

Southern California Renal Disease Council, Inc. ESRD Network 18

Blood Sample Labeling
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Lisle Mukai, QI Coordinator

Presented at Webex Conferences:
July 20, 21, & 22, 2010

Blood Sample Labeling Seminar
6255 West Sunset Blvd
Los Angeles, CA



Blood Labeling utilizing Quality Fundamentals

- Learning Objectives:
 - Understand the basic flow chart design
 - How to design a flow chart
 - Outline the Quality Improvement Process
 - Introduce the tools used in the Quality Improvement Process
 - Understanding Fail Proofing



Why are we having this QI WebEx?

- Numerous reports of mislabeled/unlabeled blood specimens have been received by Transplant facilities all over Southern California.
- Brought about by errors of transplant samples however this is designed for the general process to eliminate errors for blood specimen labels not specifically to transplant specimens.
- This is a life changing error that has caused severe and irreversible damage to our patients.
- Blood sample labeling is a “ZERO TOLERANCE PROCESS”. Errors in your system need to be corrected immediately!



What happens when a specimen is mislabeled?

- Samples are used for antibody screening
 - If its wrong then the patient may reject to kidney
- Cross-match of Kidney Compatibility
 - Stored in Los Angeles awaiting to be called for a match
- Transplanted patient may receive an incompatible kidney, develop antibodies and never be transplantable again. (Now we have not only taken a kidney but someone's hopes and dreams too)



The Blood Draw

- Person drawing the blood must identify the patient in a positive manner (comparing orders, wristbands, medical record, date of birth, stated name) TWO POSITIVE IDENTIFIERS.
- If there is a discrepancy with any of the information DO NOT COLLECT THE SAMPLE UNTIL RESOLVED!!
- Do not use chair numbers or bed tags or even a chart on the chair for identification purposes.
- Minimum labeling PATIENTS NAME AND DATE OF BIRTH.

