted from nationally available models (e.g., see Shook, 2008, and Jimmerson, 2007, listed in Resources in the content guide).

The A3 template outlines key information to be rated and a typical order in which information is presented. However, an individual A3 may vary in how its problem-solving story is presented. Assessments do not depend on information order (as long as logic flow is clear), just on whether key information is presented understandably somewhere in the A3.

A3 content guide. The content guide describes in more detail the key information to be presented and formats often used to present information. The explanations provide a more consistent, shared understanding of key information and its presentation across A3 authors and across A3 raters.

A3 assessment tool. The 23-item tool outlines key information to assess using a simple 4-point rating scale for each item. The assessment tool focuses on the written A3 as a stand-alone document that anyone can assess without additional contextual knowledge or information.

 A3s are typically the basis for a presentation, discussion, and dialog. However, if the assessor is not present to interact with the author, the document is the only source of information. (If desired, the assessment tool could be applied to information presented both in a written A3 and verbally.)

2

 While some assessors may have personal knowledge of the actual situation, the assessments focus on information in the document that can be rated without first-hand knowledge of the problem and its context. (If an assessor has personal knowledge of the situation, the assessment tool has 9 supplementary items concerning adequacy and feasibility that may also be rated.)

Description of rating options. Items in the assessment tool have four response options. This document describes the meaning of each item's response options. This shared understanding of responses helps provide consistent ratings across individuals and across A3s.

A3 Assessment examples. Three "finished" problemsolving A3s, at the proposal stage, and their assessments are provided as examples.

- The first example A3 is thoroughly done. The high quality of the content is reflected in its ratings and explanations for them.
- The second and third example A3s are less complete. The content contains some areas of lower quality. An assessment tool is provided to try out rating the items, then to compare them with the standard ratings and explanations provided.

Learning to Use the Assessment Tool

Learning about the tool and practicing its use are straightforward.

- Review the materials. Review the A3 template, A3
 content guide, assessment tool, and explanation of
 item ratings to understand the content to be assessed
 and the ratings to be performed.
- Review A3 Example 1 and its ratings. After reviewing the A3, go through each item on its completed ratings and explanations form to understand how each item's rating was determined. Reviewing this well done A3 and its scoring provides a basis for subsequent comparisons when making assessments.
- 3. Practice using the assessment tool on A3 Example 2 and/or A3 Example 3 (less well done). Review the A3, then download and fill out the rating tool for it. Then compare your ratings with the standard ratings and explanations provided. Review why your ratings may have diverged from the standard ratings, particularly for differences of 2 points or more. (Note: less well organized or incomplete A3s may take a little longer to assess.)
- Consider using the assessment tool on an A3 with which you are familiar. If you have access to an A3 developed locally, use the assessment tool to rate it.

Review your ratings for information content and quality that you have not considered previously.

The learning and practice should help you use the assessment tool to provide ratings of A3s that are reasonably consistent with ratings that others would make. This level of experience should be adequate to differentiate A3s that are of overall low, moderate, and high quality in presenting key information. Additional practice and comparisons with others will likely be needed to rate some individual items consistently.

Tips

Some A3s will not address all items listed in the assessment tool. Even when working from a template, A3 authors may not remember or understand the need to address all of the content, may not have information to address all of the content, or may not be far enough along in their problem investigation to complete the A3. This assessment tool helps teachers and learners of A3 problem solving understand the key content to include. Providing A3 authors with structured feedback regarding this content will help develop their problem-solving skills.

Relevant information may be located in different sections of an A3. A3 authors may place relevant information in another section of the A3, most likely in an adjacent section. Also, an A3 may present sections of information in a different order than the order on the A3 template presented here and on the rating tool. If logic flow is clear, consider any information in the A3 when rating an item.

Assessing a specific A3 will involve some judgement. Deciding which of two adjacent rating options is most appropriate may be somewhat arbitrary for a specific A3. However, for most purposes a rating in the appropriate range of the rating scale is sufficient.

A3 Content Guide

Purpose & Use

A3 thinking is a method to:

Solve problems. A3s are grounded in scientific thinking – cycles of empirical observation, hypothesis generation, and testing. The A3 template guides the problem owner through a systematic, structured thought process to diagnose and treat performance problems – analogous to completing a History & Physical with Assessment and Plan for a patient. A3s can be adapted for diverse settings, audiences and problems. A3s can address problems of varying scope – from small local improvements to major strategic initiatives.

Develop problem solvers. An A3 requires problem owners to "show their thinking." An increasing number of organizations use dialog between a problem owner and his/her manager or mentor around an A3 as a means to develop individuals to solve problems in their work, and to capture organizational learning. A3 topics can be self-selected or assigned to problem owners as a development activity.

Communicate, engage and build consensus. As the problem owner shares the A3 with key stakeholders, he or she can incorporate the thinking of others, create a shared understanding, and build consensus on each section of the A3:

| Grasping the Situation [left side] | Countermeasures & Implementation Plans [right side] |
|--|--|
| Background or reason for action. Current Situation of problem to be solved, concluding with a Problem Statement identifying a performance gap to be closed. Goal of the improvement effort. Analysis to identify root causes of problem. | Countermeasures proposed to address causes. Action Plan for testing, implementation and monitoring if planned actions were performed. Follow Up Plan to assess if desired goals were achieved. |

Tell a story. A3s are intended to tell a story. Use an effective combination of visual images and words to communicate. Space limits you to only highlights on the page, but you can expand when presenting. A3s can be handwritten or composed using software.

Propose action. This A3 template is designed to propose action. The problem owner acquires a thorough grasp of the situation and problem, designs a robust set of countermeasures and plans, and builds consensus needed to start the "Do" phase of the **P-D-C-A** (Plan-Do-Check-Adjust) cycle.

Sections of the A3

The content of an A3 is organized to help readers follow the logic flow. The top of the page has headings introducing the overall topic and who is involved. The left side generally addresses what the A3's author has observed (Background, Current Situation ending with a Problem Statement, and Analysis). The right side generally describes what the author wants to try out (Countermeasures, Action Plan, and Follow Up.

Header: Orientation information:

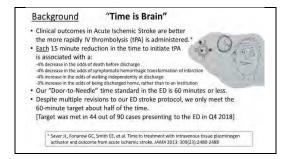
<u>Title:</u> The topic of the A3, described in a way that clearly identifies the problem to be addressed.

<u>Owner:</u> The name of the A3 owner/author who is investigating the problem – the "problem solver." The owner may also list team members, sponsors, coaches and anticipated reviewers.

<u>Date:</u> The date of the draft to assure version control. Multiple revision dates are likely as the problem owner learns more about the problem, incorporates ideas of others and demonstrates the iterations of his/her thinking.

Background: Summarize the reason for action---the clinical and/or business case for change. This section should communicate the significance of the problem by describing its serious consequences: who

is impacted, how severely, and how frequently. Tell the "ugly story" of how the problem harms patients/customers, frustrates workers, or wastes resources. Highlight relevant historical and organizational context. Keep the customer perspective in mind. Consider using pictures as well as words to tell a compelling story. Simple, hand-drawn illustrations can be powerful.

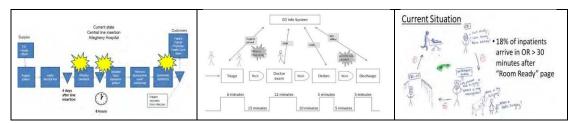


Current Situation: Accurately depict the:

Current level of performance



Process for doing the work



Ideally, both can be visually illustrated, e.g., baseline measures, trend chart, process map or value stream map of current state. Again, simple hand-drawn illustrations can be effective.

To deeply understand the current situation, "Go and See" to observe firsthand the problem and its context. (A "Go See" takes place at the *gemba*, a Japanese term meaning the real place where the work is done). Talk to and engage people working in the process. They are best positioned to understand the issues, the constraints, and feasible solutions.

Focus on "Five Actuals": 1) what is actually <u>happening</u>; 2) actual <u>individuals</u> involved in performing the work; 3) actual <u>location</u> where the problem occurs; 4) the actual <u>process;</u> and 5) the actual <u>conditions</u>.

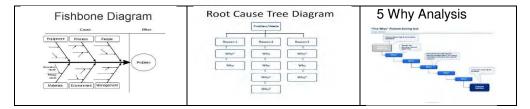
<u>Problem Statement</u>: Conclude the section on Current State with a clear sentence describing the specific gap in performance. A performance gap is the difference between what should be happening and what is actually happening, that is, standard v. actual. The gap can be in any dimension of performance: Safety, Quality, Patient Experience, Timeliness/Efficiency, Equity, Value, Financial Performance, Employee Engagement, or others.

The Problem Statement should describe the gap in measurable terms (e.g., callbacks to patients should occur within one working day; only 44% currently meet the standard), <u>not</u> in vague or general terms (callbacks to patients take too long).

Goal: Establish the target condition or specific performance improvement to be achieved in a set timeframe. "How much of the gap do you want to close, by when?" The A3 may establish an interim goal (a "next target condition") that is part way to a longer-term goal, or ideal state, requiring a longer time horizon to achieve. Think in terms of setting <u>SMART</u> goals: Specific, Measurable, Achievable, Relevant, and Time-bound.

Analysis: Explain causation. Identify contributors to the problem, significant root causes and constraints. The core of A3 problem-solving is to delve beyond symptoms to an actionable root cause or causes. In a complex system, a problem may have multiple root causes – a "web of causation". Multiple causes may need to be addressed for the problem solving to succeed.

Observe the problem at the point of cause and gather relevant facts and data. Then complete the Analysis section of the A3. Depict root causes, ideally with visuals, e.g., fishbone diagram, tree diagram, "5 Whys" analysis, or Pareto chart. Caution: be careful to describe what is observable: "absence or lack of" a potential countermeasure, such as training, standard work or an IT system, are not root causes.

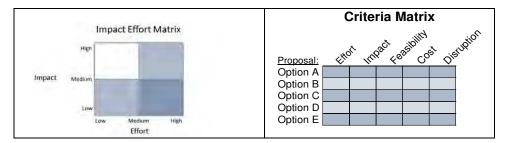


Countermeasures: Consider, prioritize and propose countermeasures. The term countermeasures is preferred to "solutions", since it is rarely possible to solve a problem permanently and completely. The countermeasures serve as a prescription for improvement. If the Analysis section of the A3 is thorough, the countermeasures should be readily apparent.

Recommendations should go beyond "weak" countermeasures (such as policy changes, reliance on human memory or education/training), to more effective interventions (such as standard work/roles, just-in-time reminders, redesigning forms and visual/ cognitive aids). If possible, include strong countermeasures such as work system changes, changes in the environment, and physically "error proofing" processes. When strong countermeasures are not feasible, select a set of countermeasures that together are likely to achieve the desired result.

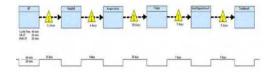
The content of this section should describe:

- Direct linkage of countermeasures to identified root causes
- Evidence of having evaluated multiple options (including ones that don't need new resources);
 this may take the form of an impact/effort matrix or criteria matrix



- Simple experiments that can be run to trial the countermeasures
- · Prediction of the outcome of the countermeasure

Consider including a future state map as an illustration of what will happen when the proposed improvement is in place



Action Plan: The Action Plan describes the D (Do) in the PDCA cycle. Detail the activities required for pilot testing and implementation. List tasks, responsible leads and due dates. Plans should be run like experiments to reveal what is not understood about the work. The plan may be shown in a simple table or a schedule of linked tasks in a Gantt Chart.

| What | Who | By When |
|-------|-----|---------|
| 1)~~~ | JB | 6/1/19 |
| 2)~~~ | LD | 6/15/19 |
| 3)~~~ | BG | 8/15/19 |



A related "monitoring plan" should describe the process (monitoring tasks, responsible leads, due dates) for monitoring whether "action items" are performed. *Did we run the experiment?* Often desired results are not achieved because no one monitors whether the Action Plan is implemented.

Follow Up: Outline a <u>plan for checking whether the desired results have been achieved</u>: *Did we get the results we were anticipating?* This is the \underline{C} (Check) in the PDCA cycle.

Like Action Plans, Follow Up Plans should outline the follow-up methods:

- What will be checked (e.g., process, outcome, balancing measures).
- Who will perform the check(s).
- When the check(s) will occur.



The Follow Up section may also be used to identify unresolved issues known at the time of planning and to describe plans for sustaining results and spreading learning, as appropriate. Although testing of countermeasures and implementation actions will not yet have occurred, consider in advance how you will know whether planned activities actually happened, the change is an improvement, and the goal has been achieved.

Resources on A3s and Problem Solving

Books

- Cindy Jimmerson, A3 Problem Solving for Healthcare: A Practical Method for Eliminating Waste, CRC Press, 2007. (Practical guide written specifically for healthcare)
- John Shook, Managing to Learn: Using the A3 Management Process to Solve Problems, Gain Agreement, Mentor, and Lead, Lean Enterprise Institute, 2008. (Description of how A3s may be used as a management process to foster individual and organizational learning)
- Art Smalley. *The Four Types of Problems*, Lean Enterprise Institute, 2018. (Description of 4 main categories of problems, and how to approach each: trouble shooting, gap from standard; target condition and open ended/innovation).
- Derek K. Sobek III and Art Smalley, *Understanding A3 Thinking*, CRC Press, 2008. (Detailed guide on writing and reviewing A3s of various types, including templates, examples and practical advice)

Chapters and Articles

Jeffrey K. Liker and David Meier, *The Toyota Way Fieldbook: A Practical Guide for Implementing Toyota's 4 Ps*, Chapter 18, "Telling the Story Using an A3 Report", McGraw-Hill, 2006.

Mark Graban, Lean Hospitals, Chapter 7, "Proactive Root Cause Problem Solving", CRC Press, 2012.

Roberto Priolo, "What is A3 Thinking?" Planet Lean: The Lean Global Network Journal. March 2, 2020. https://planet-lean.com/what-is-a3-thinking/

A3 Training Opportunities

Lean Enterprise Institute, https://www.lean.org/

Catalysis, https://createvalue.org/

University of Michigan College of Engineering ISD, http://isd.engin.umich.edu/

Web Resources - Quality Improvement Tools

All of the tools included in the A3 content guide are further explained, with examples and templates provided, at one or more of these websites:

ASQ (American Society for Quality). *The Seven Basic Quality Tools for Process Improvement*: http://asq.org/learn-about-quality/seven-basic-quality-tools/overview/overview.html

Institute for Healthcare Improvement. IHI Quality Improvement Essential Toolkit: http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx

Minnesota Department of Health. *Public Health and Quality Improvement Resources and Tools:* http://www.health.state.mn.us/divs/opi/qi/toolbox/

revised 1/17/20

Assessment Tool for a Problem-Solving (Proposal) A3

Directions

Items Assessed by Direct Review of the Proposal A3

Items numbered 1-23 can be assessed without knowing the actual situation. Most items reflect descriptive content suggested in the accompanying A3 template.

