

# Quality and Safety Series

## Developing a Reliable Process

# OBJECTIVES

A close-up photograph of a hand in a dark suit jacket and white shirt cuff, pointing towards the word 'OBJECTIVES'.

- Define process reliability.
- Discuss the importance of process reliability.
- Identify the four steps in developing a reliable process.

# Two Terms to Understand

**Process Reliability**



The *consistency* of a process to produce a specific output

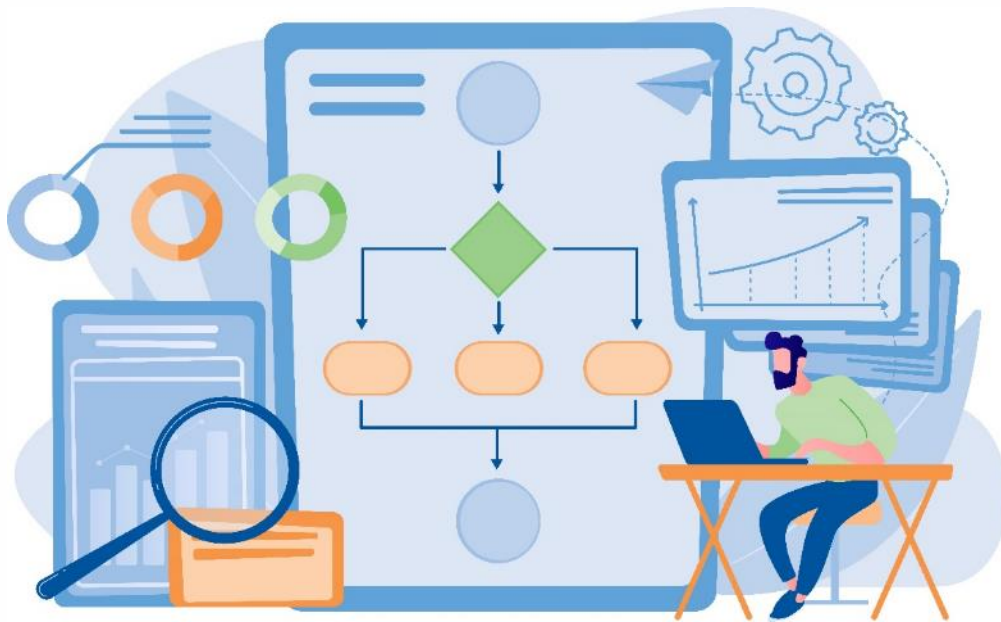
≥ 95%

**Process Capability**



The *ability* of a process to produce a specific output

# What Is Process Reliability?



- Is a deliberate design
- Is a standard operating procedure
- Reduces deficits
- Increases consistency
- Improves outcomes
- Builds in evidence-based care

# Process Failure

- Variation
- Autonomy
- Person-dependent processes
- Expecting policies to drive outcomes
- Education as a primary intervention