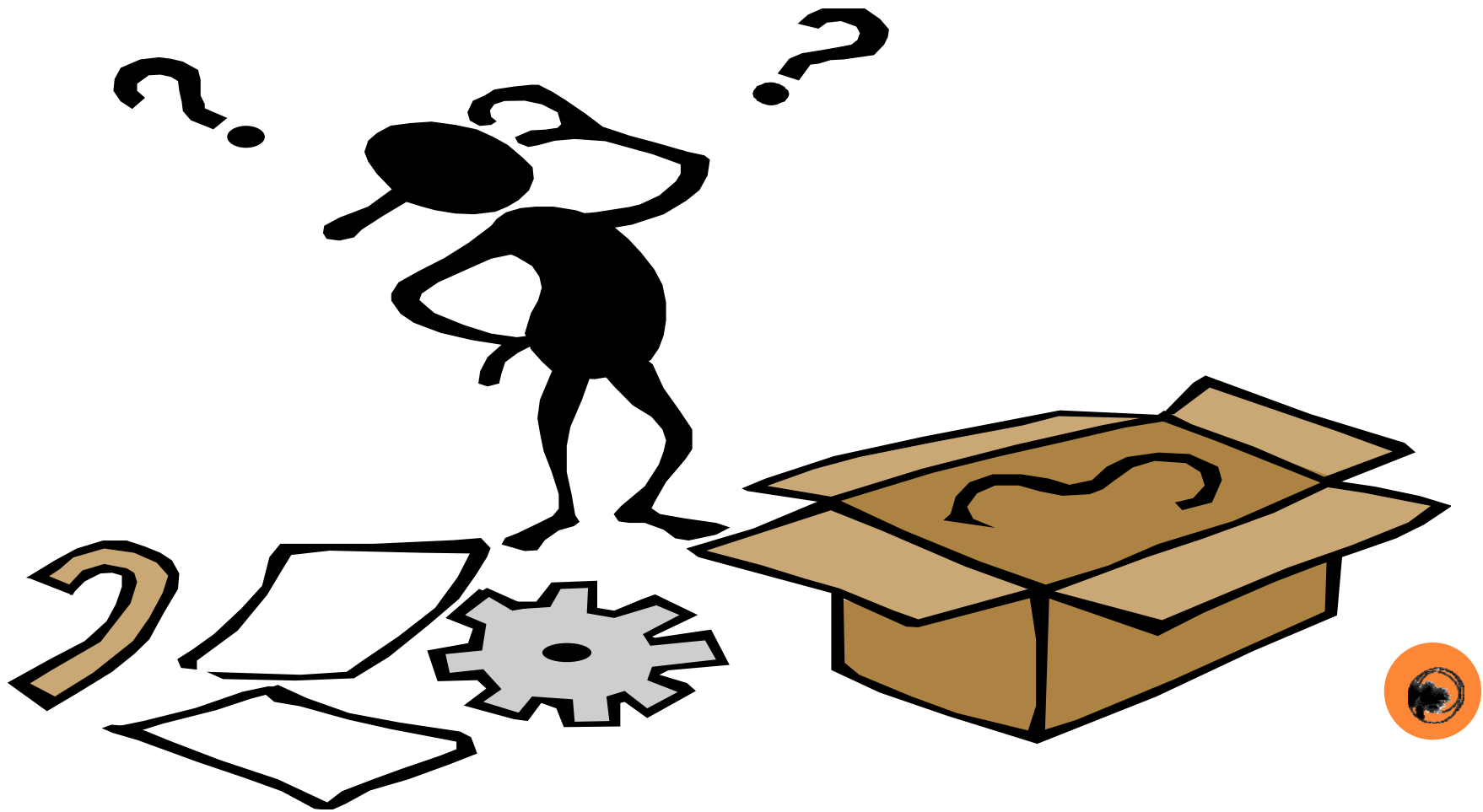


How do we fix this problem?

- Flow chart the process
- Find the ROOT CAUSE(S) using the 5 whys and the Ischikawa diagram
- Make the process more efficient
 - Eliminate steps
 - Make the current steps more reliable
- Monitor the progress with Quantitative measures
 - Number of errors in Blood Samples
 - Number of total Blood Samples
 - **Error rate at that time**
- Review over time and compare Error rates



Continuous Quality Improvement (CQI)



Quality Improvement Process

Root Cause Analysis Investigations:

- RCA usually uncovers a system of root causes.
- RCA uncovers specific causes and effects.
- RCA results in executable, quantifiable solutions that may be monitored.



Quality Improvement Process ***(continued)***

Root Cause Analysis Investigations: (continued)

- RCA does not point blame at any one person or group, but simply identifies a system of causes and effects that lead to and incident.
- RCA focuses on past events.



Quality Improvement Process ***(continued)***

- Root cause analysis can use a variety of techniques to uncover root causes, including cause mapping, change analysis, the [Ishikawa fishbone diagram](#), [5 Whys](#), and others.
- All are designed to analyze the elements affecting a particular outcome to determine the root causes.



Poke Yoke

- Japanese for Mistake proofing
- Idiot proof
- Engineering control
- Error Proofing
- Fail proofing
- Device that prevents a mistake from occurring or detects the mistake and makes it obvious immediately.



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Flow Charting

Shean Strong, QI Director

Lisle Mukai, QI Coordinator



Flow Charting
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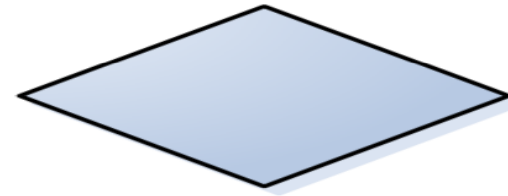
Basic Symbology

- Each shape depicts a step in the process you are flowing and has a specific meaning.
- General process steps are a great beginning.
- When we have a general idea of the process we can break each steps into smaller steps allowing us to pinpoint the flaws in the system.
- If time and money are an issue in our process, then we can add time and cost to each step. This will allow us to determine cost, and time constraints.
- WE CAN FLOW CHART AND IMPROVE ANY SYSTEM AS LONG AS WE KNOW THE PROCESS.





