



## Lean basics for value analysis: PART 2

Value Analysis Course

**vizient**<sup>TM</sup>

# Learning objectives

**By the end of this lesson, you will be able to:**

- Apply lean tools to improve supply chain and value analysis processes
- Identify the waste found in the value analysis process
- Analyze a process map and determine where waste exists
- Apply A3 problem solving to value analysis and supply chain
- Use the problem analysis and solution steps of A3 problem solving
- Demonstrate how to coach others to use the A3 problem solving method



# A3 advantages and pitfalls

## Advantages

- Precision summary
- Incorporates root cause analysis regardless of the method: Pareto Diagram, Five Why's, Fishbone Diagram, Fault Tree
- Adapts to DMAIC and PDSA
- Adaptable to any of the 7 wastes in healthcare: Defects, overproduction, motion, over-processing, waiting, inventory, transportation

## Pitfalls

- Jumping to solutions
- Losing objectivity
- Completing the A3 independently
- Generating solutions that are not targeted to the root cause

# Activity: A3 for the “SEPS Kit for Bedside Subdural Hematoma Evacuation and Drainage” Initiative

In this activity we will walk through the A3 as a class (Handouts Day 2).

## **FIRST:**

Left Side

- Problem Identification Analysis

## **FOLLOWED BY:**

Right Side

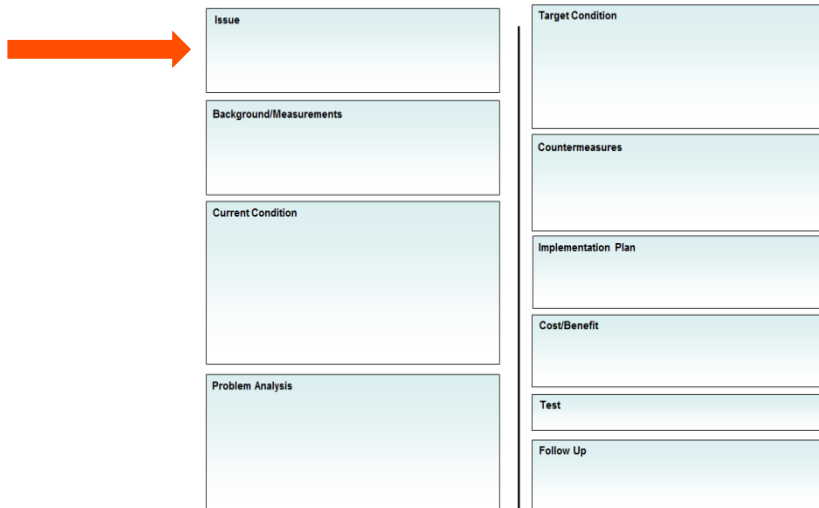
- Improving the Process

# Problem identification and analysis: developing the left side of the A3



# Problem: the issue

- State the issue through the eyes of your customer or patient
- Don't include a solution
- Answer the question "So what?" or "Why does it matter?"
- Describe what the issue is



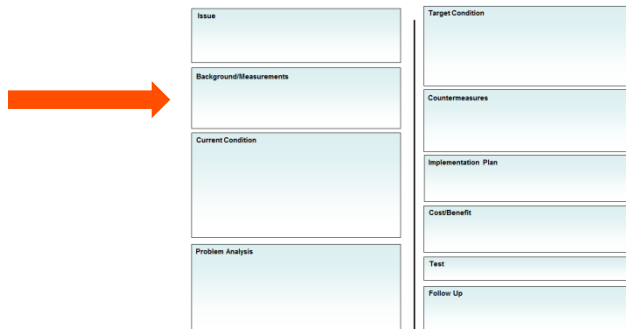
## The issue:

The SEPS kit for bedside burr holes is more cost effective than the current Cranial Access Kit. Making this change will also save money by allowing us to move some cases from the OR to the bedside.

# Problem: background and measurement

## Here, you:

- Clarify and establish the significance of the issue
- Determine the “weight of the problem”
- Be sure to think about how you **measure** here. How often does it occur? Do we really have a problem? How important is it to our customers and/or the organization?



## Background and measurement:

80 cases per year are completed in the OR at \$17,732.00 reimbursement rate with \$12,658.00 in procedural expenses netting a profit of \$405,920.00. The bedside reimbursement rate (CPT Code 61105) is \$6,668.00. Current data shows no bedside cases. Estimate moving 28 per year to bedside. Current bedside cost incomplete (estimating \$10,702.00 per case for comparative purposes) DRG codes are not consistent between OR and Bedside. SEPS kit is \$1,562.94 and the current burr kit is \$528.67. Product change could net \$111,701.16 in increased spend. Estimated bedside reimbursement lost annually is \$186,704.00. If we received reimbursement for bedside at current DRG, each case would net a loss of \$4,034.00.