# When You Need 100%

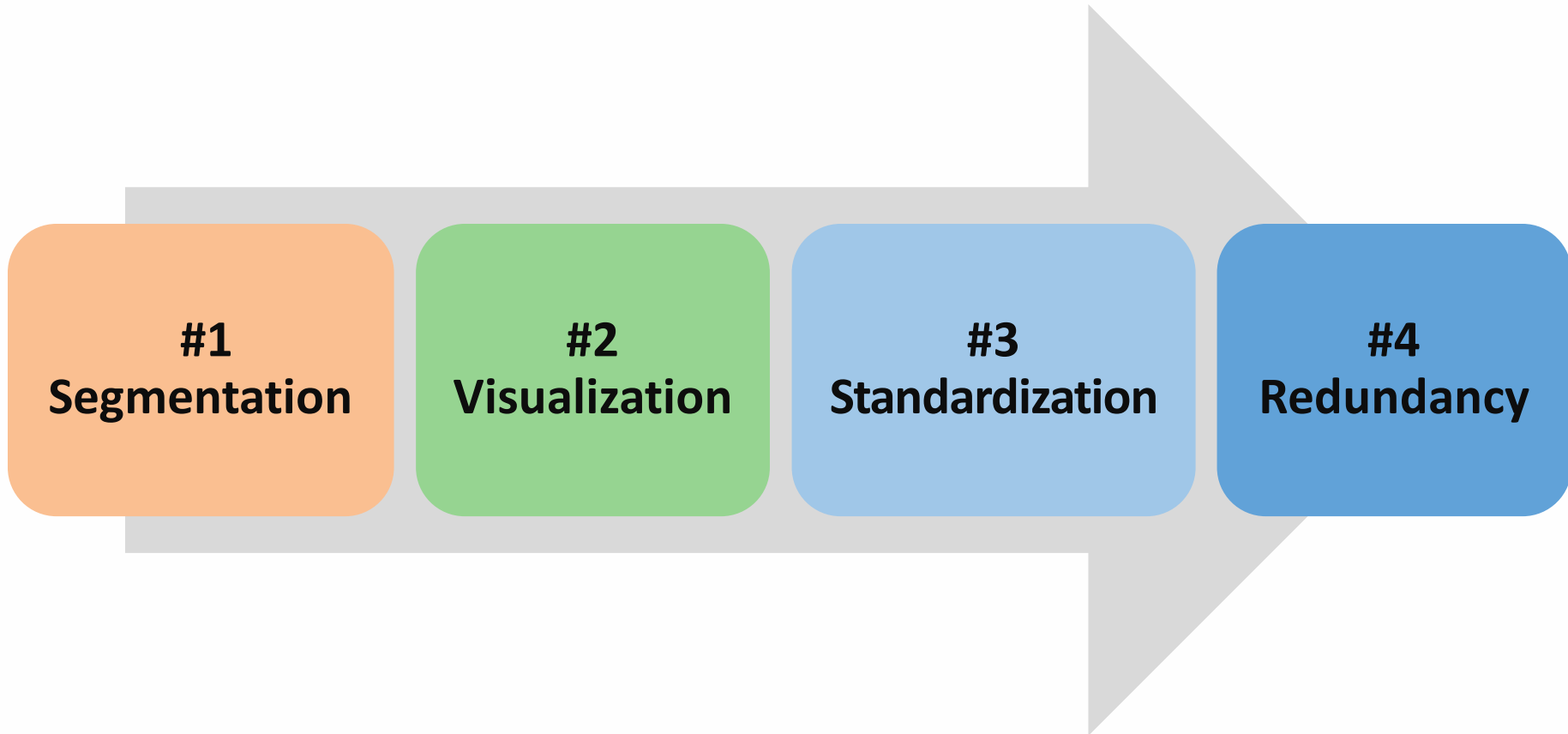


**IMPORTANT**

Highly reliable processes are **not** for catastrophic processes, where 100% accuracy is necessary.

- Right-site surgery
- Blood transfusions
- Sponge/instrument counts

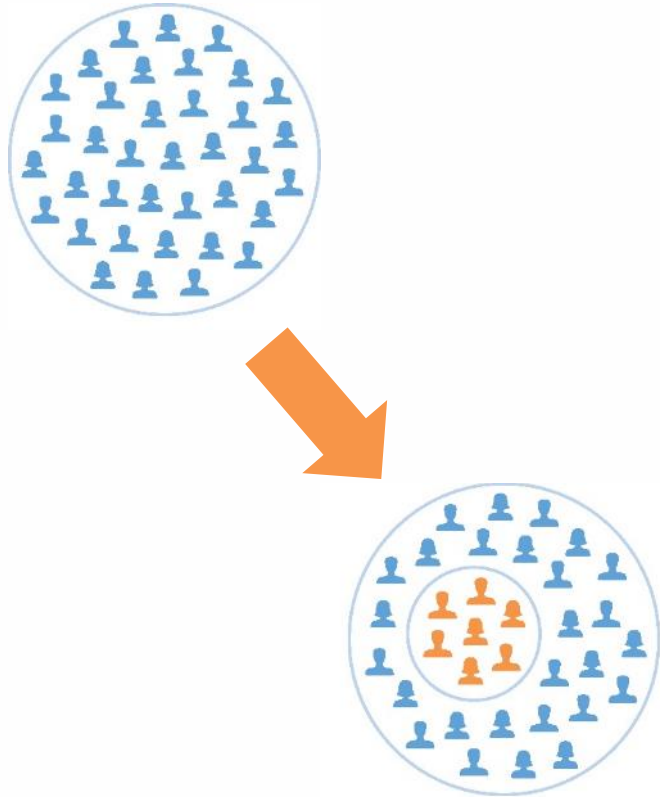
# IHI Four Steps to Developing a Reliable Process