Rating these items. For each item, review the A3 and assess the item using one of the four rating options. *Include information in adjacent sections when assessing items – information on the left side or on the right side may be in a different order/location on a specific A3.* Record the "points" (0 to 3) associated with the rating option to the right under "Item Rating."

Overall mean rating for these items. At the end, add the item "points" to calculate the overall total rating "points." Calculate the overall mean item rating by dividing the total rating points by 23, the total number of items. (*If completed on a computer, calculations are performed automatically – see below.*)

Items That Require Knowledge of the Actual Situation

Unnumbered items (noted with ">=") address how well an A3 reflects the actual situation. Only individuals who are somewhat familiar with the specific context (beyond description in the A3) can assess these ten items. When these items can be rated, they assess the A3's accuracy in representing the actual situation.

Rating these items. For each item, review the A3 and:

- If you have adequate knowledge of the actual situation, assess the item using one of the four rating options.
- If you are not familiar (or not adequately familiar) with the current situation, indicate "Cannot assess."

These items are not included in aggregated mean ratings because not all raters will be familiar with the problem.

Providing Feedback

Provide feedback to A3 authors using the item ratings, comment box for each section, and overall ratings. For "Problem Solving" A3s in development, feedback provides important formative assessments. For finished A3s, feedback explains summative/final assessments.

Functions When Completing on a Computer

The assessment tool is a PDF fillable form that performs two functions when completed on a computer.

"Hover" for rating explanations. "Hover" your pointer over a rating option and a more detailed explanation will appear.

Entering ratings and calculating scores. Use the dropdown menu for each answer box to enter the score. For the numbered items, the total and the mean for the 23 numbered items will be calculated and appear at the end. (*If numbered items are not answered, they are scored as zero in calculating the total and mean scores.*)

| uthor: | | Reviewer: | Date: | |
|--|--|--|--|------------|
| | Items (based on A3 | B Template) and Rating Sca | ale | Rating |
| Background Why is t | the problem important? | | | |
| | | on, waste): how specific is the c | learest statement of a negative | |
| consequence of the p 0. Not addressed | | 2. General (eg, "harm," "difficulties," "waste") | 3. Specific type of consequence | 9 |
| | | | tration, waste): how specific is the | <u>)</u> |
| o. Not addressed | | ividual, group/unit, or organizati 2. General (eg, "staff," or "patients," but not which) | on? 3. Specific individual, group, or organizational unit | |
| | | | pecific is the clearest statement of | f the |
| severity (e.g., extent/a 0. Not addressed | amount) of at least one no 1. Unclear | egative consequence? 2. General (eg, significant harm) | 3. Specific extent/amount | |
| | | ., harm, frustration, waste): how | specific is clearest statement of t | <u>the</u> |
| | | e negative consequence? | 2. Specific fraguency (ag eyen | 4- |
| None | tant negative consequen Inadequate | General (eg, rare, often) Ces (e.g., harm, frustration, was Adequate Thorough | per unit of time) | |
| ➤ <u>Extent to which impor</u> None Background – reviewer c | tant negative consequen Inadequate comments: What is actually happening? | ices (e.g., harm, frustration, was | per unit of time) | |
| Extent to which import None Background – reviewer of the second of the | tant negative consequen Inadequate comments: What is actually happening? mance 1. General words, but no data | ces (e.g., harm, frustration, was Adequate Thorough 2. Some data | per unit of time) ste) are identified? Cannot assess 3. Thorough and robust data | |
| Extent to which import None Background – reviewer of the second of the | tant negative consequen Inadequate comments: What is actually happening? mance 1. General words, but no data | ces (e.g., harm, frustration, was Adequate Thorough 2. Some data | per unit of time) ste) are identified? Cannot assess | |
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| Goal What target cond | dition or specific performanc | e is desired? By when? | | revised 1/17/ |
|--|--|---|---|----------------------------|
| 9. How specific is the | | - · · · · · · · · · · · · · · · · · · · | | |
| 0. Not addressed | | 2. Somewhat specific | 3. Very specific | |
| 10. <u>Is the goal measur</u> 0. Not addressed | | e 2. May be measurable | 3. Clearly measurable | |
| How achievable is to Not achievable | <u>he goal?</u> Unlikely | Possibly Probably | Cannot assess | |
| | e goal to addressing the p | oroblem? | | |
| Not addressed | 1. Not relevant | Somewhat relevant | 3. Very relevant | |
| | lear timeframe for accom | nplishment) is the goal? | | |
| Not addressed | 1. Unclear | Somewhat clear (eg, relative timeframe) | 3. Very clear (eg, date | specified) |
| Goal – reviewer comm | ents: | | | |
| _ | ntributing to the problem? V | What are its root causes? | E.a. fishbone diagram "5-wby | 's"/root cause |
| tree diagram, Pareto 0. Not displayed | chart) | able 2. Partially understandable | | s noot cause |
| 14. <u>How clear are the i</u> 0. Not addressed | dentified root causes? 1. Unclear | 2. Somewhat clear | 3. Very clear | |
| | | 2. 000 | o. Vory olear | |
| None | • | | Cannot assess | |
| | Inadequate Ad | entified? | · | |
| None | Inadequate Ad | entified? | · | |
| None | Inadequate Ad | entified? | · | |
| None Analysis – reviewer co | Inadequate Adments: | entified? | Cannot assess | ed? |
| None Analysis – reviewer co Countermeasures 15. How many options | Inadequate Admments: S What options/alternatives for countermeasures we | entified? dequate Thorough s were considered? What countermere considered? | Cannot assess easures/strategies are propose | ed? |
| None Analysis – reviewer co Countermeasures | Inadequate Admments: S What options/alternatives | entified? dequate Thorough s were considered? What counterm | Cannot assess | ad? |
| None Analysis – reviewer co Countermeasures 15. How many options 0. None | Inadequate Admments: S What options/alternatives for countermeasures we 1. One | entified? dequate Thorough s were considered? What counterm ere considered? 2. Two defined. How strong is it? | easures/strategies are propose 3. Three or more 3. Strong (e.g., "forcing | g function" |
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| | wer comments: | | | | | sed 1/17/20 | _ |
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| Action Plan To pilot & | implement the selected co | | what who when? | | | | |
| • | • | | | 5- 4- b d\0 | | L | |
| For the action plan on 0. Not addressed | 1. Unclear | 2. Somewl | | 3. Very clear | | | |
| Are individuals identifi Not addressed | ied to be responsible for 1. For the minority | | | ut (i.e. "who")? 3. For all | | | |
| 20. <u>Are estimated comple</u> 0. Not addressed | tion dates identified for a | each action iter 2. For the | | 3. For all | | | |
| 21. <u>How clear</u> i <u>s the plan</u> i | for monitoring the imple | mentation of ac | ctions in 18-20 ab | ove (what will be mor | nitored, by | L | |
| whom, when)? 0. Not addressed | Plan unclear (no minority of action monitored – what who, when) | ns (majority | rtially clear y of actions ed – what, who, | Plan clear (all acmonitored – what | | | |
| How adequate is the a Not adequate | | Probably | Very likely | Cannot assess | | | |
| Action plan – reviewer coi | • | , | , , | | | | |
| Follow-up Plans ch | ecking whether desired goa | al(s) was achieve | ed? | | | | |
| • | _ | ent of the desi 2. Plan pa f of "what | | t will be measured, b 3. Plan clear "(wha | | | |
| 22. <u>Is follow-up planned to</u> 0. Not addressed | o measure achieveme 1. Plan unclear (no more than one of "what, who, wher | ent of the desi 2. Plan pa f of "what | red goal(s) (wha | | | | |
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Description of Rating Options

1/17/20

Assessment Tool for a Problem-Solving (Proposal) A3

Directions

Items Assessed by Direct Review of the Proposal A3

Items numbered 1-23 can be assessed without knowing the actual situation. Most items reflect descriptive content suggested in the accompanying A3 template.

Rating these items. For each item, review the A3 and assess the item using one of the four rating options. *Include information in adjacent sections when assessing items – information on the left side or on the right side may be in a different order/location on a specific A3.* Record the "points" (0 to 3) associated with the rating option to the right under "Item Rating."

Overall mean rating for these items. At the end, add the item "points" to calculate the overall total rating "points." Calculate the overall mean item rating by dividing the total rating points by 23, the total number of items. (If completed on a computer, calculations are performed automatically – see below.)

Items That Require Knowledge of the Actual Situation

Unnumbered items (noted with ">") address how well an A3 reflects the actual situation. Only individuals who are somewhat familiar with the specific context (beyond description in the A3) can assess these ten items. When these items can be rated, they assess the A3's accuracy in representing the actual situation.

Rating these items. For each item, review the A3 and:

- If you have adequate knowledge of the actual situation, assess the item using one of the four rating options.
- If you are not familiar (or not adequately familiar) with the current situation, indicate "Cannot assess."

These items are not included in aggregated mean ratings because not all raters will be familiar with the problem.

Providing Feedback

Provide feedback to A3 authors using the item ratings, comment box for each section, and overall ratings. For "Problem Solving" A3s in development, feedback provides important formative assessments. For finished A3s, feedback explains summative/final assessments.

Functions When Completing on a Computer

The assessment tool is a PDF fillable form that performs two functions when completed on a computer.

"Hover" for rating explanations. "Hover" your pointer over a rating option and a more detailed explanation will appear. (Not functioning on this "Descriptions" form because the detailed explanation is presented below the item.)

Entering ratings and calculating scores. Use the dropdown menu for each answer box to enter the score. For the numbered items, the total and the mean for the 23 numbered items will be calculated and appear at the end. (If numbered items are not answered, they are scored as zero in calculating the total and mean scores.)

| Title: | | |
|---|--|--------------------------|
| uthor: | Reviewer: | Date: |
| Items (bas | sed on A3 Template) and Rating Scale | Rating |
| Background Why is the problem in | mportant? arm, frustration, waste): how specific is the clearest statement | of a negative |
| consequence of the problem? 0. Not addressed 1. Unclean | • | |
| 0. Not Addressed – No negative | e consequences are mentioned. | |
| | nclear or vague regarding whether the problem results in mean lem is not differentiated from its negative consequences. | ningful negative |
| | ties," "waste) – Statements are made about negative conseque stated only in general terms. | ences occurring, but the |
| | ces— at least one specific type of negative consequence is specificately, increased cost in providing care, increased staff frustration | |
| | the negative consequences (e.g., harm, frustration, waste): ho impacted individual, group/unit, or organization? | ow specific is the |
| 0. Not addressed 1. Unclea | | |
| Not Addressed – No identific performance problem. | ation of individuals or other entities impacted by negative cons | sequences of the |
| patients, clinical personnel | er entities impacted by negative consequences of the performat, or institution) are implied, but not specifically stated. | |
| of the performance problem | nts," but not which) – Individuals or other entities impacted by mare stated broadly (e.g., "patients") without clarifying the speot clarifying patients with a specific medical condition). | |
| | or organizational unit – at least one set of individuals or other e the performance problem is clearly stated. | entity impacted by the |
| the severity (e.g., extent/amount) | ences (e.g., harm, frustration, waste): how specific is the clear of at least one negative consequence? | |
| Not addressed 1. Unclea | ar 2. General (eg, significant 3. Specific extent harm) | :/amount |
| 0. Not Addressed – the negative | e consequences of the performance problem are not addresse | ed. |
| | formance problems cause negative consequences (e.g., "cause of their severity or extent of impact the consequences. | ses problems for |
| | m) – statement of the general severity of negative consequence without indicating the degree of severity or extent of harm. | ces (e.g., poor clinical |
| | or at least one negative consequence, a specific severity or degree, type of morbidity, length of prolonged hospitalization, level of s). | |
| | quences (e.g., harm, frustration, waste): how specific is cleare ne) of at least one negative consequence? ar 2. General (eg, rare, often) 3. Specific freque per unit of time) | ency (eg, events |
| | | <i>)</i> |