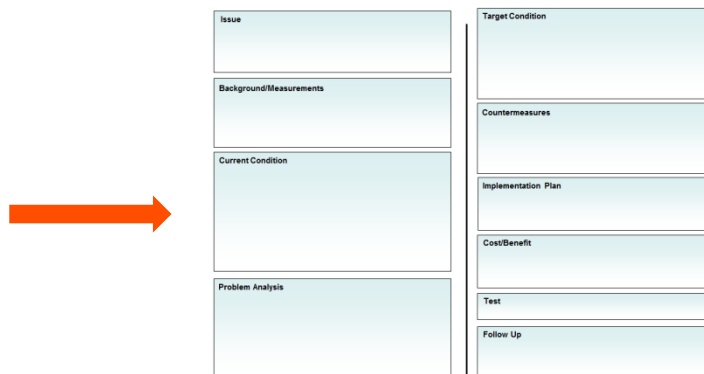
# Problem: current condition (how we operate now)

Draw or graphically represent how the work **happens now**, based on your observations (this is your storyboard)

Talk and validate with affected parties for accuracy and buy-in

## Questions

- Is there waste?
- Are there loops in the work?
- Is there continuous flow?
- Is it ideal?



## Current Condition:

Current observation at bedside shows one SKU difference in items that are pulled for the case (Lidocaine). The request is to pull a SEPS kit with lidocaine and chloraprep. Residents are not documenting bedside cases resulting in a \$6,668 per case loss in revenue (DRG-025 versus DRG-066). Clinical criteria are not set for determining OR versus bedside. Cost data for bedside is not properly tracked.



# Current Condition

**Bedside Cost Data**  
 Cost data for bedside procedures are not being tracked.

**Compromised Net Impact**  
 No data creates a lack of awareness.

**Anesthesia/OR Time**  
 Patient procedural location determined by physician without clearly defined criteria.

**Operational Impact**  
 1. Increased OR time.  
 2. Increased Anesthesia time  
 3. Decreased Revenue

**Resident Documentation**  
 Residents are not documenting for bedside procedures

**DRG Coding**  
 Without Resident Op Notes, Coders have no indicator that the DRG code chosen is inaccurate. DRG code being used for the OR is different than for the bedside resulting in lost revenue.

**Pull Supplies from Central Sterile**  
 1. Pull Supplies from CPSI generated reports



Walking Time  
 Elevator Wait  
 Interruptions

**Stock Supplies in Department**  
 1. Rotate & pull outdated  
 2. Pull missing sticker stock  
 3. Notate obvious stock outs  
 4. Retrieve clean iso carts



Walking Time  
 Elevator Wait  
 Interruptions

**Next Department or Return to MM**  
 1. Repeat process in all assigned areas  
 2. Tag & fill storeroom  
 3. Complete other assigned duties

# Problem Analysis

- What should we work on?
- Goal is to identify the root cause by using the five “whys”
- Review the storm clouds
- Consolidate the ones that are related to each other (i.e., one may be a “why?” of another)
- Will not always take five “why’s” to reach root cause
- A “why” may branch out
- Go as far as you have control
- If root cause is “no process” – stop there and determine best way to create a process

## Problem analysis

1. Residents are not documenting bedside procedures.
  - ↳ Why? Residents assumed base documentation was sufficient.
  - ↳ Why? Residents do not receive documentation education in the orientation.
  - ↳ Why? Orientation staff unaware of the need.
  - ↳ Why? Physician staff have not identified or relayed the need.

Issue	Target Condition
Background/Measurements	Countermeasures
Current Condition	Implementation Plan
Problem Analysis	Cost/Benefit
	Test
	Follow Up

### Issue

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### Target Condition

### Countermeasures

### Implementation Plan

### Cost/Benefit

### Test

### Follow Up

# Polling Questions:

1. What do you think is the most important component of the A3 so far?
2. How would the process mapping help in this scenario?



