

# Root-Cause Analysis

June 2022





Our timeline for the day

1. Introductions
2. RCA Coaching  
25 minutes
3. Case Study 1  
20 minutes
4. Case Study 2  
20 minutes
5. Case Study 3  
20 minutes
6. Question and Answers

# Introductions

# Introductions



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RCA Coaching

1. What is an A3?
2. How is an A3 Structured?  
Example A3
3. Analysis phase – A3

# **A3 Thinking**

**What is an A3?**

# A3 Thinking

## What is an A3?

A visual tool to depict a problem-solving story, typically housed on an A3 sized paper.

An A3 document contains several boxes of information that can take anyone from the identification to the solution of a problem whether it is large or small.

**Purpose:** An A3 problem-solving document provides a template for collaborative problem-solving to address the root cause of a problem and create sustainable solutions

# **A3 Thinking**

**How is an A3 Structured?**



Process Owner(s):

Sponsor(s):

|                   |
|-------------------|
| Background        |
| Current Situation |
| Goals/Target      |
| Analysis          |

# A3 Thinking

How is an A3 Structured?

Left side:

1. Background
2. Current Situation
3. Goals / Target
4. Analysis

# A3 Thinking

## How is an A3 Structured?

Right side:

1. Recommendations
2. Implementation Plan
3. Follow Up

Problem Solving A3 - (Date)

Team:

Recommendations (Proposed Countermeasures / Future State)

Implementation Plan

Follow Up/Sustaining Improvements

# **A3 Thinking**

**Analysis Phase – A3**

# A3 Thinking

## Analysis Phase – A3

**Purpose: Identify the causes of the problem decided on in the A3**

**Method: Causes of the problem can be identified using a number of tools that are grouped under Root-Cause Analysis. These tools include Fishbone Diagrams, Pareto Charts, and “5 Why” Analysis**