IHI = Institute for Healthcare Improvement

Institute for Healthcare Improvement. (2019). Developing a reliable processes. Retrieved from [http://www.ihl.org/resources/Pages/Tools/Four-Steps-for-Developing-Reliable-Processes.aspx?PostAuthRed=/resources/\\_layouts/download.aspx?SourceURL=/resources/Knowledge%20Center%20Assets/Tools%20-%20FourStepsforDevelopingReliableProcesses\\_940f6310-f326-4845-9aab-62d21cc46981/SafetyToolkit\\_DevelopingReliableProcesses.pdf](http://www.ihl.org/resources/Pages/Tools/Four-Steps-for-Developing-Reliable-Processes.aspx?PostAuthRed=/resources/_layouts/download.aspx?SourceURL=/resources/Knowledge%20Center%20Assets/Tools%20-%20FourStepsforDevelopingReliableProcesses_940f6310-f326-4845-9aab-62d21cc46981/SafetyToolkit_DevelopingReliableProcesses.pdf)

# Step 1: Segmentation



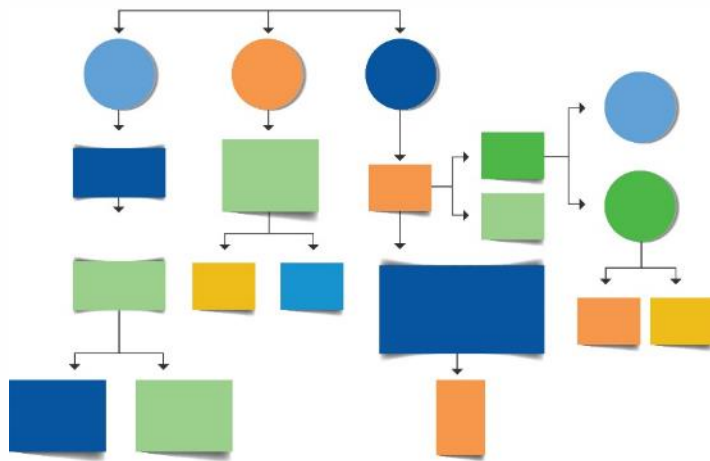
*Focus on a smaller, representative group until a process is refined.*

- Single unit, department, clinic, etc.
- Engaged frontline staff
- Innovative team
- Strong leadership
- Must be large enough to compile a sample
- Small enough to manage
- Scale and spread later