| | ent that performance pro | ription of Rating Opt oblems cause negative conse | quences (e.g., "causes pro | oblems for |
|--|--|---|--|--|
| . ,, | ŭ | eral frequency of the negative | • | a a a coi a na lly |
| frequently), with | h the no specific frequen | • | | |
| | | t least one negative conseque reporting extremely dissatisfa | | |
| from a performa problems may s much lower tha | ance problem may be co seldom result in negative an the frequency of the p tive consequences, the t | egative consequences. The frontused with the frequency of e consequences, so the frequency of performance problem. However frequency of performance pro | a performance problem. ency of negative consequency er, if each instance of a pe | Some performance ences may be erformance problem |
| Extent to which import | | nces (e.g., harm, frustration, v Adequate Thorough | | |
| | | | | |
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| | | | | |
| | | | | |
| | What is actually happening? | ? | | |
| Current level of perform Not addressed | 1. General words, | 2. Some data | 3. Thorough and robust | t data |
| | but no data | | - | _ |
| 0. Not addressed – | No information or data r | reflecting the current level of p | performance. | |
| 1. General words, b | ut no data – Performano | ce is stated only in general ter | rms (e.g., "poor"). | |
| | | | | |
| | | nents are made about perform | | of the time) or data |
| may be questio | onable (e.g., based on a | very small number of patients | 3). | , |
| may be questio 3. Thorough and rol | onable (e.g., based on a bust data – Data are pre | very small number of patients esented that directly represen | s). t the level/frequency of the | e performance |
| may be questio 3. Thorough and rol | onable (e.g., based on a bust data – Data are pre | very small number of patients | s). t the level/frequency of the | e performance |
| may be questio 3. Thorough and rol problem (e.g., 9) . How is work done (pro- | onable (e.g., based on a bust data – Data are pre% of cases with recomm | very small number of patients esented that directly representended action not performed) | s). t the level/frequency of the and appear to be reliable. | e performance |
| may be questio 3. Thorough and rol problem (e.g., 9) . How is work done (pro- 0. Not addressed | onable (e.g., based on a bust data – Data are pre % of cases with recomm cess/workflow)? 1. Addressed, but unclear | very small number of patients esented that directly representended action not performed) 2. Illustration/ description somewhat clear | s). t the level/frequency of the | e performance |
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| may be questio 3. Thorough and rol problem (e.g., 9) . How is work done (production of the control of the con | onable (e.g., based on a bust data – Data are pre % of cases with recomm cess/workflow)? 1. Addressed, but unclear | very small number of patients esented that directly representended action not performed) 2. Illustration/ description somewhat clear | s). It the level/frequency of the and appear to be reliable. 3. Illustration/ descripticlear | e performance on very |
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| may be question 3. Thorough and roll problem (e.g., some section of the problem section | conable (e.g., based on a bust data – Data are presonable (e.g., based on a bust data – Data are presonable (cess/workflow)? 1. Addressed, but unclear No information about hounclear – Presents information is involved. Siption somewhat clear – licates who performs the intion very clear – A process involved in each step. | very small number of patients esented that directly representended action not performed) 2. Illustration/ description somewhat clear by the work is done. anation about a sequence of action about a sequence of action. A process map or other description cless map or other description. | s). It the level/frequency of the and appear to be reliable. 3. Illustration/ descripticlear ctivities, but omits informat ription that includes most leading to the control of the con | on very tion about some key process steps |
| may be question 3. Thorough and roll problem (e.g., some section of the problem | conable (e.g., based on a bust data – Data are presonable (e.g., based on a bust data – Data are presonable (cess/workflow)? 1. Addressed, but unclear No information about hounclear – Presents information is involved. Siption somewhat clear – licates who performs the intion very clear – A process involved in each step. | very small number of patients esented that directly representended action not performed) 2. Illustration/ description somewhat clear by the work is done. anation about a sequence of action about a sequence of action. A process map or other description cless map or other description. | s). It the level/frequency of the and appear to be reliable. 3. Illustration/ descripticlear ctivities, but omits informat ription that includes most leading to the control of the con | on very tion about some key process steps |
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| | <u>n/gap?</u> | escription of Rating Op | | 1/17/20 |
|---|--|---|--|-------------------------|
| 0. Not addressed | 1. Unclear | 2. Partially specified | 3. Clearly specified/quantified | |
| 0. Not addressed - | – A performance prol | olem and gap are not stated. | | |
| 1. Unclear – A per | formance problem ar | nd gap are stated in vague or un | nclear language. | |
| 2. Partially specifie | ed – A performance p | problem/gap is stated with some | general information (e.g., "less than | half") |
| 3. Clearly specified | d/quantified – a perfo | rmance problem is stated with o | quantified gap. | |
| | 13 author demonstrat | es direct observation of the wor | k process? | |
| Not observed | A little | Some All | Cannot assess | |
| Extent of demonstrat | tion of learning from t | the people involved in the proces | ss? | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Goal What target condit | tion or specific performa | ance is desired? By when? | | |
| 9. How specific is the go | oal? | | | |
| 0. Not addressed | 1. Vague | 2. Somewhat specific | 3. Very specific | |
| 0. Not addressed - | – No statement is ma | ide about a goal. | | |
| | | d (e.g., improve the performanc | e). | |
| | | | ovement is made (e.g., improve by) | |
| | | | ance or the target level of performan | |
| 3. Very specific – performance. | A statement is made | that identifies both the baseline | level of performance and the target | level of |
| portormanoor | | | | |
| 10. Is the goal measural | | | | |
| | Not measurable | | 0.01 | |
| Not addressed | | le 2. May be measurable | 3. Clearly measurable | |
| | - No goal is stated re | egarding an aspect of performan | · | |
| Not addressed - Likely not meas | surable – Performance | egarding an aspect of performan | ce to measure. en measured (i.e., no baseline data) | and for |
| Not addressed - Likely not meas which perform | surable – Performance nance is not likely to b | egarding an aspect of performan e related to the goal has not bee be measured easily (at least bas | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). | |
| Not addressed - Likely not meas which perform May be measure measurable free. | surable – Performance nance is not likely to b rable – Performance r rom routinely availabl | egarding an aspect of performan e related to the goal has not been be measured easily (at least base related to the goal has not been e data (e.g., in an electronic hea | ce to measure. en measured (i.e., no baseline data) | ut may be |
| Not addressed - Likely not meas which perform May be measurable fr surveys of patents. | surable – Performance nance is not likely to b rable – Performance r rom routinely availabl tients or care provide | egarding an aspect of performan e related to the goal has not bee be measured easily (at least bas related to the goal has not been e data (e.g., in an electronic hears). | nce to measure. Sen measured (i.e., no baseline data) Sed on information in the A3). Measured (i.e., no baseline data), balth record, recording observable act | out may be tivities, |
| Not addressed - Likely not meas which perform May be measure measurable fr surveys of pat Clearly measura | surable – Performance nance is not likely to b rable – Performance r rom routinely availabl tients or care provide able – Either performa | egarding an aspect of performan e related to the goal has not bee be measured easily (at least bas related to the goal has not been e data (e.g., in an electronic hears). | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), b | out may be tivities, |
| O. Not addressed - Likely not meas which perform May be measurable fr surveys of pat Clearly measurable, or | surable – Performance nance is not likely to be table – Performance rom routinely available tients or care provide able – Either performance or measurement is de | egarding an aspect of performan e related to the goal has not bee be measured easily (at least bas related to the goal has not been e data (e.g., in an electronic hears). ance related to the goal has bee | nce to measure. Sen measured (i.e., no baseline data) Sed on information in the A3). Measured (i.e., no baseline data), balth record, recording observable act | out may be tivities, |
| 0. Not addressed - 1. Likely not meas which perform 2. May be measure measurable fr surveys of pat 3. Clearly measura measurable, of How achievable is the | surable – Performance nance is not likely to be able – Performance rom routinely available tients or care provide able – Either performer measurement is desired. | egarding an aspect of performant erelated to the goal has not been be measured easily (at least baserelated to the goal has not been e data (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), b alth record, recording observable act en measured (e.g., in baseline data). | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of measurable, of the measurable is the Not achievable. | surable – Performance nance is not likely to be able – Performance room routinely available tients or care provide able – Either performance measurement is despected by the surface of th | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic heaters). ance related to the goal has been escribed in the Action Plan. Possibly Probably | nce to measure. Sen measured (i.e., no baseline data) Sed on information in the A3). Measured (i.e., no baseline data), balth record, recording observable act | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of measurable, of the measurable of the measurable. How achievable is the Not achievable 11. How relevant is the measurable. | surable – Performance in ance is not likely to be able – Performance in routinely available tients or care provide able – Either performance measurement is define goal? Unlikely goal to addressing the | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), balth record, recording observable acten measured (e.g., in baseline data). Cannot assess | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of measurable, of the measurable is the Not achievable. | surable – Performance nance is not likely to be able – Performance room routinely available tients or care provide able – Either performance measurement is despected by the surface of th | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic heaters). ance related to the goal has been escribed in the Action Plan. Possibly Probably | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), b alth record, recording observable act en measured (e.g., in baseline data). | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measured measurable from surveys of path and the surveys of p | surable – Performance in ance is not likely to be able – Performance in rom routinely available tients or care provide able – Either performance measurement is described by the goal? Unlikely goal to addressing the surable of the surable in the surable of the surable in the | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), balth record, recording observable acten measured (e.g., in baseline data). Cannot assess | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of the measurable, of the measurable is the Not achievable 11. How relevant is the of the Not addressed O. Not addressed - | surable – Performance in ance is not likely to be able – Performance in routinely available tients or care provide able – Either performance measurement is define goal? Unlikely goal to addressing the 1. Not relevant – No goal is stated. | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), b alth record, recording observable act en measured (e.g., in baseline data). Cannot assess 3. Very relevant | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measure measurable fresurveys of path and the surveys of path | surable – Performance in ance is not likely to be able – Performance is rom routinely available tients or care provide able – Either performance measurement is described by the stated of the stated goal is not income able – No goal is stated. | egarding an aspect of performant erelated to the goal has not been be measured easily (at least baserelated to the goal has not been e data (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? 2. Somewhat relevant | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), b alth record, recording observable aci en measured (e.g., in baseline data). Cannot assess 3. Very relevant | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of the control of the c | surable – Performance in ance is not likely to be able – Performance in rom routinely available tients or care provide able – Either performance measurement is described by the surface of the stated goal is not a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not a contract of the stated | egarding an aspect of performant erelated to the goal has not been be measured easily (at least based to the goal has not been edata (e.g., in an electronic heaters). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? 2. Somewhat relevant relevant to the stated problem/particles and problem. | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), balth record, recording observable acten measured (e.g., in baseline data). Cannot assess 3. Very relevant performance gap. stated problem/performance gap. | out may be tivities, |
| O. Not addressed - 1. Likely not meas which perform 2. May be measurable fr surveys of pat 3. Clearly measurable, of the control of the c | surable – Performance in ance is not likely to be able – Performance in rom routinely available tients or care provide able – Either performance measurement is described by the surface of the stated goal is not a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not and a contract of the stated goal is not a contract of the stated | egarding an aspect of performant erelated to the goal has not been be measured easily (at least baserelated to the goal has not been e data (e.g., in an electronic hears). ance related to the goal has been escribed in the Action Plan. Possibly Probably the problem? 2. Somewhat relevant | ce to measure. en measured (i.e., no baseline data) sed on information in the A3). measured (i.e., no baseline data), balth record, recording observable acten measured (e.g., in baseline data). Cannot assess 3. Very relevant performance gap. stated problem/performance gap. | out may be tivities, |

| 12. <u>F</u> | How time-bound (clea | | escription of Ratin complishment) is the goal? | | 113 | | 1/17/20 |
|--------------|---|--|--|---------------------|----------------------------|----------------|----------|
| - | 0. Not addressed | 1. Unclear | Somewhat clear relative timefram | | 3. Very clear (eg, date | e specified) | |
| | 0. Not addressed – | No timeframe is sta | ated for accomplishing the | goal. | | | |
| | Unclear – A generate indicated. | eral timeframe is sta | ated (e.g., over the next ye | ar) for whic | ch no beginning and e | nding points | |
| | | (e.g., relative timefr | ame) – A general timefran ted. | ne is provid | led (e.g., over the nex | t year) for | |
| | | | | | | | |
| | | | | | | | |
| _ | | | | | | | ; |
| | - | | ? What are its root causes? | | | | |
| 13. <u>l</u> | s the display of meth cause tree diagram, Pa | od(s) for analyzing reto chart) | root causes easy to under | <u>rstand? (E.c</u> | g., fishbone diagram, "5-\ | vhys"/root | |
| - | 0. Not displayed | Not understandabl | 2. Partially underst e | andable | 3. Easy to understand | t | |
| | 0. Not displayed – N | No method(s) for an | nalyzing root causes are vi | sually displ | layed. | | |
| | | ole – Methods for a e (e.g., unclear, con | nalyzing root causes are v fusing). | risually disp | played, but the content | and logic ar | e not |
| | 2. Partially understa only be partially | | for analyzing root causes | are visually | displayed, but the co | ntent and log | ic can |
| | Easy to understate to understand. | and – Methods for a | nalyzing root causes are v | isually disp | olayed with content an | d logic that a | are easy |
| 14. <u>F</u> | How clear are the ide 0. Not addressed | ntified root causes? | ? 2. Somewhat clear | | 3. Very clear | | |
| | 0. Not addressed – | No information is p | resented about root cause | S. | | | |
| | | | auses is presented, no cau | | | 3 . | |
| | | | s are identified, but their m | | not clear. | | |
| | 3. Very clear – For | all identified root ca | auses, the meaning is clea | ır. | | | |
| _ | xtent to which impor | | | | | | |
| | | • | Adequate Thorou | ugh | Cannot assess | | |
| Ariai | lysis – reviewer comi | nenis. | | | | | - |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 15. <u>F</u> | How many options fo | r countermeasures | were considered? | | | | |
| | 0. None | 1. One | 2. Two | | 3. Three or more | | |
| | 0. None – No count | ermeasures are pre | esented. | | | | |
| | 1. One – One count | | | | | | |
| | 2. Two – Two count | ermeasures are pre | esented. | | | | |
| | | | | | | | |

| | Description of Rating Options 1/17/26 3. Three or more – Three or more countermeasures are presented. | 20 |
|------------|---|----|
| | 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 the proposed countermeasures (however many) are feasible and are likely to achieve the goal. | |
| 16. | Identify the strongest countermeasure considered. How strong is it? 1. Weak (e.g., policy | |
| | No countermeasures – No countermeasures are presented. | |
| | Weak (e.g., policy change, education and training) – None of the countermeasures is "stronger" than policy change, education, or training. | |
| | Intermediate (e.g., standard work/roles, just-in-time reminders, or visual/cognitive aids) – None of the countermeasures is "stronger" than standard work/roles, just-in-time reminders, or visual/cognitive aids. | |
| | 3. Strong (e.g., "forcing function" that ensures work is done the right way) – at least one of the countermeasures makes it impossible to do a task incorrectly. | |
| | Note: Although strong countermeasures are not always feasible, combining two or more weak or intermediate countermeasures may be sufficient. In the supplementary item at the end of the Countermeasures section, someone familiar with the local circumstances can indicate whether the proposed countermeasures are likely to achieve the goal. | |
| | 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 1. Minority linked to 2. Majority linked to causes 3. All linked to causes causes | |
| | No linkage – No countermeasures are linked to (address) root causes. | |
| | Minority linked to causes – A minority (i.e., less than half) of the countermeasures are linked to root causes. Majority linked to causes – The majority (i.e., more than half), but not all of the countermeasures are linked to root causes. All linked to causes – All of the countermeasures are linked to root causes. | |
| | To what extent are countermeasures feasible to carry out? Not feasible Unlikely Possibly Highly likely Cannot assess | _ |
| > <u> </u> | How likely will countermeasures result in achieving the goal? Not possible Unlikely Possibly Highly likely Cannot assess | |
| Соι | untermeasures – reviewer comments: | |
| | | |
| AC | tion Fian 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 | |
| | Not addressed – No activities to be performed are listed. | |
| | · · | Τ |
| | 1. Unclear – All statements about activities to be performed ("what" is to be done) are vague with no indication of the operational action to be taken. | |
| | | |
| | operational action to be taken. 2. Somewhat clear – Some statements about activities to be performed ("what" is to be done) are clear, but others are | |