# Root Cause Analysis

# Root Cause Analysis

Purpose of an RCA

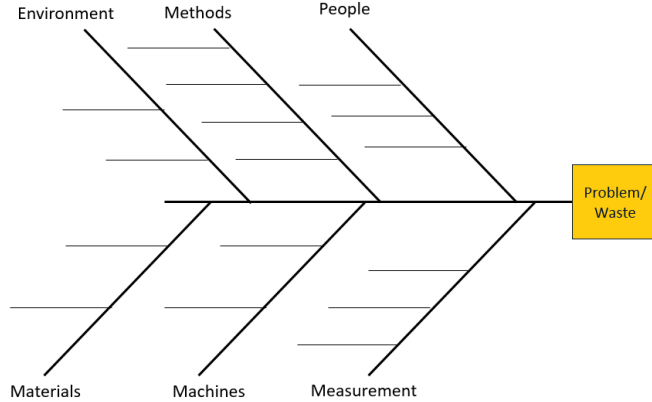


# Root Cause Analysis

## Choosing Your Approach

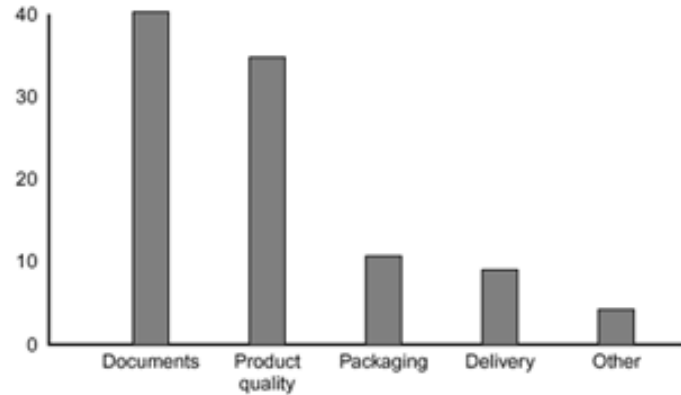


*Fishbone Diagram*

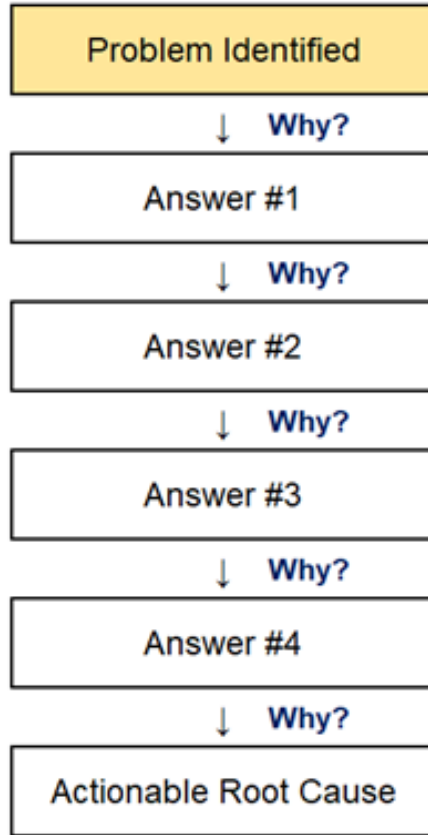


*Pareto Chart*

**Types of Customer Complaints**  
Second Quarter 2005



**And Others...**



# Root Cause Analysis

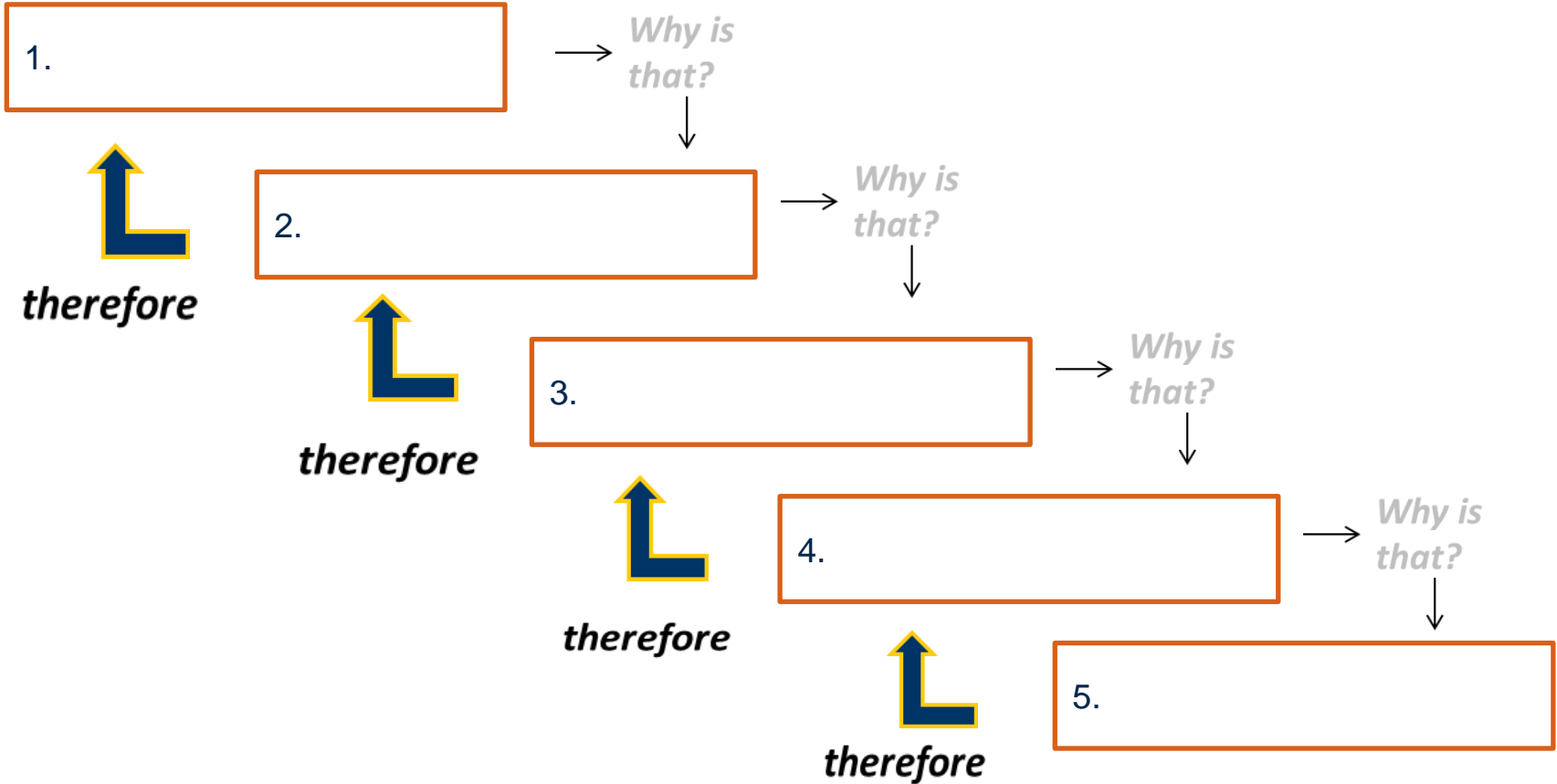
How to complete an RCA

1. Determine the problem
2. Establish primary contributing causes
3. Establish subsequent contributing causes
4. Add data or visuals!
5. Gather feedback