PROCESS



DECISION



MANUAL
OPERATION



DOCUMENTS



PROCESS
END



MANUAL
INPUT



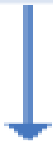
**LABELS
ARE PRINTED**



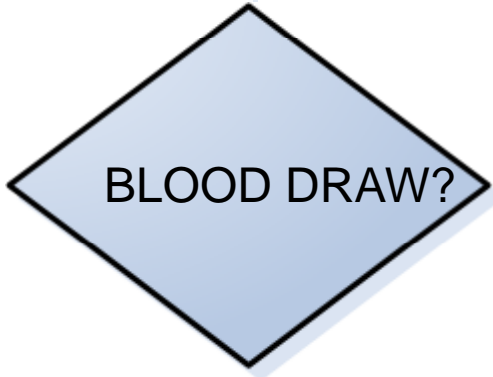
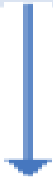
**One page per
patient/Tear
sheet after each
patient is printed
separating each
patients labels**



LABELS ARE
PRINTED



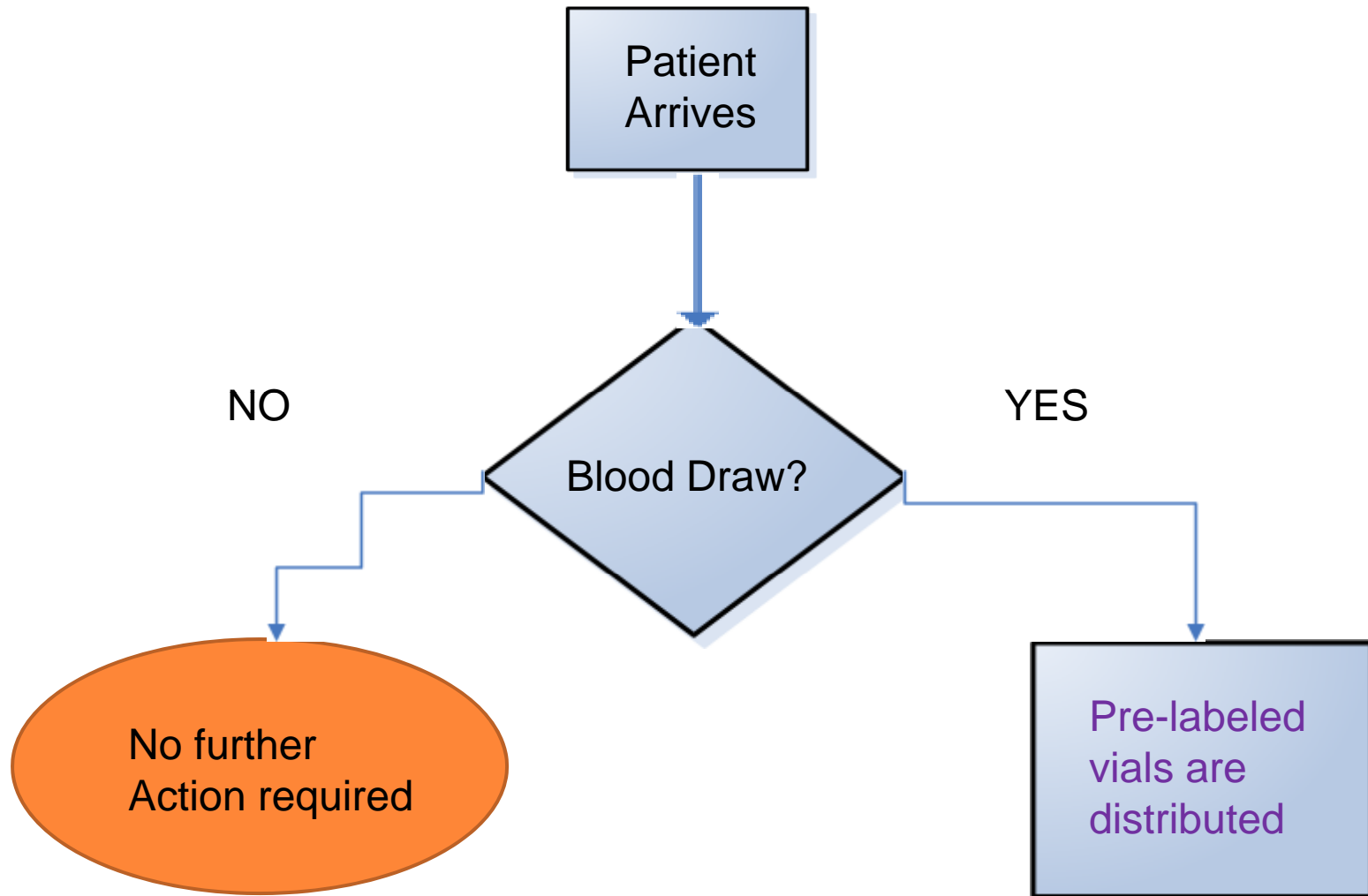
PATIENT
ARRIVES



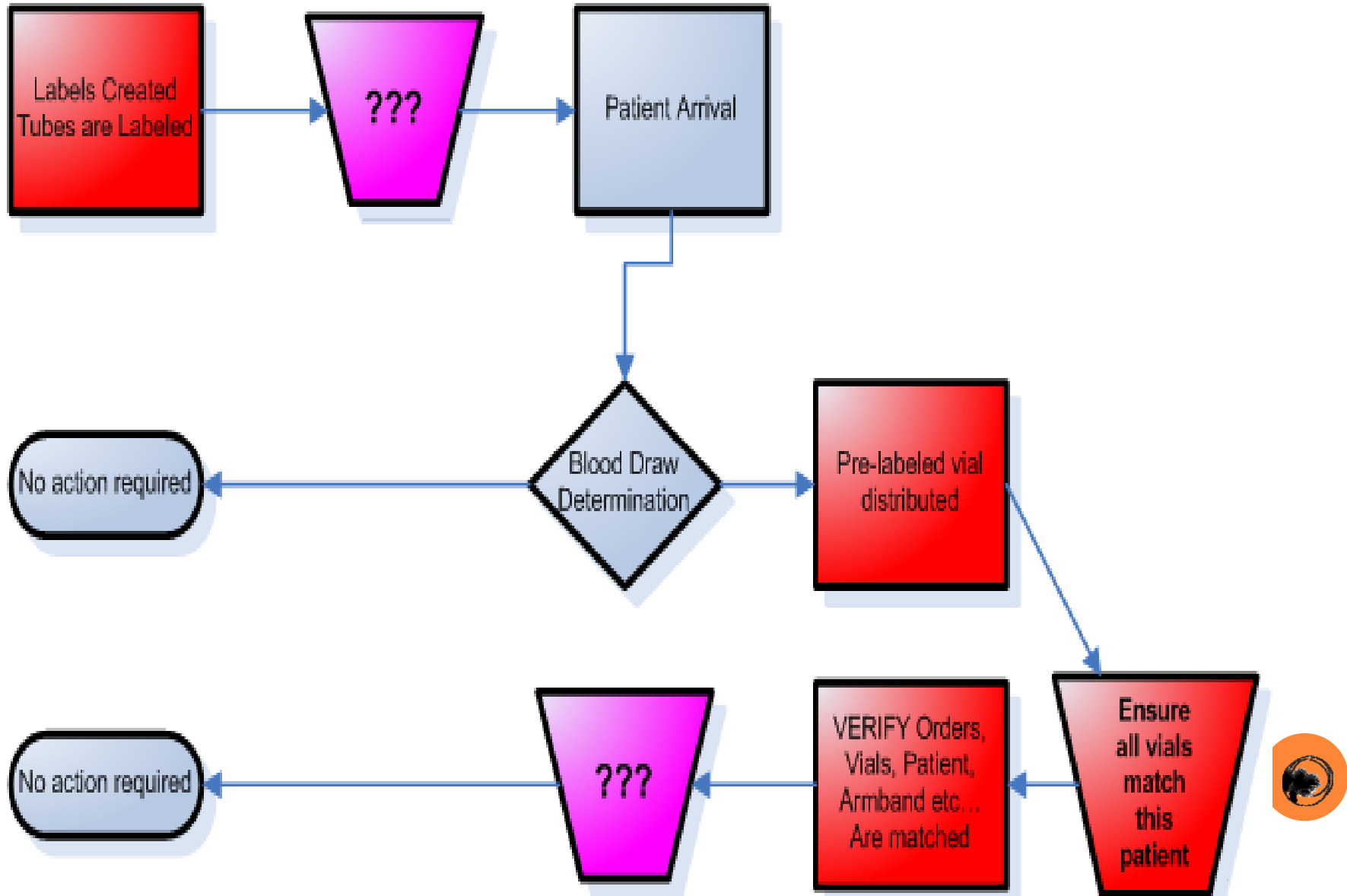
NO

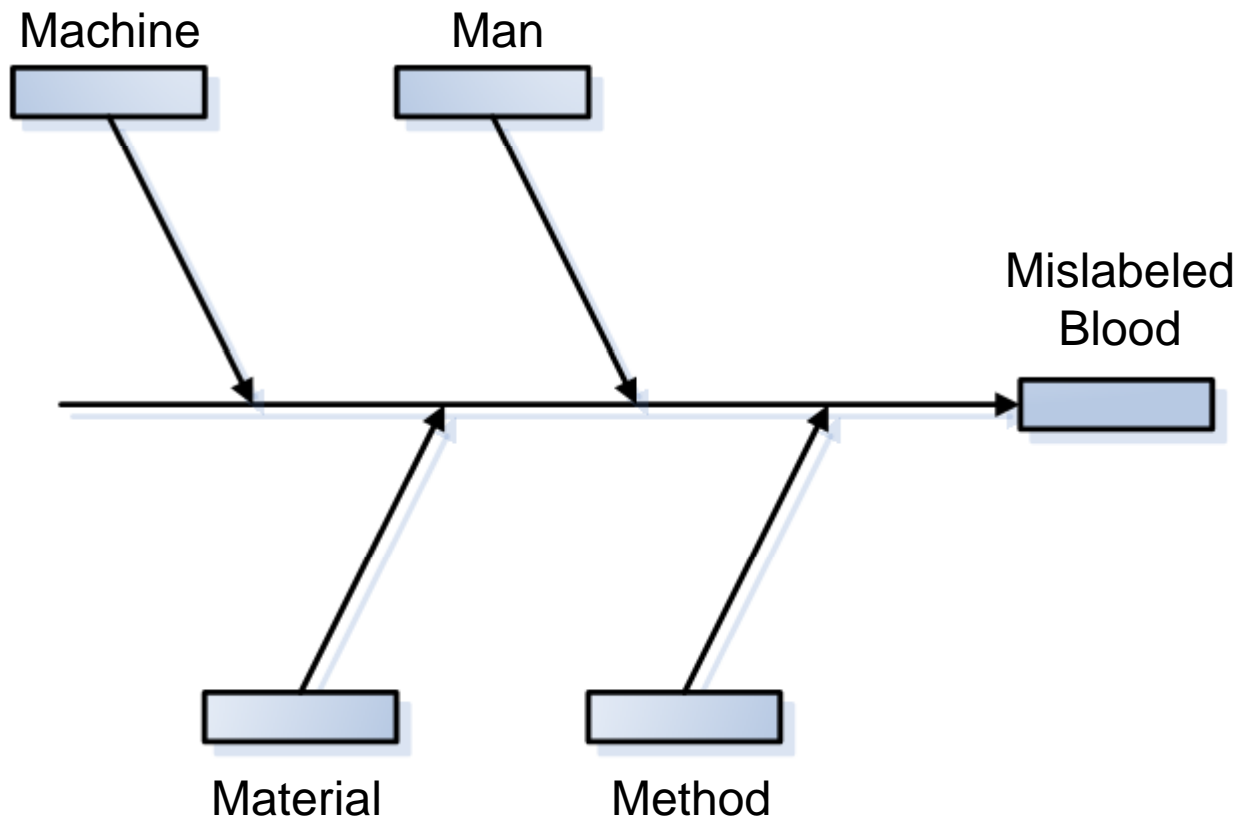
YES



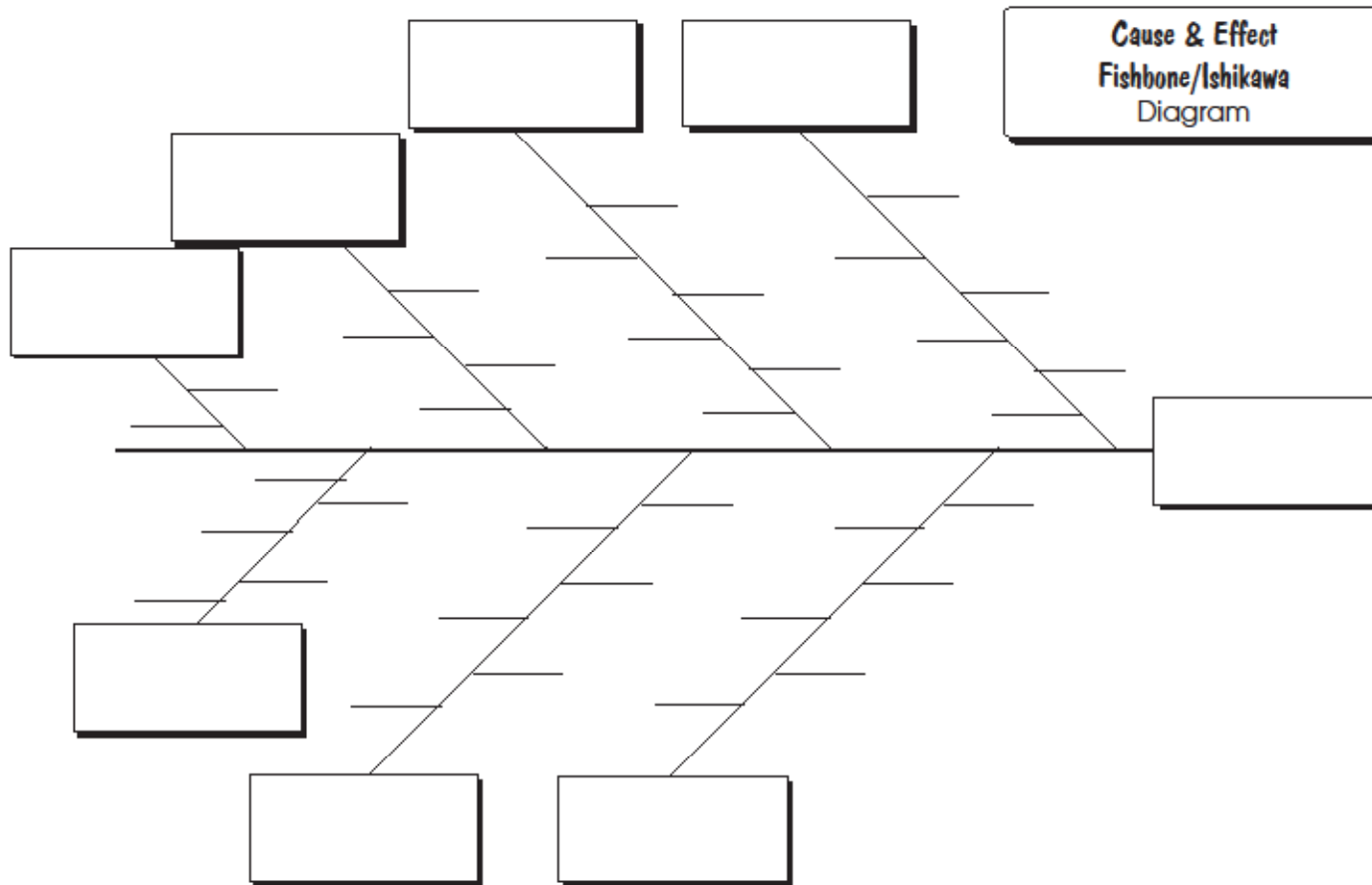