| Note: Whether each countermeasure in the previous section is linked to an action in this section is part of item 23 concerning logic flow from one section to the next. 19. Are individuals identified to be responsible for each action item to be carried out (i.e. "who")? 19. Are individuals dentified to be responsible for each action item to be carried out (i.e. "who")? 10. Not addressed — No individuals are identified to carry out any of the activities (or if no action plan is listed). 1. For the minority — Individuals are identified to carry out actions for only a minority of activities. 2. For the majority— Individuals are identified to carry out actions for the majority of activities. 3. For all — Individuals are identified to responsible to a carry out activities. 20. Are estimated completion dates identified for each action item (i.e. "when")? 1. For the minority — Estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority— Estimated completion dates are identified to carry out actions for only a minority of activities. 3. For all — Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all — Estimated completion dates are identified to carry out actions for he majority of activities. 3. For all — Estimated completion dates should be stated for an activity. Specific dates (e.g., April 30, 2020) are clearest, although the month may be adequate with the end of the month understood as the completion date. More vague statements (e.g., by spring, by next year) are generally unacceptable because they are not practically useful for knowing when to see if work has been performed. 2. How clear is the plan for monitoring the implementation of actions in 18-20 above (what will be monitored, by whom, when." 3. Clear — For all of the action plan activities of or only a minority (less than half) of action plan activities is it clear "what will be monitored, by whom, when." 3. Clear — For all of the act | 3 Very clear – All sta | Description of Rating Options ements about activities to be performed ("what" is to be done) are cle | 1/17/20 |
|--|---------------------------------------|---|---------------------------------|
| 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 0. Not addressed - No individuals are identified to carry out any of the activities (or if no action plan is listed). 1. For the minority - Individuals are identified to carry out actions for only a minority of activities. 2. For the majority- Individuals are identified to carry out actions for only a minority of activities. 3. For all - Individuals are identified to carry out actions for all of the activities. 20. Are estimated completion dates identified to reach action item (i.e. "when")? 0. Not addressed 1. For the minority 2. For the majority 3. For all 0. Not addressed - No estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority- Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all - Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all - Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all - Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all - Estimated completion dates are identified to carry out actions for the majority of activities. Note: Estimated completion dates should be stated for an activity. Specific dates (e.g., April 30, 2020) are clearest, although the month may be adequate with the end of the month understood as the completion date. More vague statements (e.g., by spring, by next year) are generally unacceptable because they are not practically useful for knowing when to see if work has been performed. 21. How clear is the plan for monitoring the implementation of actions in 18-20 above (what will be monitored, by whom, when) when) monitored — what, who, when) monitored — what, who, when) monitored — what, who, when) monitoring plan is no | • | · · · · · · · · · · · · · · · · · · · | |
| O. Not addressed — No individuals are identified to carry out any of the activities (or if no action plan is listed). 1. For the minority — Individuals are identified to carry out actions for only a minority of activities. 2. For the majority— Individuals are identified to carry out actions for the majority of activities. 3. For all — Individuals are identified to carry out actions for the majority of activities. 20. Are estimated completion dates identified to carry out actions for all of the activities. 20. Not addressed — No estimated completion dates are identified to carry out any of the activities (or if no action plan is provided). 1. For the majority— Estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority— Estimated completion dates are identified to carry out actions for only a minority of activities. 3. For all — Estimated completion dates are identified to carry out actions for the majority of activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 4. Note: Estimated completion dates are identified to carry out actions for all of the activities. 3. For all — Estimated completion dates are identified to carry out actions for all of the activities. 4. How the majority of actions activities in activiti | concerning logic f | ow from one section to the next. | |
| O. Not addressed — No individuals are identified to carry out actions for only a minority of activities. 1. For the minority — Individuals are identified to carry out actions for only a minority of activities. 2. For the majority— Individuals are identified to carry out actions for the majority of activities. 3. For all — Individuals are identified to carry out actions for all of the activities. 20. Are estimated completion dates identified for each action item (i.e. "when")? O. Not addressed — No estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority— Estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority— Estimated completion dates are identified to carry out actions for only a minority of activities. 3. For all — Estimated completion dates are identified to carry out actions for he majority of activities. Note: Estimated completion dates should be stated for an activity. Specific dates (e.g., April 30, 2020) are clearest, although the month may be adequate with the end of the month understood as the completion date. More vague statements (e.g., by spring, by next year) are generally unacceptable because they are not practically useful for knowing when to see if work has been performed. 2. How clear is the plan for monitoring the implementation of actions in 18-20 above (what will be monitored. by whom. when)? O. Not addressed — No monitoring plan is noted for checking on whether the action plan activities is it clear "what will be monitored — what, who, when") D. Not addressed — No monitoring plan is noted for checking on whether the action plan activities is it clear "what will be monitored, by whom. when." 2. Partially clear — For the majority of action plan activities it is clear "what will be monitored, by whom, when." 2. Partially clear — For the majority of action plan activities it is clear "what will be monitored, by whom, when." 2. Partially clear — For the ma | | , , , | |
| 1. For the minority – Individuals are identified to carry out actions for only a minority of activities. 2. For the majority – Individuals are identified to carry out actions for all of the activities. 3. For all – Individuals are identified to carry out actions for all of the activities. 20. Are estimated completion dates identified for each action item (i.e. "when")? 0. Not addressed — No estimated completion dates are identified to carry out actions for all or the activities (or if no action plan is provided). 1. For the minority – Estimated completion dates are identified to carry out actions for only a minority of activities. 2. For the majority– Estimated completion dates are identified to carry out actions for all of the activities. 3. For all – Estimated completion dates are identified to carry out actions for all of the activities. 4. For the majority– Estimated completion dates are identified to carry out actions for all of the activities. 5. For the majority— Estimated completion dates are identified to carry out actions for all of the activities. 6. For the majority— Estimated completion dates are identified to carry out actions for all of the activities. 6. For the majority— Estimated completion dates are identified to carry out actions for all of the activities. 6. For the majority of actions an activity. Specific dates (e.g., April 30, 2020) are clearest, although the month may be adequate with the end of the month understood as the completion date. More vague statements (e.g., by spring, by next year) are generally unacceptable because they are not practically useful for knowing when to see if work has been performed. 2. How clear is the plan for monitoring the implementation of actions in 18-20 above (what will be monitored, by whom. when) 3. Plan unclear (no or 2. Plan partially clear (majority of actions monitored — what, who, when") 4. How clear is the plan for monitoring plan is noted for checking on whether the action plan is activities is it clear "what will be monitored, by whom, when | 0. Not addressed | 1. For the minority 2. For the majority 3. For all | |
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| | D | escription of | Rating Option | ons | 1/17/2 | 20 |
|--|--|--------------------------------|---------------------|-----------------------|--------------------------|-----|
| Unclear – Meas by whom and | uring achievement o | of desired goal(s) in | ncludes no more t | han one element of | "what is to be measured | |
| | Measuring achiever whom and when." | ment of desired go | al(s) includes two | of the three elemen | its of "what is to be | |
| 3. Clear – Measuri and when." | ng achievement of c | desired goal(s) incl | udes all three eler | ments of "what is to | be measured by whom | |
| Across A3 Section | IS | | | | | |
| 23. How clearly does the 0. No title | e title identify the pro 1. Unclear | oblem to be addres 2. Somew | | 3. Very clear | | |
| 0. No title – No title | e is listed. | | | | | |
| 1. Unclear – The ti | tle is completely und | clear in indicating t | he problem is that | the A3 is to addres | SS. | |
| Somewhat clea the performan | | s that something n | eeds to be improv | ved in a general area | a, but does not indicate | |
| 3. Very clear - The | e title indicates the s | pecific performanc | e problem being a | addressed. | | |
| How often does the I | ogic flow clearly from | n one section of th | e A3 to the next s | section? | | |
| Not at all | Occasionally | Majority | Always | Cannot assess | | |
| In general, how information None used or not | Not very | Somewhat | Very | Cannot assess | | |
| informative | informative | informative | informative | | | |
| | | | | | | |
| OVERALL RATING (Total points (max = 69) Mean (divide total by 23 | | | | | 0 | |
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Where's the cath??? Increasing the % of outside cardiac catheterization films arriving with transferred patients

BACKGROUND

- University Hospital Cardiology Service receives 50-80 transfer requests monthly from outside hospitals (OSH).
- In FY2017, 744 patient transfer requests accepted by the Cardiology admitting officer of the day (AOD) resulted in an admission.

HOWEVER, outside imaging studies needed by the care team arrived before or with the patient less than half (329/744) of the time. Not having the images leads to:

- Delays in patient care of hours to several days, with potential for harm to patients
- Repeat procedures [average of 6/month], with potential clinical complications for patients and unnecessary healthcare costs [average of \$3,200/study]
- Delays in patient throughput, with financial consequences to institution [Finance Dept. estimates we lose > \$350,000 in revenue annually from blocked Cardiology admissions]
- Less satisfied patients and families
- Frustrated staff





CURRENT STATE

Transfer Center routes OSH call to AOD

AOD accept or rejects transfer request & makes note

Transfer Center Staff calls **OSH RN** for records

Patient arrives usually before Cath films

Resident. Nurse, or RA calls **OSH Cath** lab

OSH lab uploads films to Life Image or overnights

Resident uploads films into **EHR**

| | - | |
|--|---|--|

= variability in process



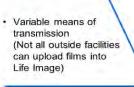
Humans

| | April 17 | May 17 | June 17 |
|--|----------|--------|---------|
| # of outside transfers | 72 | 57 | 66 |
| # of transfers arriving with films available | 35 | 24 | 30 |
| % of transfers arriving with films available | 49% | 42% | 45% |

Problem Statement:

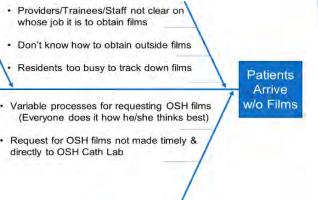
Only 44% of outside hospital transfers to the Cardiology Service arrive with necessary catheterization study films.

ROOT CAUSE ANALYSIS Machines Machines



· Transfer note template doesn't capture need for past studies or date of past studies

Materials



Methods



GOAL: Increase % of transfer patients arriving with outside catheterization study films from 44% to >75% by April 2018.

PROPOSED COUNTERMEASURES AND FUTURE STATE

| | Countermeasures: | Effort | Impact |
|-------------|--|-----------|--------|
| Humans 🙏 | Assign responsibility to Resident Assistants for obtaining films and uploading them into EHR. Provide Job Aid. | Low | High |
| Methods 🖈 | Create & implement Resident Assistant Standard Work with set timeframe for making direct contact with OSH cath labs. | Medium | High |
| Materials | Add <u>required</u> fields to AOD's electronic Transfer Note to check need for past films and to provide date of last study. | Low | Medium |
| -Machines - | Out of Scope: Image transfer capability of outside | hospitals | |

RA checks transfer list first thing in a.m

RA contacts OSH Cath Lab(s) by 8 a.m. OSH Cath Lab uploads or overnights films

RA uploads into EHR

Lead RA

Resident

A3 Owner

Nursing

Supervisor

Chief

Patient arrives

ACTION PLAN

| What: | Who: | When: |
|--|-----------------------------|--------------------|
| Meet with RAs for input on proposed standard work and job aid. | A3 Owner | By 10/15/17 |
| Present A3 and socialize proposed work changes with attendings (including AODs), residents, fellows and PAs at November division meeting; obtain agreement from service chief to pilot in January. | A3 Owner | 11/7/17 |
| Work with IT to add new fields to electronic transfer note template. | Cardiology Administrator | By 12/15/17 |
| Finalize standard work and job aid and provide training session for resident assistants. | Chief Resident | By 12/22/17 |
| Pilot new template and new RA standard work as a PDCA cycle. | A3 Owner/ AODs/RAs | 1/1/18- 1/31/18 |

Monitoring Plan:

- ✓ Check that (a) an October meeting with RAs and (b) time on agenda at November division meeting were scheduled
- Confirm new fields were added to note template and are working
- Check that final standard work and job aid documents were completed and approved, and that training occurred
- ✓ Audit RA standard work and AOD utilization of new template over course of pilot

FOLLOW UP

QI Analyst to track performance on cath study film availability during pilot, and add to Division Quality dashboard monthly post-pilot.

21

10/01/17

12/16/17

12/23/17

1/1/18-

1/31/18]

revised 1/28/20

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

Background Why is the problem important?

- 1. Negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement of a negative consequence of the problem?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, "harm," "difficulties," "waste")
- 3. Specific type of consequence

3

Rating. 3. Specific type of consequence

Explanation. The Background identifies several types of consequences: "delays in care...with potential for <a href="https://example.com/https://ex

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)."

- 2. Individuals/groups impacted by the negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement identifying an impacted individual, group/unit, or organization?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, "staff," or "patients," but not which)
- 3. Specific individual, group, or organizational unit

3

Rating. 3. Specific individual, group, or organizational unit

Explanation. The Background identifies several impacted entities: "delays in care...with potential for harm to patients. "financial consequences to institution," "less satisfied patients and familles." and "frustrated staff." One clearly specified impacted entity is sufficient for rating "3. Specific individual, group, or organizational unit."

- 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").
- 3. Severity 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?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, significant harm)
- 3. Specific extent/amount

3

Rating. 3. Specific extent/amount

Explanation. 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 > \$350,000 in revenue annually from blocked Cardiology admissions." The Background also provides descriptions of the extent of consequences: "delays in patient care of hours to several days, with potential for harm to patients;" "repeat procedures [average of 6/month], with associated potential for clinical complications for patients;" "less satisfied patients and families;" and "frustrated staff." One clearly specified extent/amount of severity is sufficient for rating "3. Specific extent/amount."

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.

- 4. Frequency 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?
 - Not addressed
- 1. Unclear
- 2. General (eg, rare, often)
- 3. Specific frequency (eg, events per unit of time)

3

Rating. 3. Specific frequency (e.g., events per unit of time)

Explanation. The Background specifies the frequency of some negative consequences: "repeat procedures [average of 6/month]" and "we lose > \$350,000 in revenue annually." However, frequency is not clear for other negative consequences: "delays in patient care of hours to several days," "potential for harm," "potential clinical

1

revised 1/28/20 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? Cannot assess None Inadequate Cannot assess Adequate Thorough Background – reviewer comments: Current Situation What is actually happening? 5. Current level of performance 3 0. Not addressed 1. General words, 2. Some data 3. Thorough and robust data but no data 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)? 3 1. Addressed, but Not addressed. 2. Illustration/ description 3. Illustration/ description very unclear somewhat clear 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? 3 0. Not addressed 1. Unclear 2. Somewhat clear 3. Very clear 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? 3 0. Not addressed 1. Unclear 2. Partially specified 3. Clearly specified/quantified 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.