# Improving the process: working with the right side of the A3



# Solution: target condition

**This is where the fun starts – We work on the solution**

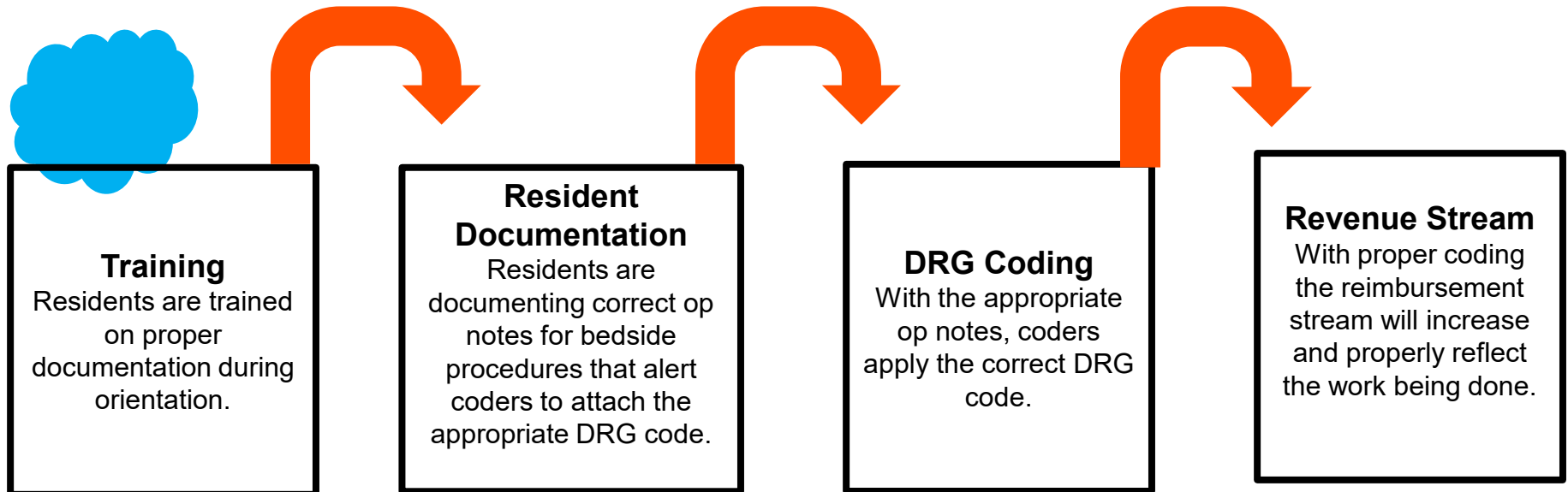
- Draw the proposed better way to work
- Replace “storm clouds” with improvements or “fluffy clouds”
- Validate with staff and affected parties

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# Target Condition

- Within 90 days, we will improve revenue by \$314,588 annually
- The Resident orientation program will be enhanced to include documentation training
- Education will take specific direction from a team comprised of the surgeons and billing specialists to ensure all appropriate details are trained to as a part of the program



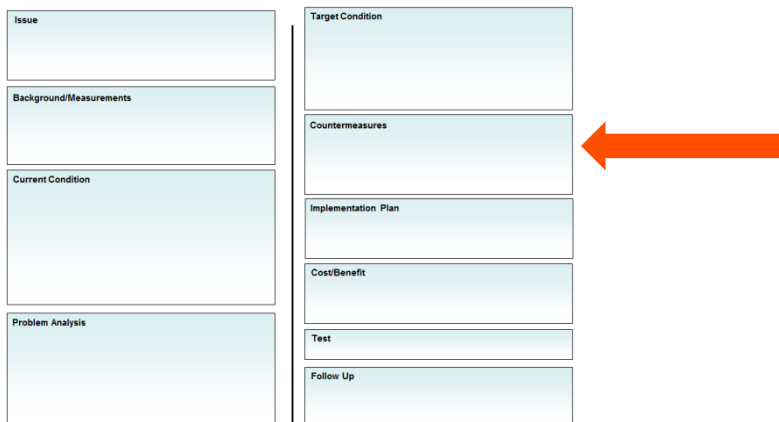
# Solution: countermeasures

- **What** are we going to do that will move us from the Current Condition to our proposed Target Condition?
- Will this move us closer to **Ideal**?
- Are we fixing problems (root causes in the problem analysis step)?



## Countermeasures

- Educate Residents on documentation needs.
- Utilize same DRG regardless of location of procedure.