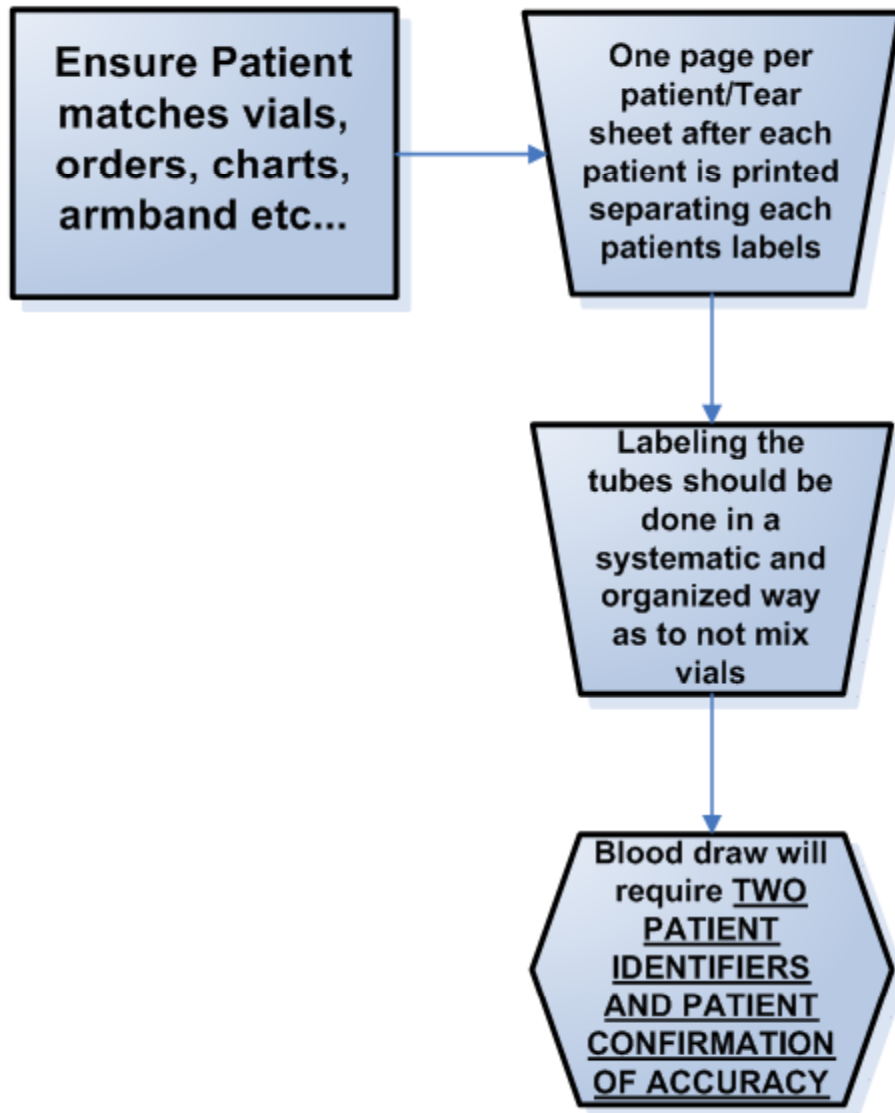
The simple truth





http://www.esrdnetwork18.org/pdfs/QI%20-%20Work%20Plan/09-10_Catheter%20Reduction_Project/3_%20Cause&Effect%20Fishbone.pdf





Last Step after your verification

- Have the patient initial the vials signifying the blood is theirs and that the information on the vials is correct.



What do I do first?