2

| Extent to which the Not observed | A little | Some | All | Cannot assess | Cannot assess |
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| None | ration of learning fror A little | <u>n the people invol</u> Some | All | <u>s?</u> Cannot assess | Cannot assess |
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| Nhat target cor | ndition or specific perfor | mance is desired? I | By when? | | |
| . How specific is the | | 0.0 | | | 3 |
| Not addresse | d 1. Vague | 2. Some | ewhat specific | 3. Very specific | |
| Rating. 3. Very | | | | | |
| | | f transfer patients | arriving with outs | de catheterization study | films from 44% to |
| <u>>75%</u> " | | | _ | | |
| | | | | relative terms (e.g., im | prove the availability |
| of cath film | s by 55 percentage p | oints) without spe | citying the baselir | ne or actual target goal. | |
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| | | 10 >15% IS a fale | tnat nas been m | easured in the past and | |
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| oal – reviewer commer | 1ts: | | | | |
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| nalysis What is contri | ibuting to the problem | ? What are its root | causes? | | |
| Is the display of meth cause tree diagram. Pa | | root causes easy | to understand? (E | .g., fishbone diagram, "5- | whys"/root |
| 0. Not displayed | 1. Not understandal | | y understandable | 3. Easy to understa | nd 3 |
| Rating. 3. Easy to u | | gram with clear ca | ategorieseasy to | understand | |
| Would be "2. Partia | lly understandable" | ' if some parts of t | he visuals were un | derstandable and som ded, but "ribs" were no | |
| How clear are the ide 0. Not addressed | • | | | 3. Very clear | 3 |
| J. 1101 dadi 00000 | Onologi | 2. Oomev | | J. Tory Glodi | |
| Rating. 3. Very clea | ar | | | | |
| Explanation. In Ana | lysis: the fishbone | diagram identifies | 7 root causes of the | ne problem that are arr | rayed by category. |
| Note: The analysis identified some | | onger if the frequer | ncy of various caus | ses were displayed in a | a Pareto chart or |
| " | | | onto and vicuale ve | ou could understand so | ome of the indicated |
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| How many of the p | roposed counterme | asures are linked to | identified root cau | uses? (Review each | |
| | d see if it addresses 1. Minority lin causes | s a root cause ident | ified in the Analysi | | uses 3 |
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| | | | | ntermeasures section es addressing those | |
| | ority linked to cause ed to (address) root | | e., more than half), | , but not all of the cou | untermeasures were |
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| Not addressed | Plan unclear (minority of act monitored – w who, when) | | rtially clear / of actions ed – what, who, | Plan clear (all ac monitored – what when") | |
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| | rtially clear" if only t is to be monitored, | | | (majority of the five ac | ction activities) were |
| How adequate is the ac Not adequate ion plan – reviewer con | Possibly | Probably | Very likely | Cannot assess | Cannot assess |
| Ilow-up Plans Che Is follow-up planned to when)? | _ | | | at will be measured, b | by whom. |
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| | revised 1/28/20 |
|--|-----------------|
| 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 |
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BACKGROUND:

Supplemental material

- Status epilepticus, defined as prolonged seizures with incomplete return to baseline, is a neurological emergency. Though relatively rare with an incidence of 20-40 per 100,000 population, the impact of status epilepticus for affected patients is substantial.
- Status epilepticus requires prompt and effective treatment with anti-epileptic medication. Phenytoin or fosphenytoin are the first-line drugs of choice for status epilepticus. Prescribing less effective medications increases the potential for poor outcomes in these patients. Given the high mortality of status epilepticus and the challenge of delivering appropriate and timely therapy, our standardized status epilepticus treatment protocol is to administer phenytoin.
- Fosphenytoin has fewer infusion-related side effects, and acts even more rapidly, but it is not currently on our formulary as it is more expensive than phenytoin.

Problem Statement:

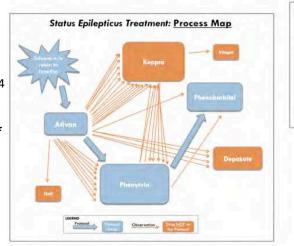
In the last two fiscal years, only 26% of patients presenting to Hospital of the University of Pennsylvania (HUP) for initial treatment of unremitting seizures were treated with phenytoin in accordance with the status epilepticus anti-epileptic drug (AED) treatment protocol. Poor adherence to this protocol leads to unnecessary variations in care and delayed, less effective treatment.

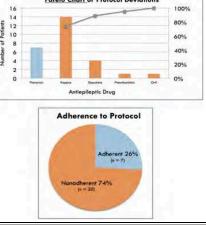
CURRENT CONDITION:

Baseline Data:

Query of patients with a *primary* diagnosis of status epilepticus by ICD-9 code treated at HUP in FY14 and FY15 yielded 83 patients in total

→ retrospective chart review of the 27 patients with treatment initiated at HUP showed:





First Antiepileptic Drug (AED) Used: Histogram of All Observations &

ROOT CAUSE ANALYSIS:

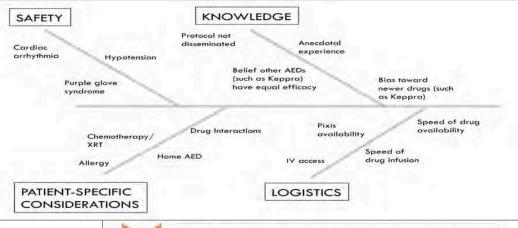
Fishbone Diagram for Nonadherence to the Anti-Epileptic Drug

Summation of input from:

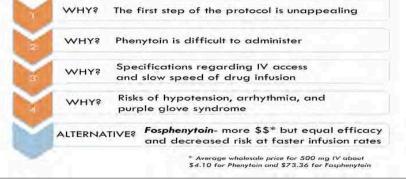
- epileptologists
- neurology

Treatment Protocol

neurosurgery



<u>Four Why's</u> for Most Commonly Observed Protocol Deviation – use of keppra instead of phenytoin (recommended):



TARGET CONDITION:

Aim: To improve adherence to the status epilepticus anti-epileptic drug treatment protocol from 26% to 80%* for patients with unremitting seizures presenting to HUP for initial treatment in the year following countermeasure implementation.

* allowing ~20% deviation for patient-specific considerations

| | METRIC | BASELINE | GOAL |
|-----------|--|-------------------------|---------------------|
| PROCESS | Adherence to Status Epilepticus Protocol | 26% | 80% |
| OUTCOME | Time to cessation of seizures | needs to be assessed | < 30 minutes |
| | Length of Stay | Average 16 days | Average <16 days |
| | Mortality | needs to be assessed | 0% |
| BALANCING | Cost of AED therapy | needs to be o | assessed |

PROPOSED COUNTERMEASURES:

| Root Cause | Countermeasures |
|---|--|
| Logistical and safety concerns regarding the use of phenytonin | Develop an updated Status Epilepticus treatment protocol with fosphenytoin as the preferred drug because of its logistical and safety advantages. |
| Knowledge about the Status Epilepticus treatment protocol and drug efficacy | When new protocol is approved, disseminate information about the Status Epilepticus protocol hospital-wide, emphasizing fosphenytoin as the new first step and its logistical and safety advantages. |
| | Develop a relevant curriculum for the Neurology Department |

ACTION PLAN – Implement the first two countermeasures. (Address the neurology curriculum next year after the new protocol and its explanatory material are available.)

- 1. Develop and disseminate an updated Status Epilepticus treatment protocol with fosphenytoin as the preferred drug because of its logistical and safety advantages.
 - a. Petition UPHS pharmacy administration to obtain fosphenytoin
 Katherine to present rationale for purchasing fosphenytoin to the hospital's Pharmacy & Therapeutics
 Committee at their in January 2017 meeting, with goal to obtain this drug by early spring. Dr. Knox to check on subsequent pharmacy administration discussions.
 - b. Rewrite status epilepticus anti-epileptic treatment protocol First draft completed by 2/1/17.
- 2. When the new protocol is approved, develop plan to disseminate the updated Status Epilepticus protocol hospital-wide.

Katherine and Dr. Patrick will complete this spring with plans to roll-out this summer.

FOLLOW-UP

• TBD

revised 1/28/20

Assessment Tool for a Problem-Solving (Proposal) A3

A3 Title: (Ex. 2) Improving the Status of Status Epilepticus

Author: XXXXX Reviewer: XXXXX Date: XXXXX

Items (based on A3 Template) and Rating Scale

Rating

Background Why is the problem important?

- Negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement of a negative consequence of the problem?
 - 0. Not addressed
- 1. Unclear
- General (eg, "harm," "difficulties," "waste")
- 3. Specific type of consequence

3

Rating. 3. Specific type of consequence

Explanation. In Background: "Prescribing less effective medications increases the <u>potential for poor clinical outcomes</u> in these patients" (i.e. patients with status epilepticus). One clearly specified impacted entity is sufficient for the rating.

Note: The statement "the <u>impact of status epilepticus</u> on affected patients <u>is substantial</u>" refers to the general clinical impact of status epilepticus rather than to the negative consequences of the performance problem of prescribing less effective medications.

Would be "2. General" if the author had stated broadly that prescribing less effective medications could cause "problems" for patients.

- Individuals/groups impacted by the negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement identifying an impacted individual, group/unit, or organization?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, "staff," or "patients," but not which)
- 3. Specific individual, group, or organizational unit

3

Rating. 3. Specific individual, group, or organizational unit

Explanation. In Background: "Prescribing less effective medications increases the potential for poor outcomes in these patients" (i.e. patients with status epilepticus). One clearly specified impacted entity is sufficient for the rating.

Would be "2. General" if the author had implied or stated broadly that patients were impacted without clarifying specifically "patients with status epilepticus."

- 3. Severity 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?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, significant harm)
- 3. Specific extent/amount

2

Rating. 2. General (eg, significant harm)

<u>Explanation.</u> In Background: "Prescribing less effective medications increases the potential for <u>poor outcomes</u> in these patients." While the general nature of the negative consequences is indicated by "poor outcomes," the extent/severity of the poor outcomes is not specified.

Would be "1. Unclear" if the author had implied or stated simply that using other medication would be "less effective" with no indication of the nature of the harm or degree of severity of consequences/impacts.

Would be "3. Specified (extent/amount of at least 1 consequence)" if the author had specified a specific degree of severity of the negative consequences of prescribing less effective medications (e.g., % mortality, type of morbidity, prolonged hospitalization, amount of healthcare costs).

- 4. Frequency 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?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, rare, often)
- 3. Specific frequency (eg, events per unit of time)

1

Rating. 1. Unclear

Explanation. In Background: The only information provided is "the <u>potential for poor outcomes</u> in these patients." No information is provided regarding how frequently that prescribing less effective medications results in poor outcomes.

revised 1/28/20 Note: The Problem Statement indicates how frequently the performance problem (less effective medications prescribed) occurs, which is different than the frequency of negative consequences resulting when the performance problem occurs. Would be "0. Not Addressed" if the author did not refer to the occurrence of negative consequences when the performance problem occurred (i.e. when less effective medications were prescribed). Would be "2. General (e.g., rare, often)." if the author had indicated a general sense of relative frequency (e.g., occasionally, frequently). Extent to which important negative consequences (e.g., harm, frustration, waste) are identified? Cannot assess None Inadequate Adequate Thorough Background – reviewer comments: **Current Situation** What is actually happening? Current level of performance 3 0. Not addressed 1. General words, 2. Some data 3. Thorough and robust data but no data Rating. 3. Thorough and robust data Explanation. In Background: "In the last two fiscal years, only 26% of patients presenting to Hospital of the University of Pennsylvania (HUP) for initial treatment of unremitting seizures were treated in accordance with the status epilepticus anti-epileptic drug treatment protocol." In Current State, there is a pareto chart and a pie chart that illustrate the data. Would be "2. Some data" if the author had made a general quantitative statement about performance (e.g., less than half of the time) or had provided data for small number of patients (e.g., less than 5) so that confidence in the data was uncertain. 6. How is work done (process/workflow)? 2 0. Not addressed Addressed, but 2. Illustration/ description 3. Illustration/ description very unclear somewhat clear clear Rating. 2. Illustration/description somewhat clear Explanation. In Current Situation: the diagram shows the sequence of the choice of anti-epileptic medications, with each arrow representing an instance of drug selection. However, no information is provided for who is involved (e.g., who orders the anti-epileptic, how it is selected) or for some steps (e.g., patient arrival and how/who determines diagnosis to initiate ordering, how and when the medication reaches the patient). Would be "1. Addressed, but unclear" if the author had provided some narrative that could not be easily followed or a process map that could not be interpreted. Would be "3. Illustration/description very clear" if the author had laid out a complete process sequence depicting who is involved at each step. 7. Clear identification of who is involved in performing the work? 0 Not addressed 1. Unclear 2. Somewhat clear 3. Very clear Rating. 0. Not addressed Explanation. No process map or written statement on the A3 indicates who is involved in performing the work of treating a patient with status epilepticus. Would be "1. Unclear" if the author had written general statements about the people involved in the work (e.g., nurses, physicians, pharmacists), but did not indicate who was doing what work. 8. Performance problem/gap? 3 0. Not addressed 1. Unclear 2. Partially specified 3. Clearly specified/quantified Rating. 3. Clearly specified/quantified 2 31

revised 1/28/20 Explanation. In Background under Problem Statement heading: "In the last two fiscal years, only 26% of patients presenting to Hospital of the University of Pennsylvania (HUP) for initial treatment of unremitting seizures were treated in accordance with the status epilepticus anti-epileptic drug treatment protocol. Poor adherence to this protocol leads to unnecessary variations in care and delayed, less effective treatment." Would be "2. Partially specified" if the author had written the performance problem/gap with some general information (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? Cannot assess Not observed A little Some All Cannot assess Extent of demonstration of learning from the people involved in the process? Cannot assess None A little Some ΑII Cannot assess Current Situation – reviewer comments: Goal What target condition or specific performance is desired? By when? 9. How specific is the goal? 3 0. Not addressed 3. Very specific 1. Vague 2. Somewhat specific Rating. 3. Very specific Explanation. In Target Condition: "To improve adherence to the status epilepticus protocol from 26% to 80% for patients with unremitting seizures presenting to HUP in the year following countermeasure implementation." Would be "2. Somewhat specific" if the author made a relative statement (e.g., improve status epilepticus anti-epileptic drug treatment protocol by 55 percentage points) without specifying the baseline (or target goal). 10. Is the goal measurable? 3 0. Not addressed 1. Not measurable 2. May be measurable 3. Clearly measurable Rating. 3. Clearly measurable Explanation. In Target Condition: "To improve adherence to the status epilepticus anti-epileptic drug treatment protocol from 26% to 80%." This statement indicates that "adherence to the status epilepticus anti-epileptic drug treatment protocol" has been measured in the past and therefore is likely to be measurable in the future. Would be "2. May be measurable" if the author included a goal statement for 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? Cannot assess Not achievable Unlikely Possibly Probably Cannot assess 11. How relevant is the goal to addressing the problem? 3 0. Not addressed Not relevant 2. Somewhat relevant 3. Very relevant Rating. 3. Very relevant Explanation. In Target Condition: "To improve adherence to the status epilepticus anti-epileptic drug treatment protocol from 26% to 80% for patients with unremitting seizures..." In Problem Statement: "In the last two fiscal years, only 26% of patients presenting to Hospital of the University of Pennsylvania (HUP) for initial treatment of unremitting seizures were treated in accordance with the status epilepticus anti-epileptic drug treatment protocol." Thus the goal directly addresses the problem statement/performance gap. Would be "2. Somewhat relevant" if the author had stated a goal that was generally related to the problem statement (i.e. goal discussed improving care for status epilepticus without clearly addressing the problem of adherence to the protocol). 12. How time-bound (clear timeframe for accomplishment) is the goal? 2 0. Not addressed 1. Unclear 2. Somewhat clear (eg, 3. Very clear (eg, date specified) relative timeframe) 32 3