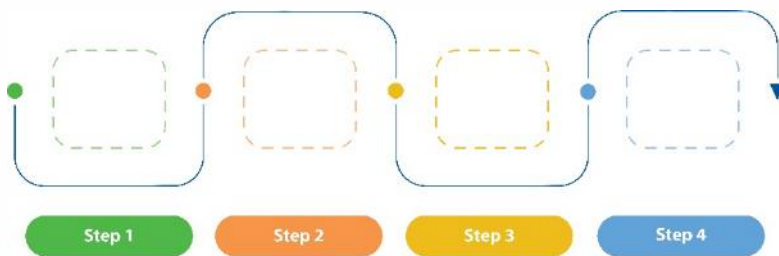


# Step 2: Visualization—Process Mapping

Complex Process Map



Simplified Process Map

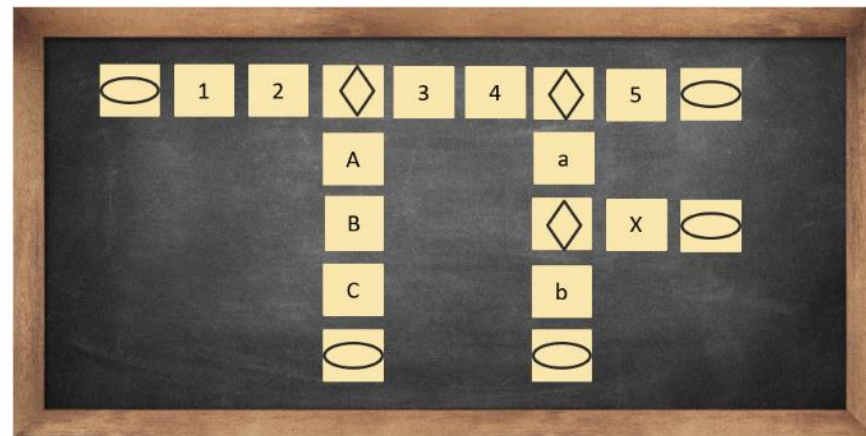


*A process map is a visual representation of a series of steps or activities to achieve a particular result, provide a service, or create a product.*

For more information on process mapping, refer to the HSAG HQIC quickinar on Process Mapping: [www.hsag.com/hqic/quality-series#\\_Process\\_Mapping](http://www.hsag.com/hqic/quality-series#_Process_Mapping)

# Step 2: Visualization—Important Tips

- Develop as a group effort.
- Include those closest to the work.
- Start basic with 3–5 high-level steps.
- Create a graphic representation of the “current state.”
- Identify defects or errors in the process.