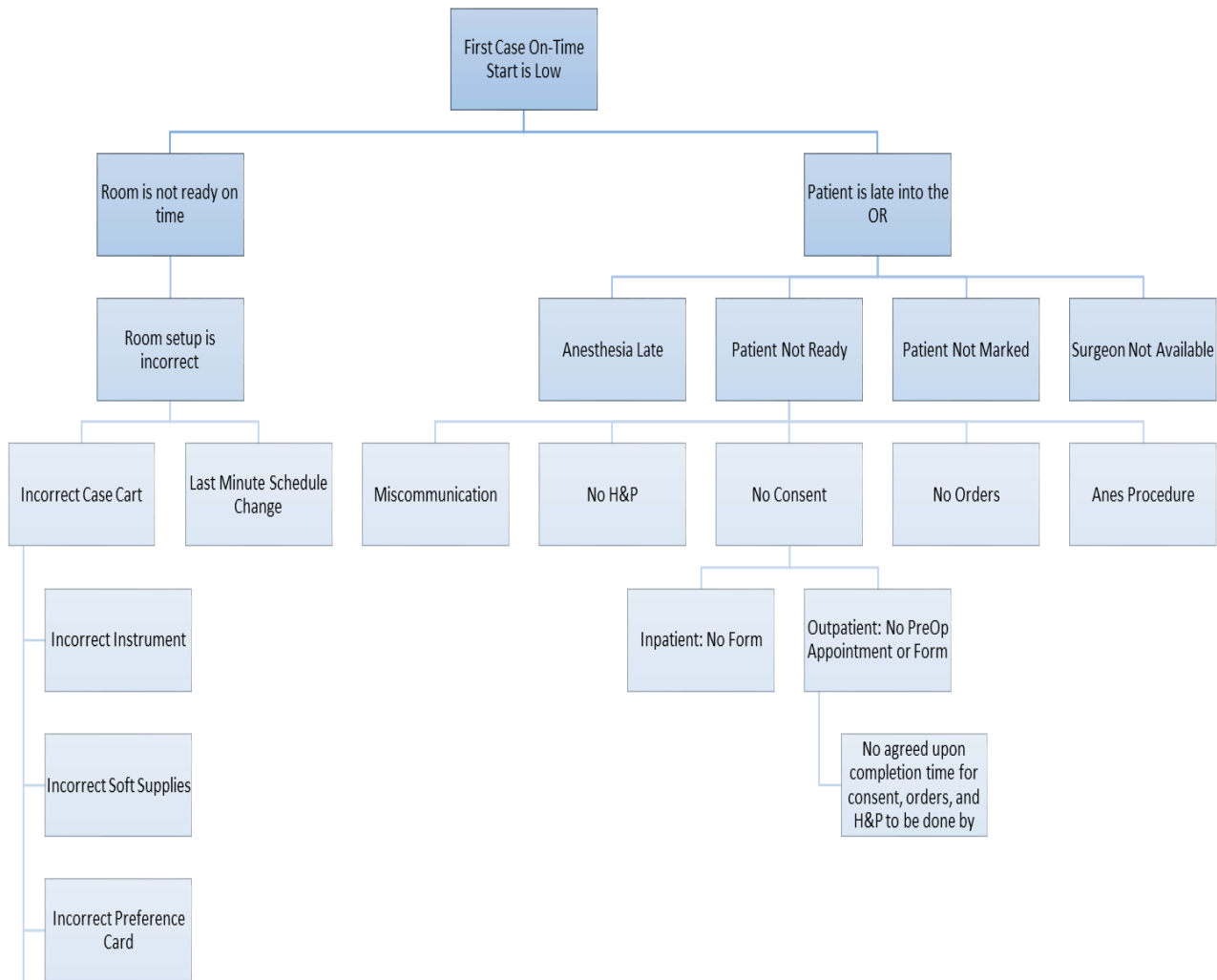
# Root Cause Analysis

## Setting Up for Success – Therefore Test



# Root Cause Analysis

## Root Cause Tree



# Root Cause Analysis

## Tips & Tricks for 5 Whys

- It gets easier with practice
- Warning! Be on the look out for...
  - Causes you have no control over
  - Identifying solutions
  - Dead-end paths
- There is often more than one root cause
- Use available resources:
- <https://msqc.org/quality-improvement/toolkits/ssi-toolkit/>
- Add data – gather more if needed
- Remember the **Therefore Test**

Questions?

# Case Study One

Patient Jane Jones  
presented an SSI  
upon readmission



# Case Study Two

# Case Study Three



**THANK YOU**



**MICHIGAN MEDICINE**  
UNIVERSITY OF MICHIGAN