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| Rating. 2. Somewha | · - | | | | | |
| | | | | implementation." This ermeasure implement | | n. |
| | r" if the author had si implementation" to i | | | nd did not include the p | hrase "followin | ng |
| | ear (e.g., date specifi al (e.g., by June 30, | | nor had stated a tim | neframe with a specifie | ed date for | |
| al – reviewer comment | S: | | | | | |
| | | | | | | |
| alysis What is contrib | | | | | | |
| Is the display of metho cause tree diagram, Pare | | ot causes easy | / to understand? (e | .g., fishbone diagram, "5- | whys"/root | |
| Not displayed | Not understandable | 2. Partial | y understandable | 3. Easy to understa | nd | 3 |
| the "head" of the | sis: Fishbone diagra | e problem is li | sted in the title of th | Note: Usually the prol ne fishbone diagram. T | | |
| | understandable" if t and some of the logic | | | uals with some parts the ts were unclear. | nat were | |
| How clear are the iden 0. Not addressed | tified root causes? 1. Unclear | 2. Some | vhat clear | 3. Very clear | | 3 |
| fishbone diagrar analysis). Additi Note: the statement of | rsis: The description n). The analysis is evonally, sources of inport the "alternative" of | en more deta out are listed. fosphenytoin | iled by identifying t | e problem is clear by cone most common caus | ses (on a 5-wh | |
| listed in the Cou | ntermeasure section | • | | ded visuals from whicl | | |
| | e of the indicated roc | | | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| Extent to which importate None Inad | | <u>lentified?</u> equate | Thorough | Cannot assess | Cannot as | sess |
| llysis – reviewer comm | ents: | | | | | |
| | | | | | | |
| untermeasures v | Vhat options/alternative | s were consider | ed? What counterme | asures/strategies are pro | posed? | |
| How many options for 0. None | countermeasures we | ere considered 2. Two | ? | 3. Three or more | | 3 |
| Dating 0 Thurs | | | | | | |
| Rating. 3. Three or r | | not Course Car | intormonouros tob | o procente three come | rata bullatad | |
| countermeasure | s that were considere | ed. <i>Note: In th</i> | nis A3 the author p | e presents three sepal laced the recommenda tion Plan section rathe | ation to initiate | the firs |
| | | | | | | |
| Countermeasure Would be "2. Two" if | e section. | lod only two o | ountormossures | | | |

| Identify the strongest 0. No counter- measures | Weak (eg, police change, education and training) | cy 2. Interme standard in-time r | | 3. Strong (eg, "forc that ensures work | | 2 |
|---|--|--|--|--|--|--|
| Explanation. In Country first counterme changes the activities (disserationale for the roles (e.g., rest (e.g., an alert of | liate (eg, standard wo untermeasures: the "o asure is "intermediate ctual work to perform. eminate the new proto e recommended drug cricting prescribing for an an electronic prescria visual reminder (e. | countermeasures e," substituting for The other two occol, develop a coll. Other "intermer this condition to | s" column in the ta sphenytoin for ph countermeasures urriculum) that madiate" strength co a set of specially nen something oth | able lists three that we tenytoin in the treatmare "weaker" educationake people aware of the trained individuals), her than fosphenytoin | ere considered. ent protocol, wh on and training the protocol and t be changing w just-in-time remi is prescribed fo | the ork inders |
| Would be "1. Weak | (eg., policy change, | education and tra | aining)" if only the | educational activities | s were proposed | d. |
| function (e.g. p fosphenytoin p | g (eg., 'forcing functio roviders were require re-selected; if a preso quired to obtain a pha ed). | ed to order any/a criber wanted to | ll anti-epileptic thr order a drug for st | ough a status epilept atus epilepticus othe | icus order set th r than fospheny | at had toin, th |
| | ong countermeasures res may be sufficient. | | feasible, combinir | ng two or more weak | or intermediate | |
| countermeasure and | see if it addresses a i | root cause identi | fied in the Analysi | is Section.) | | 3 |
| ountermeasure and a 0. None linked to causes Rating. 3. All linked Explanation. In Procountermeasure | see if it addresses a l 1. Minority linked causes | root cause identi | ified in the Analysis y linked to causes sts the root cause concerns with phe | is Section.) 3. All linked to cau and the related cour enytoin, which were c | ntermeasures. T | The firs |
| Ountermeasure and a 0. None linked to causes Rating. 3. All linked Explanation. In Procountermeasur diagram in the address the lace | see if it addresses a language of the causes of the cause of the c | root cause identified to 2. Majority sures, the table listical and safety well as addressed at status epileptic | ified in the Analysis y linked to causes state the root cause concerns with phe don the fishbone cus treatment and | is Section.) 3. All linked to cau and the related cour enytoin, which were of diagram. The next 2 | ntermeasures. The countermeasure | The firs |
| ountermeasure and a 0. None linked to causes Rating. 3. All linked Explanation. In Procountermeasur diagram in the address the lact the problem "bow Would be "2. Major | see if it addresses a if a line of the causes of the cause of the | to 2. Majorit Later 2. Majorit Later 2. Majorit Later 3. Majorit Later 4. Majorit Later 4. Majorit Later 4. Majorit Later 5. Majorit Later 6. Majorit Later 6. Majorit Later 6. Majorit Later 7. Majori | ified in the Analysis y linked to causes sts the root cause concerns with phe don the fishbone cus treatment and Analysis section. | and the related courenytoin, which were diagram. The next 2 its protocol, which was | ntermeasures. This played in the countermeasure as indicated as o | The firs 4-whys es one of |
| O. None linked to causes Rating. 3. All linked Explanation. In Procountermeasure diagram in the address the lacthe problem "bowld be "2. Major explicitly linked." To what extent are co | see if it addresses a language of the causes d to causes d to causes oposed Countermeas re addresses the logis Analysis section as vock of knowledge about ones" in the fishbone ity linked to causes" in the (address) root causes. | root cause identified to 2. Majorities and safety well as addressed at status epileptic diagram in the Af the majority (i.e. uses. | ified in the Analysis y linked to causes sts the root cause concerns with phe don the fishbone cus treatment and Analysis section. | and the related courenytoin, which were diagram. The next 2 its protocol, which was | ntermeasures. This played in the countermeasure as indicated as o | The firs 4-whys es one of were |
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| O. None linked to causes Rating. 3. All linked Explanation. In Procountermeasure diagram in the address the lact the problem "be Would be "2. Major explicitly linked To what extent are con Not feasible How likely will counter Not possible | see if it addresses a in 1. Minority linked causes d to causes d to causes oposed Countermeas re addresses the logis Analysis section as work of knowledge about ones" in the fishbone ity linked to causes" in the (address) root cause of the causes of the | sures, the table listical and safety well as addresseut status epileptic diagram in the Aff the majority (i.e. uses. ble to carry out? Possibly chieving the goa | sts the root cause concerns with pho d on the fishbone cus treatment and Analysis section. E. more than half), Highly likely | and the related courenytoin, which were diagram. The next 2 its protocol, which was but not all, of the courennot assess | ntermeasures. This played in the countermeasure as indicated as cuntermeasures where the countermeasures where the counter | The firs 4-whyses one of were |
| Causes Rating. 3. All linker Explanation. In Procuping Countermeasur diagram in the address the lacting the problem "both Would be "2. Major explicitly linked To what extent are convolved to the problem "both | see if it addresses a in 1. Minority linked causes d to causes d to causes oposed Countermeas re addresses the logis Analysis section as work of knowledge about ones" in the fishbone ity linked to causes" in the (address) root cause of the causes of the | sures, the table listical and safety well as addresseut status epileptic diagram in the Aff the majority (i.e. uses. ble to carry out? Possibly chieving the goa | sts the root cause concerns with pho d on the fishbone cus treatment and Analysis section. E. more than half), Highly likely | and the related courenytoin, which were diagram. The next 2 its protocol, which was but not all, of the courennot assess | ntermeasures. This played in the countermeasure as indicated as cuntermeasures where the countermeasures where the counter | The firs 4-whyses one of were |

Rating. 3. Very clear

1. Unclear

0. Not addressed

Explanation. In Action Plan: for the two countermeasures that are to be addressed now, three actions are listed ("what" is to be done). The first countermeasure has two actions (1a. petition UPHS pharmacy to obtain fosphenytoin; 1b.

2. Somewhat clear

34 5

3. Very clear

| revised 1/28/20 |
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rewrite the status epilepticus protocol) and the second countermeasure has one action (2. develop plan to disseminate the treatment protocol).

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")?

Not addressed

1. For the minority

2. For the majority

For all

2

Rating. 2. For the majority

Explanation. In Action Plan: individuals or groups ("who") are identified for first countermeasure's first action (1a. "Katherine") and for the second countermeasure's action (2. "Katherine and Dr. Patrick"). However, no one is identified for to perform the first countermeasure's second action (1b. complete first draft).

Would be "3. For All" if the author had identified individuals to carry out actions for all of the activities.

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

1

Rating. 1. For the minority

Explanation. In Action Plan: only one of the three actions has a clear estimated completion date ("by when"). A clear completion date is identified for the action of rewriting the treatment protocol (1b. "by 2/1/17"). The other two actions have vaguely stated timeframes (1a. "goal of obtaining this drug by early spring" and 2. "will complete this spring with plans to roll-out this summer.") "Spring" and "summer" are not practically useful for knowing when to follow up to see if work has been performed.

Would be "0. Not addressed" if no estimated completion dates were listed or if all were vague.

Would be "2. For the majority of action items" if the author had listed multiple action plan activities and estimated time frames were identified for the majority of activities (e.g., 2 of the 3 activities).

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

1

0. Not addressed

minority of actions monitored - what,

who, when)

1. Plan unclear (no or 2. Plan partially clear (majority of actions monitored - what, who, when)

3. Plan clear (all actions monitored - what, who, when")

Rating. 1. Unclear

Explanation. The Monitoring Plan only partially addresses the first action in the Action Plan and does not address the other two of the actions in the Action Plan. The Action Plan lists two activities for the first countermeasure (1a and 1b) and one activity for the second countermeasure. For the first countermeasure's first action (1a. "Petition UPHS pharmacy administration to obtain fosphenytion"), the Monitoring Plan addresses components of implementing this action ("Dr. Knox to follow-up on pharmacy administration discussions"). While the individual ("who") is identified to carry out this check ("Dr. Knox"), the time frame ("when") the follow-up will occur is not clear. No monitoring ("who will check when") is addressed for either of the other two actions in the Action Plan (1b. rewriting the protocol, 2. develop plan to disseminate the protocol).

Would be "0. Not addressed" if monitoring was not addressed for any of the three action activities.

Would be "2. Partially clear" if monitoring was addressed for at least a second activity and both checks addressed "what would be monitored, by whom, and when." That would result in the majority of the action plan activities (two of the three) being monitored.

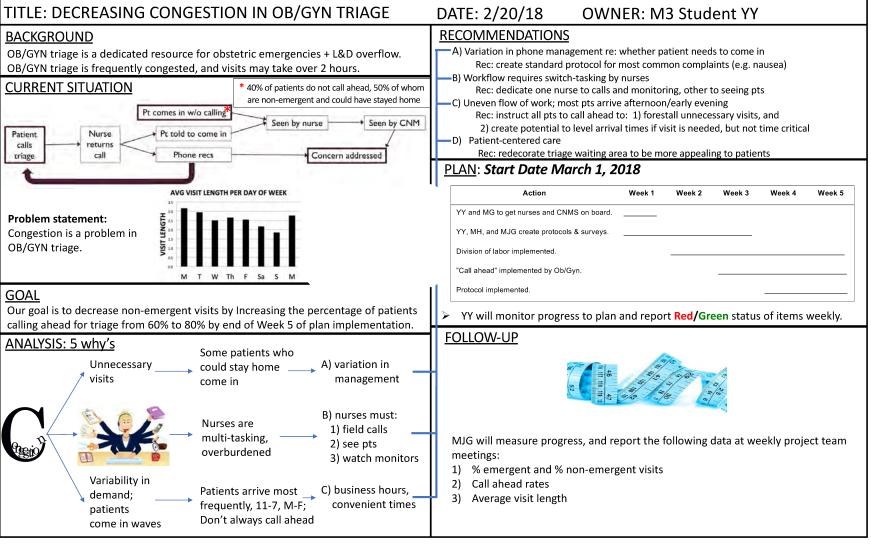
| Not adequate is the Not adequate Action plan – reviewer of | Possibly | Probably | Very likely | Cannot assess | Cannot assess |
|---|-----------|----------|-------------|---------------|---------------|
| Action plan - reviewer | comments. | | | | |
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6

| Is follow-up planned to when)? | <u>inieasure acniev</u> | ement of the des | sirea goai(s) (wh | at will be measured, | by wnom, | 0 |
|---|---|-------------------------------------|-------------------------------------|--|----------------|-------------|
| Not addressed | Plan unclear more than on "what, who, v | ne of what | rtially clear (two , who, when") | 3. Plan clear "(wha when") | at, who, | |
| Rating. 0. Not addre | essed | | | | | |
| Explanation. The A3 new status epile | does not address eptics anti-epileptic | | | red goal, (i.e. improv | ing adherence | to the |
| Would be "1. Unclea when." | r" if measuring ach | ievement of the de | esired goal addres | sed one element of ' | who is to do v | what, |
| ross A3 Sections | | | | | | |
| How clearly does the t | itle identify the pro 1. Unclear | blem to be address 2. Somew | | 3. Very clear | | 2 |
| Rating. 2. Somewh. Explanation. Title: "I improved regard to the treatment | Improving the Statu | | | general that someth cate that the problem | | |
| Would be "1. Unclea "Needed Improv | r" if a title were liste rement in Patient C | | ly unclear what the | e problem is that the | A3 is address | sing (e.g., |
| Would be "3. Very cle Evidence-based | ear" if the title indic I Practice Guideline | | | ressed (e.g., "Improv | ving Adherenc | e to |
| How often does the log Not at all | gic flow clearly from Occasionally | n one section of the Majority | e A3 to the next se Always | ection? Cannot assess | Cannot as | sess |
| In general, how information None used or not informative | ative are the visual Not very informative | illustrations? Somewhat informative | Very informative | Cannot assess | Cannot as | ssess |
| ross A3 Sections – revi | ewer comments: | | | | | |
| ZERALL RATING (ite | ems 1 – 23) | | | | | |
| al points (max = 69) | | | | | | 51 |
| | | en answered. Missin | g answers are code | d "0." | | 2.2 |
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| an (divide total by 23 it te: check that all 23 numl | | | | | | |

7

Supplemental material



revised 1/28/20

Assessment Tool for a Problem-Solving (Proposal) A3

A3 Title: (Ex. 3) Decreasing Congestion in Ob/Gyn Triage

Author: XXXXX Reviewer: XXXXX Date: XXXXX

Items (based on A3 Template) and Rating Scale

Rating

Background Why is the problem important?

- Negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement of a negative consequence of the problem?
 - 0. Not addressed
- Unclear
- 2. General (eg, "harm," "difficulties," "waste")
- 3. Specific type of consequence

1

Rating. 1. Unclear

Explanation. The Background refers to a problem of "congestion" but the negative consequences of congestion are not clear. While the Background states that "visits may take over 2 hours," it is unclear if this is the usual expected visit time and whether congestion has a negative consequence of lengthening visit time.

Would be "2. General" if negative consequences were at least stated in general terms, e.g., problems with patient care due to congestion or long visit wait times.

Would be "3. Specific type of consequence" if a specific consequence of congestion were listed such as longer visit time, clinically significant delay in diagnosis, patients leaving without being seen, lower patient satisfaction with care, providers experiencing increased work stress.

- 2. <u>Individuals/groups</u> impacted by the negative consequences (e.g., harm, frustration, waste): how specific is the clearest statement identifying an impacted individual, group/unit, or organization?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, "staff," or "patients," but not which)
- 3. Specific individual, group, or organizational unit

1

Rating. 1. Unclear

Explanation. The unclear statement of negative consequences makes it difficult to understand who is impacted by the negative consequences. The Background notes that congestion occurs in the "OB/GYN triage" unit, but does not indicate that congestion is resulting in negative consequences for that unit.

Would be "2. General" if a more general wording were used to describe who is impacted, e.g., "affects everyone."

Would be "3. Specific individual, group, or organizational unit" if negative impacts and who is impacted by them were specified, e.g., patients who have longer visit times, OB/GYN triage area staff who are stressed.

- 3. Severity 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?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, significant
- 3. Specific extent/amount

0

Rating. 0. Not addressed

Explanation. The Background does not address severity of negative consequences of the OB/GYN triage congestion.

Would be "1. Unclear" if a statement were made about negative consequences of congestion, but their severity is unclear, e.g., "causes problems" with no indication of the nature of the harm or its impacts.

Would be "2. General (e.g., significant harm)" if the severity/extent impact were described in general terms, e.g., "congestion may result in lower quality care and increased dissatisfaction," but the extent of negative impact on relevant individuals is only generally communicated as negative.

Would be "3. Specific extent/amount of at least 1 consequence" if the extent of impact were communicated: e.g., obgyn triage congestion problems result longer visit times that can lead "to delay in emergent diagnoses with increased clinical complications" and "to staff dissatisfaction and turnover."

- 4. Frequency 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?
 - 0. Not addressed
- 1. Unclear
- 2. General (eg, rare, often)
- 3. Specific frequency (eg, events per unit of time)

0

Rating. 0. Not addressed

1

| | | | | revised 1/28/20 |
|---|---|--|--|---|
| OB-GYN triag congestion ma | e area. While the Backgro | dress how often that congesti ound does indicate that the p gative consequences such a | roblem of congestion oc | curs frequently, |
| | ear" if the background inc lengthened visit times m | luded a statement about neg | ative consequences, but | their frequency is |
| | | nly a relative sense of freque ionally results in critical delay | | |
| negative cons each week 20 | equences: e.g., "clinically patients leave without be | r unit of time)" if the backgrou r significant delay in diagnosi- ping seen due to frustration was cited work stress due to co | s occurs on average 4x/rith the triage delays", or | month", "on average, "the last 5 staff |
| None | Inadequate | nces (e.g., harm, frustration, v Adequate Thorough | waste) are identified? Cannot assess | Cannot assess |
| Background – reviewer | comments. | | | |
| Current Situation | What is actually happening? | , | | |
| Current level of perfor Not addressed | | 2. Some data | 3. Thorough and rob | ust data 2 |
| emergent and day of week. | ckground, there are state could stay home (50%). | ments of how many patients Also, a bar graph illustrates t the bar graph were not show | he average visit length in | n ob-gyn triage per |
| | | more granular data were give ients involved. | n, e.g., the length of time | e waiting before being |
| How is work done (pro Not addressed | ocess/workflow)? 1. Addressed, but unclear | Illustration/ description somewhat clear | Illustration/ descri clear | ption very 2 |
| Explanation. In Cu | | t clear map shows the general proc highlighted and delays in the | | |
| | ration/description very cle | process steps or other descrear" if the process map show | | |
| Clear identification of 0. Not addressed | who is involved in perfori 1. Unclear | ming the work? 2. Somewhat clear | 3. Very clear | 3 |
| Rating. 3. Very cle Explanation. The p nurse, CNM). | | tate includes who is involved | in performing each step | of the work (e.g., |
| | ewhat clear" if individuals the work, but not for othe | (e.g., nurses, CNM) involved parts of the work. | I in performing the work | were indicated for |
| | | | | |

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| Rating. 1. Unclea | r | | | |
|--|--|--|---|---|
| | | Congestion is a problem in ob/g nance gap may be the time pati | | |
| | | erformance problem/gap were vorovider evaluation is increasing | | language (e.g., |
| managed safe | | d" if the performance gap was of that the average time to be see | | |
| | | es direct observation of the wor | | Cannot assess |
| Not observed | A little | Some All | Cannot assess | |
| Extent of demonstra None | tion of learning from t A little | he people involved in the proce Some All | ss? Cannot assess | Cannot assess |
| rent Situation – revi | ewer comments: | | | |
| Not addressed | 1. Vague | 2. Somewhat specific | 3. Very specific | 3 |
| Rating. 3. Very Sp Explanation. In G from 60% to 8 Would be "2. Som | 1. Vague pecific foal: "Decrease non-e 80% by the end of were newhat specific" if the | 2. Somewhat specific mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in | e percentage of patients of | calling ahead for triag |
| Rating. 3. Very Sp Explanation. In G from 60% to 8 Would be "2. Som | 1. Vague pecific foal: "Decrease non-e 80% by the end of were hewhat specific" if the ht specifying a target. | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in | e percentage of patients of | calling ahead for triag |
| O. Not addressed Rating. 3. Very Sp. Explanation. In G. from 60% to 8 Would be "2. Som visits") without sthe goal measura O. Not addressed Rating. 3. Clearly Explanation. In G. of this A3 pre- | 1. Vague pecific foal: "Decrease non-e 80% by the end of were newhat specific" if the at specifying a target. ble? | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in | e percentage of patients on relative terms (e.g., "deconormal and a conormal and | calling ahead for triag crease non-emergent ole |
| Rating. 3. Very Sp. Explanation. In G. from 60% to 8. Would be "2. Som visits") without the goal measura 0. Not addressed Rating. 3. Clearly Explanation. In G. of this A3 prepatients do not Would be a "2. Market State of the control of the contr | 1. Vague pecific poal: "Decrease non-e 80% by the end of were pewhat specific" if the period of the specifying a target. 1. Not measurable measurable oal the measure is: ". viously measured the pot call ahead), this goal ay be measurable" if units of the specific of the spec | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in le 2. May be measurable increase the % of patients canumber of patients who did not | alling ahead from 60 to 80 to call ahead (see Current | calling ahead for triag crease non-emergent ole 3 2%. Since the authors Situation: 40% of the Condition, the |
| Rating. 3. Very Sp. Explanation. In G. from 60% to 8. Would be "2. Som visits") without the goal measura 0. Not addressed Rating. 3. Clearly Explanation. In G. of this A3 prepatients do not would be a "2. Ma measure were thow achievable is the goal measure were the state of th | 1. Vague Decific Soal: "Decrease non-e 80% by the end of were sewhat specific" if the at specifying a target. Louisian target Not measurable measurable oal the measure is: ". Viously measured the obt call ahead), this goal ay be measurable" if use not commonly used | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in the state of patients can be a sumber of patients who did not all is clearly measurable. | alling ahead from 60 to 80 to call ahead (see Current | calling ahead for triag crease non-emergent ole 3 2%. Since the authors Situation: 40% of the Condition, the |
| Rating. 3. Very Sp. Explanation. In G. from 60% to 8. Would be "2. Som visits") without the goal measura 0. Not addressed Rating. 3. Clearly Explanation. In G. of this A3 prepatients do not would be a "2. Mameasure were dow achievable is the Not achievable. | 1. Vague pecific poal: "Decrease non-e 30% by the end of were pewhat specific" if the period of the specifying a target. 1. Not measurable measurable poal the measure is: ". viously measured the pot call ahead), this goal as be measurable" if use not commonly used. | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in the control of the control o | alling ahead from 60 to 80 to call ahead (see Current monstrated in the Current mether measurement could | calling ahead for triag crease non-emergent ble 3 3 3 3 3 6 7 8 8 9 8 9 8 9 8 9 9 9 9 9 |
| Rating. 3. Very Sp. Explanation. In G. from 60% to 8. Would be "2. Som visits") without the goal measura 0. Not addressed Rating. 3. Clearly Explanation. In G. of this A3 prepatients do not Would be a "2. Mameasure were dow achievable is the Not achievable. | 1. Vague Decific Goal: "Decrease non-e BO% by the end of were Decific if the end of the end | mergent visits by increasing the ek 5 of plan implementation." goal were stated qualitatively in the state of the measurable and the reader is uncertain when the problem? | alling ahead from 60 to 80 to call ahead (see Current monstrated in the Current mether measurement could | calling ahead for triag crease non-emergent one 3 2%. Since the authors Situation: 40% of the Condition, the dispersion of the Cannot assess |

improving some aspect of patient experience when the problem statement focused on "managing OB patient

emergencies efficiently.")

| Not addressed | | ccomplishment) is the goal? | | 2 |
|--|--|--|--|--|
| U. INOT AGGRESSEC | d 1. Unclear | Somewhat clear (errelative timeframe) | g, 3. Very clear (eg, da | ate specified) |
| Rating. 2. Some | ewhat clear | | | |
| Explanation. The deadline. | ne Goal: states "by | end of Week 5 of plan impleme | entation." This sets a somew | hat clear |
| Would be "3. Vei April 5, 2020 | | ate were added (e.g., "by th | e end of week 5 of plan imple | ementation, i.e. |
| oal – reviewer comn | ments: | | | |
| | | | | |
| | | | | |
| nalysis What is co | ontributing to the problem | n? What are its root causes? | | |
| Is the display of m cause tree diagram. | | g root causes easy to understa | and? (e.g., fishbone diagram, "5- | |
| 0. Not displayed | Not understandat | Partially understand ble | dable 3. Easy to understar | nd 2 |
| Rating. 2. Partia | lly Understandable | | | |
| Explanation. At t | the left side of the roos word is somewhat d | t cause tree diagram is capital ifficult and therefore the displa | "C" with the word "congestic ty is rated "partially understar | n" jumbled inside of it. ndable." |
| Would be "3. Easin Ob-Gyn to | | ne beginning of the root cause | tree diagram said "Too many | non-emergent visits |
| | | • | | |
| How clear are the Not addressed | identified root causes d 1. Unclear | 2. Somewhat clear | 3. Very clear | 3 |
| | | | | |
| Bating 3 Very | clear | | o. Very clear | |
| (unnecessal cause tree f | he Analysis section is ry visits, nurses who a | a root cause tree diagram tha are multi-tasking, and patients nderlying causes of these thre | at identifies 3 major contributi coming in waves to the triag | e area). The root |
| Explanation. In the (unnecessal cause tree for more "whys' Would be "2. So root causes, | he Analysis section is ry visits, nurses who a urther identifies the u " to get to the underly mewhat clear" if from , but not others. For e | a root cause tree diagram tha are multi-tasking, and patients nderlying causes of these thre | at identifies 3 major contributi coming in waves to the triag e major contributing factors be suals you could understand s only listed the 3 major contril | e area). The root by asking at least 2 come of the indicated buting factors and did |
| Explanation. In the (unnecessal cause tree for more "whys" Would be "2. So root causes, not illustrate waves. | he Analysis section is ry visits, nurses who a urther identifies the u " to get to the underly mewhat clear" if from , but not others. For e | s a root cause tree diagram that are multi-tasking, and patients inderlying causes of these threing root causes. The written statements and visexample, if the root cause tree ins for the unnecessary visits, | at identifies 3 major contributi coming in waves to the triag e major contributing factors be suals you could understand s only listed the 3 major contril | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in |
| Explanation. In the (unnecessal cause tree for more "whys" Would be "2. So root causes, not illustrate waves. | he Analysis section is ry visits, nurses who a urther identifies the u " to get to the underly mewhat clear" if from , but not others. For e the underlying reaso | s a root cause tree diagram that are multi-tasking, and patients inderlying causes of these threing root causes. The written statements and visexample, if the root cause tree ins for the unnecessary visits, | at identifies 3 major contribution coming in waves to the triague major contributing factors to the suals you could understand so only listed the 3 major contribution multi-tasking nurses, and paragraphs. | e area). The root by asking at least 2 come of the indicated buting factors and did |
| Explanation. In the (unnecessal cause tree for more "whys" Would be "2. So root causes, not illustrate waves. | he Analysis section is ry visits, nurses who a urther identifies the u "to get to the underly mewhat clear" if from , but not others. For e the underlying reaso | a a root cause tree diagram that are multi-tasking, and patients inderlying causes of these threing root causes. the written statements and visexample, if the root cause tree ins for the unnecessary visits, are identified? | at identifies 3 major contribution coming in waves to the triague major contributing factors to the suals you could understand so only listed the 3 major contribution multi-tasking nurses, and paragraphs. | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in |
| Explanation. In the function of the function o | he Analysis section is ry visits, nurses who a urther identifies the u "to get to the underly mewhat clear" if from , but not others. For e the underlying reaso | a a root cause tree diagram that are multi-tasking, and patients inderlying causes of these threing root causes. the written statements and visexample, if the root cause tree ins for the unnecessary visits, are identified? | at identifies 3 major contribution coming in waves to the triague major contributing factors to the suals you could understand so only listed the 3 major contribution multi-tasking nurses, and paragraphs. | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in |
| Explanation. In the function of the function o | he Analysis section is ry visits, nurses who a urther identifies the u "to get to the underly mewhat clear" if from , but not others. For e the underlying reaso | a a root cause tree diagram that are multi-tasking, and patients inderlying causes of these threing root causes. the written statements and visexample, if the root cause tree ins for the unnecessary visits, are identified? | at identifies 3 major contribution coming in waves to the triague major contributing factors to the suals you could understand so only listed the 3 major contribution multi-tasking nurses, and paragraphs. | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in |
| Explanation. In the (unnecessal cause tree for more "whys") Would be "2. Son root causes not illustrate waves. Extent to which imply None malysis – reviewer company ountermeasure | he Analysis section is ry visits, nurses who a urther identifies the u " to get to the underly mewhat clear" if from , but not others. For e the underlying reaso portant root causes a lnadequate comments: | s a root cause tree diagram that are multi-tasking, and patients and erlying causes of these three ing root causes. The written statements and vis example, if the root cause tree ens for the unnecessary visits, are identified? Adequate Thorough | at identifies 3 major contributicoming in waves to the triage major contributing factors to suals you could understand sonly listed the 3 major contributing multi-tasking nurses, and particular control of the control | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in Cannot assess |
| Explanation. In the (unnecessal cause tree for more "whys") Would be "2. Son root causes not illustrate waves. Extent to which imply None malysis – reviewer company ountermeasure | he Analysis section is ry visits, nurses who a urther identifies the u "to get to the underly mewhat clear" if from , but not others. For e the underlying reaso portant root causes a lnadequate omments: | s a root cause tree diagram that are multi-tasking, and patients and erlying causes of these three ing root causes. The written statements and vis example, if the root cause tree ens for the unnecessary visits, are identified? Adequate Thorough | at identifies 3 major contributicoming in waves to the triage major contributing factors to suals you could understand sonly listed the 3 major contributing multi-tasking nurses, and particular control of the control | e area). The root by asking at least 2 ome of the indicated buting factors and did tients coming in Cannot assess |
| Explanation. In the (unnecessal cause tree for more "whys") Would be "2. Son root causes, not illustrate waves. Extent to which implies not in the implies of the implies | he Analysis section is ry visits, nurses who a urther identifies the u "to get to the underly mewhat clear" if from , but not others. For eathe underlying reason portant root causes at Inadequate comments: Se What options/alternations for countermeasures 1. One | a root cause tree diagram that are multi-tasking, and patients inderlying causes of these three ing root causes. The written statements and visexample, if the root cause tree in for the unnecessary visits, are identified? Adequate Thorough attives were considered? What course were considered? 2. Two | at identifies 3 major contributicoming in waves to the triague major contributing factors to suals you could understand sonly listed the 3 major contributing multi-tasking nurses, and parameter and contributions. Cannot assess In Cannot assess In Cannot assess In Cannot assess | e area). The root by asking at least 2 come of the indicated buting factors and did tients coming in Cannot assess posed? |
| Explanation. In the (unnecessal cause tree for more "whys") Would be "2. Son root causes, not illustrate waves. Extent to which implies to waves and illustrate waves. Extent to which implies analysis – reviewer continuation of the continuation of the cause of the | he Analysis section is ry visits, nurses who a urther identifies the u in to get to the underly mewhat clear" if from the underlying reason the underlying reason the underlying reason portant root causes as Inadequate comments: Se What options/alternations on the underlying reason the underlying reason portant root causes as Inadequate comments: | a root cause tree diagram that are multi-tasking, and patients anderlying causes of these three ing root causes. The written statements and vis example, if the root cause tree ins for the unnecessary visits, are identified? Adequate Thorough actives were considered? What couses were considered? | at identifies 3 major contributicoming in waves to the triage major contributing factors to suals you could understand sonly listed the 3 major contributing multi-tasking nurses, and particular contributions of the contribution of the contributio | e area). The root by asking at least 2 come of the indicated buting factors and did tients coming in Cannot assess posed? |