- Root Cause Analysis using
 - Ischikawa and/or the 5 why?
 - Flow chart the process
- Identify the problem
 - Areas of decreased productivity, areas where errors occur etc...
- Create a problem statement
 - The root of the problem
 - The AIM statement should follow outlining the goal of the project.
- Start the PDSA cycle



Quality Assessment and Performance Improvement Plan (QAPI)

○ Interdisciplinary Team: (minimum)

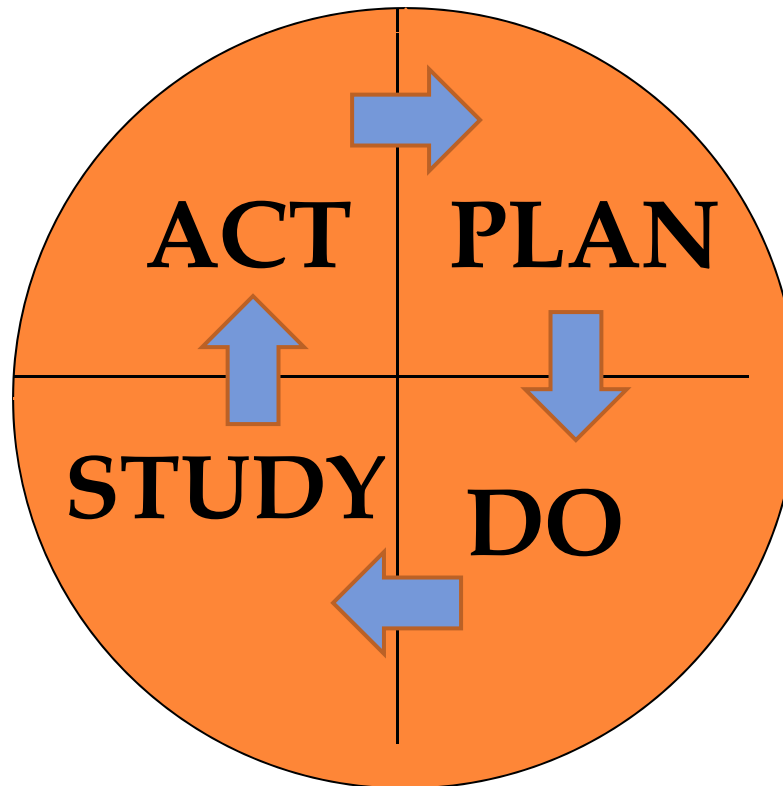
- Physician
- Registered nurse
- Social Worker
- Dietitian



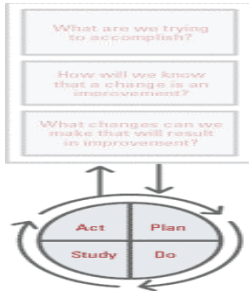
PDSA Cycle

Plan-Do-Study-Act:

PDSA is the format the Network uses for developing a QAPI plan.



PDSA Template



PROJECT:

TEAM: (List all members)

(Summary of facility's identified problem and description of what the facility has been doing to improve the problem.)

Adopted from IHI
Website, June 2007

Step 1.

PLAN:

Plan the test.

What is the objective of this improvement cycle?

.....
What is the goal? (Include a numeric goal to achieve.)
.....

Develop a plan to achieve the goal?

(List steps of the plan – this will allow you to identify the step that may need modifying/revising if necessary.)

.....
2 of 3 pages

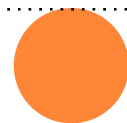
What data sources are needed for the test? (What data sources will you be using to monitor your progress?)


.....
What measures are used to analyze if you are achieving the goal?

BASELINE:

Measure: (Numerical formula)

Monitoring frequency:
.....



<p>Step 2. <u>DO:</u> Try out the test on a small scale</p>	<p>Implement the plan. <u>Document problems and unexpected observations.</u></p>
<p>Step 3. <u>STUDY:</u></p>	<p>Analyze the results and compare the results with your goal.</p>
<p>Step 4. <u>ACT:</u> Determine if the test was successful or the plan needs to be revised.</p>	<p>If the test was successful, how will you implement the plan on a wider scale?</p> <p>If it was not successful, what needs to be changed based on what you have learned? Should you continue to search for other root causes?</p> 

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Any Questions

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