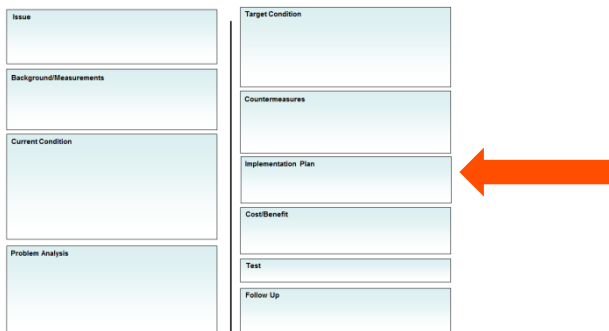


# Solution: implementation plan

Create a realistic and achievable plan for the time available

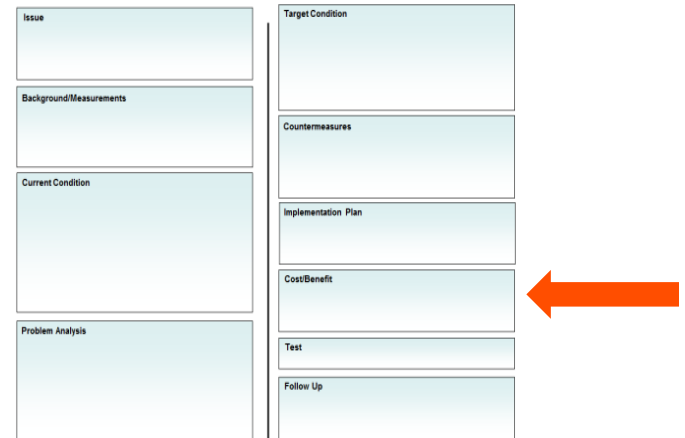
The details of how we'll make the countermeasures happen

What	Who	When	Outcome
1. Engage Education in updating Physician orientation	Dr. Revenue	3.30.18	1. Identify details required. 2. Create education goals.
2. Create Education for Resident Orientation	Sally T.	4.14.18	1. Concise orientation packet
3. Educate Residents	Mark R.	5.1.18	1. Train current Residents. 2. Train new Residents at orientation moving forward.



# Solution: Cost and/or Benefit

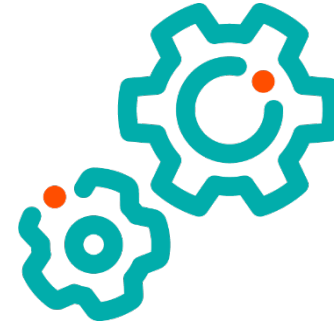
- What will it cost to implement the plan to make the Target Condition happen? Be specific. (There is always a cost!!)
- Can you put a dollar amount on the waste identified? Can you measure the improvement of the product/service delivered?
- Does the benefit justify the cost of the implementation plan?



## Cost and/or benefit

<b>Direct:</b>	\$314,588.00 increased revenue from previously not billed bedside DRG-025 procedures
<b>Indirect:</b>	Improved patient outcomes with Clinical criteria for procedure location
<b>Indirect:</b>	Improved Resident orientation.
<b>Indirect:</b>	Standardized products and procedure

# Solution: the test



- Essential to test the implementation plan in a safe environment
- Design an experiment to test your plan
- Enables you to design an experiment to test your plan and continue to improve it

## Test

Prior to education of procedures, Dr. Trial (Resident) will be given the training and then observed. Finance and Education will review documentation to ensure completeness.

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# Solution: follow-up

- How/who/when will check to insure that the implementation has changed the work for the better?
- If the follow-up information doesn't reflect 100% perfect, we initiate another improvement process; it becomes the new current condition – “Continuous incremental improvement”

## Follow-up

30 day check will include daily monitor by Finance and Education of each procedure. Between 31 and 60 days checks will be performed on any Resident who has only performed one procedure to date. Between 61 and 90 days spot checks will occur as deemed appropriate.

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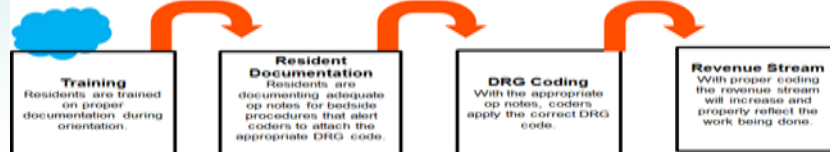
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# Solution: approval

- Be sure that your A3 has a title written in the top right hand corner (so that it can be easily read when it is fan folded in a binder)
- Be sure that it is directed to the person(s) who need to approve the changes
- Include the date the A3 was originated. This becomes important as you continue to make improvements



# Where can we apply A3 thinking in value analysis and supply chain?

- Avoiding common pitfalls can be difficult
- The biggest challenge is often with background measuring
- Cascading A3's can have a significant impact in a healthcare system

# Coaching A3 Problem Solving

(See One...Do One...Teach One)

- Coaching is leading the activity of discovery
- Ask, don't tell! (Socratic method)
- Mine the great ideas of the staff members
- Develop coaches
  - The organization and yourself benefit from both internal & external coaches

You can't solve all problems and improve all processes by yourself. You must develop an army of problem-solvers!





# Questions