| measures | Weak (eg, polic change, education and training) | standar in-time i | | Strong (eg, "force that ensures work way) | |
|--|--|--|--|--|--|
| Explanation. In Re | diate (eg, standard wo commendations: Stan ons A, B, and C | . • | | <u> </u> | orkflow are included as |
| Would be "1. Weak countermeasu | " if only educational ir re proposed | terventions we | re proposed, or if r | edecorating the triage | e area was the only |
| to error proof the | | ng patients to ca | ıll in before comin | g to triage, and to only | ypothetically possible y see patients who had |
| | ong countermeasures res may be sufficient. | are not always | feasible, combinii | ng two or more weak | or intermediate |
| | posed countermeasur see if it addresses a r 1. Minority linked causes | oot cause ident | ified in the Analys | | 2 |
| Rating. 2. Majority | linked to causes | | | | |
| Explanation. In Re | ecommendations: Item e waiting area, is not o | | | | es. Recommendation Inked, the "majority are |
| | nked" if either all 4 pro ountermeasures had b | | | plicitly linked to a roo | t cause, or if only the |
| o what extent are co | ountermeasures feasib | ole to carry out? | , | | |
| | | | | | |
| Not feasible | Unlikely | Possibly | Highly likely | Cannot assess | Cannot assess |
| | Unlikely rmeasures result in ad Unlikely | • | 0,,, | Cannot assess Cannot assess | Cannot assess |
| low likely will counte | rmeasures result in ac Unlikely | chieving the goa | al? | | |
| ion Plan To pilot & | rmeasures result in ac Unlikely ewer comments: | Possibly discountermeasure | al? Highly likely s: what, who, when? | Cannot assess | Cannot assess |
| low likely will counte Not possible ntermeasures – revia | rmeasures result in ac Unlikely ewer comments: | Possibly discountermeasure | al? Highly likely s: what, who, when? | Cannot assess | |
| ion Plan To pilot & For the action plan of 0. Not addressed Rating. 2. Somewhat ion board Explanation. The foolly somewhat what "on board" | rmeasures result in ac Unlikely ewer comments: A implement the selected in the A3, how clearly 1. Unclear | Possibly discountermeasure are activities de 2. Somew | al? Highly likely S: what, who, when? sscribed (i.e. "what what clear e GANTT chart). I | Cannot assess Tisto be done)? 3. Very clear However, the descript CNMs on board" does aged with the subsequence of the company of the comp | Cannot assess 2 ion of some tasks is as not communicate |
| ion Plan To pilot 8 For the action plan o 0. Not addressed Rating. 2. Somewhat for board somewhat for board Recommendat | measures result in an Unlikely ewer comments: a implement the selected on the A3, how clearly 1. Unclear Plan lists 5 activities (I t clear to the reader. I' means, for example tion D (Redecorate the | eft column of the For example, "ve, simply agreeing waiting area) | al? Highly likely S: what, who, when? Scribed (i.e. "what what clear e GANTT chart). I will get nurses and ang or actively enganas no associated | Cannot assess 2 2 3: "is to be done)? 3. Very clear However, the descript CNMs on board" does aged with the subsequence task(s). | Cannot assess 2 ion of some tasks is as not communicate |
| ion Plan To pilot 8 For the action plan of 0. Not addressed Rating. 2. Somewhat "only somewhat "on board Recommendat Would be "1. Uncle Would be "3. Very "only possible to the property of the possible to t | ewer comments: a implement the selected on the A3, how clearly 1. Unclear Plan lists 5 activities (I t clear to the reader. "" means, for example tion D (Redecorate the par" if the statements of the car" if the statements of the car is t | Possibly discountermeasure are activities de 2. Somev eft column of the For example, "va, simply agreein awaiting area) of what is to be | al? Highly likely s: what, who, when? sscribed (i.e. "what what clear e GANTT chart). I will get nurses and ng or actively enga has no associated done were vague | Cannot assess The second of t | Cannot assess 2 ion of some tasks is as not communicate uent tasks. Further, |
| ion Plan To pilot 8 For the action plan of 0. Not addressed Rating. 2. Somewhat "only somewhat "on board Recommendat Would be "1. Uncle Would be "3. Very what was to be | measures result in activities (I t clear to the reader. I'means, for example tion D (Redecorate the ear" if the statements of clear" if all of the reco | eft column of the sample, "very simply agreeing waiting area) of what is to be mmendations of the for each action | Highly likely Highly likely S: what, who, when? Scribed (i.e. "what what clear e GANTT chart). I will get nurses and ang or actively enganas no associated done were vague escribed tasks with the control of the carried | Cannot assess The control of the co | cannot assess 2 ion of some tasks is as not communicate uent tasks. Further, , "will engage others." |

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| Rating. 3. For all Explanation. In Plan: the the actions are to b indicated. | etions listed in the last 3 or dates identified for For the minority | action steps hut of 5 action seach action ite 2. For the number of the seach action ite NTT chart lays | nad an identified of the steps had an iden em (i.e. "when")? majority | owner. | ., "YY and MH will" |
|---|--|--|---|--|---------------------|
| Are estimated completion of 0. Not addressed 1. Rating. 3. For all Explanation. In Plan: the the actions are to b indicated. | dates identified for For the minority | each action ite 2. For the n | em (i.e. "when")? majority sout a 5-week tim | tified owner. | 3 |
| Are estimated completion of 0. Not addressed 1. Rating. 3. For all Explanation. In Plan: the the actions are to b indicated. | dates identified for For the minority header of the GAI | each action ite 2. For the n | em (i.e. "when")? najority s out a 5-week tim | | 3 |
| O. Not addressed Rating. 3. For all Explanation. In Plan: the the actions are to b indicated. | For the minority header of the GA | 2. For the n | majority | 3. For all | 3 |
| O. Not addressed Rating. 3. For all Explanation. In Plan: the the actions are to b indicated. | For the minority header of the GA | 2. For the n | majority | 3. For all | 3 |
| Explanation. In Plan: the the actions are to b indicated. | | | | | |
| the actions are to b indicated. | | | | | |
| Note: If the implementat | | | e chart, the estim | neframe for the action ated beginning and er | - |
| dates from an as ye | | | rting the specific | dates would be cleare | r than the relative |
| Would be "2. For the maj | | | | le action plan activities s (e.g., 3 of the 5 activ | |
| How clear is the plan for m whom, when)? | onitoring the imple | mentation of a | ctions in 18-20 a | bove (what will be mor | nitored, by |
| • | Plan unclear (no ominority of actions monitored – what, who, when) | (majority | tially clear of actions d – what, who, | Plan clear (all act monitored – what, when") | |
| Rating. 3. Plan clear Explanation. The Plan st (when). Would be "2. Partially cle not stated (no "when | ar" if only 2 of the 3 | 3 "what, who, v | when" elements w | | |
| How adequate is the action | plan? | | | | 0 |
| | ssibly Pr | obably | Very likely | Cannot assess | Cannot assess |
| | | | | | |
| llow-up Plans Checking | g whether desired god | al(s) was achieve | ed? | | |
| Is follow-up planned to me | asure achieveme | ent of the des | ired goal(s) (wh | at will be measured, b | oy whom, |
| when)? 0. Not addressed 1. | Plan unclear (no more than one of "what, who, when" | of "what, | tially clear (two who, when") | 3. Plan clear "(what, when") | , who, |
| Rating. 3. Plan clear | | | | | |
| Explanation. Follow up: I | t states that MJG (| who) will be tra | acking 4 metrics | (what), and will report | weekly (when). |
| Would be "1. Plan unclea measured did not co | | | | vere addressed, or if v | vhat was being |

Across A3 Sections

| 0. No title | 1. Unclear | 2. Somew | hat clear | 3. Very clear | 2 |
|------------------------------|--|----------------------|-------------------|-----------------------|--------------------|
| Rating. 2. Some | what clear | | | | |
| | e title identifies a some ever, why "congestion" | · · | ` , | | ing (OB/GYN triage |
| Would be "1. Und | clear" if less informatio | n were in the title, | e.g., no statemen | t of where the proble | em is occurring. |
| Congestion | y clear", if the title iden n Ob/Gyn Triage to R logic flow clearly fron | educe Delays in A | ssessing OB Patio | ent Emergencies." | pe "Decreasing |
| Not at all | Occasionally | Majority | Always | Cannot assess | Cannot assess |
| In general, how info | ormative are the visua | l illustrations? | | | Cannot assess |
| None used or not informative | Not very informative | Somewhat informative | Very informative | Cannot assess | Calliot assess |
| oss A3 Sections – | reviewer comments: | | | | |
| ERALL RATING | (items 1 – 23) | | | | |
| al points (max = 69 |) | | | | 47 |
| | | | | | |

10/20/19

Feedback Form: Assessment Package for Proposal A3s

Please provide your feedback on all aspects of the A3 assessment package. As you review these documents and try out assessing A3s, please take notes of your impressions, questions, and suggestions. We will use this outline for prompts when we discuss your feedback in person.

| Ori | entation to the pilot study | |
|-----|--|----------------------------------|
| a. | Was the memo providing information for piloting the assessment of A3 clear? | |
| b. | Was the orientation phone call adequate? | |
| Sel | f-instruction package | |
| | Instructions for Assessing Problem-Solv | ing A3s |
| a. | What suggestions do you have for how to make the overview and learning steps clearer for an individual such as yourself? | |
| | A3 Template and A3 Content Guide | |
| a. | What suggestions do you have for making one or both of these documents easier to understand? | |
| b. | Was there anything important missing? | |
| | Practice assessing A3s – example A3s a | nd standard ratings/explanations |
| a. | How helpful were the standard ratings and explanations? Would you make any suggestions to improve them? | |
| | Self-instruction package – overall | |
| a. | Approximately how long did it take you to complete the training package (reviewing materials, practicing the assessment of example A3s, checking ratings)? | |
| b. | Any comments about the self-instruction package as a whole? | |
| Ass | sessing six A3s | |
| а. | Approximately how long did it take you to assess all six A3s? | |
| b. | Did you find this assessment form easy to use? Why or why not? | |
| c. | What if anything frustrated you about the form? | |

10/20/19

| d. | Any feedback on the layout or format of the assessment form? | |
|-----|--|--|
| e. | Any feedback on specific items or rating scales and their use? | |
| f. | Any other comments or suggestions regarding performing the assessments? | |
| Ove | erall experience and usefulness | |
| a. | Did you find that learning and applying this approach to assessing A3s was easy or hard? In what ways? | |
| b. | Did utilizing the A3 instructional package help prepare you better to evaluate an A3? | |
| C. | Do you have any other suggestions on how to improve the assessment of A3s? | |
| d. | Any other comments on this A3 instructional package? | |