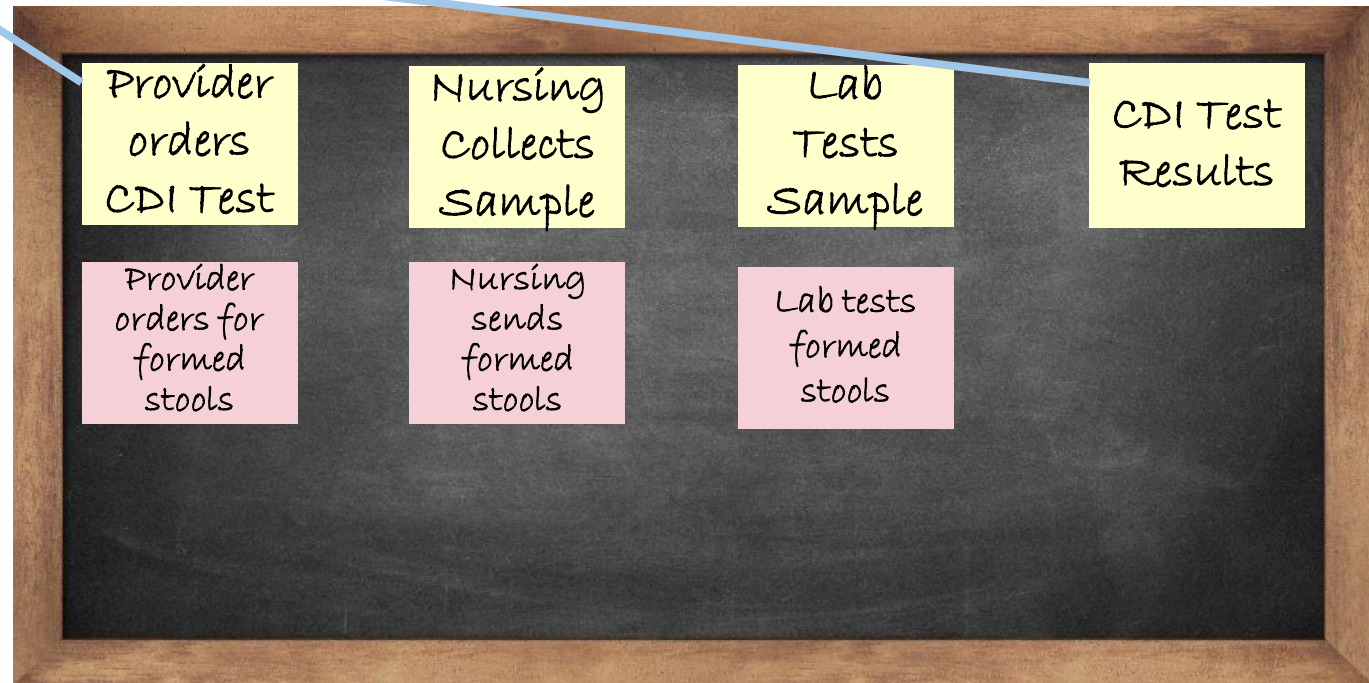


# Step 2: Visualization—Example

Start with beginning of process and end of process to set the scope

## Very High-Level, Current-State Process Map On CDI Testing

Identify errors

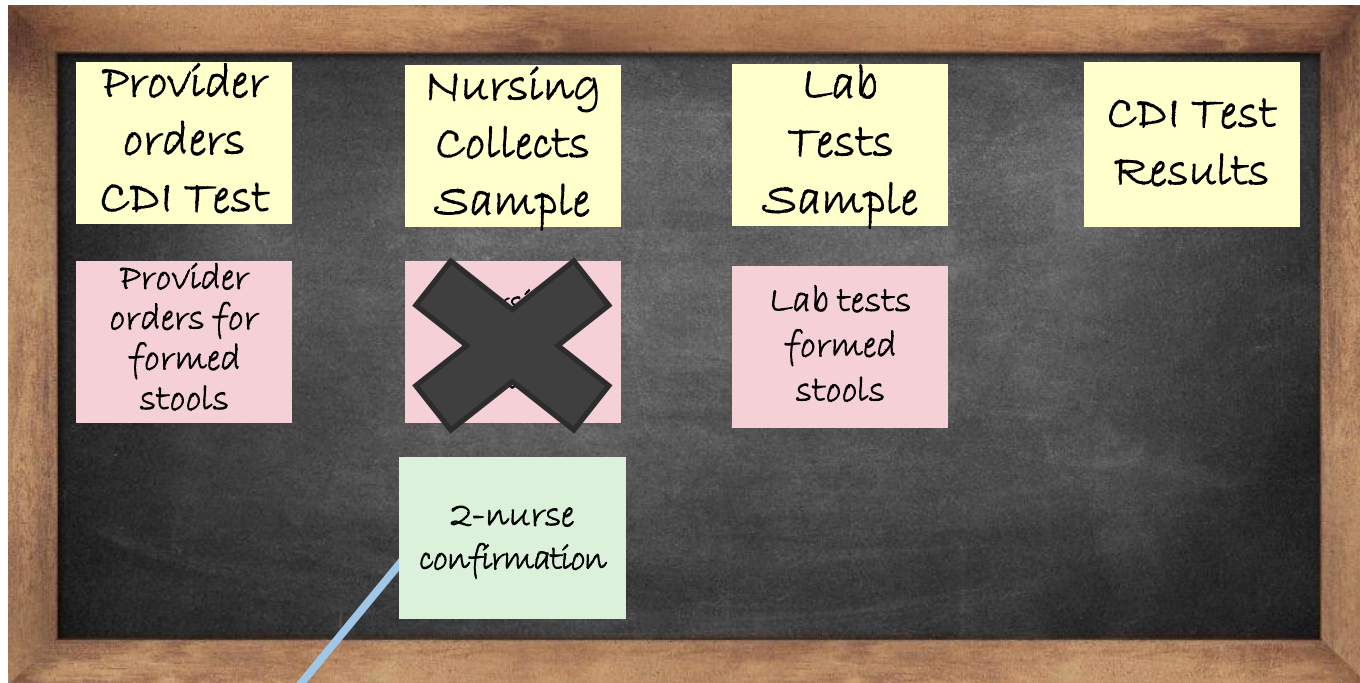


# Step 3: Standardization—Next Steps

- Identify deficits (points of failure) to correct.
- Enlist a multidisciplinary team.
- Include those directly involved in the process.
- Brainstorm ideas.
- Determine focus.

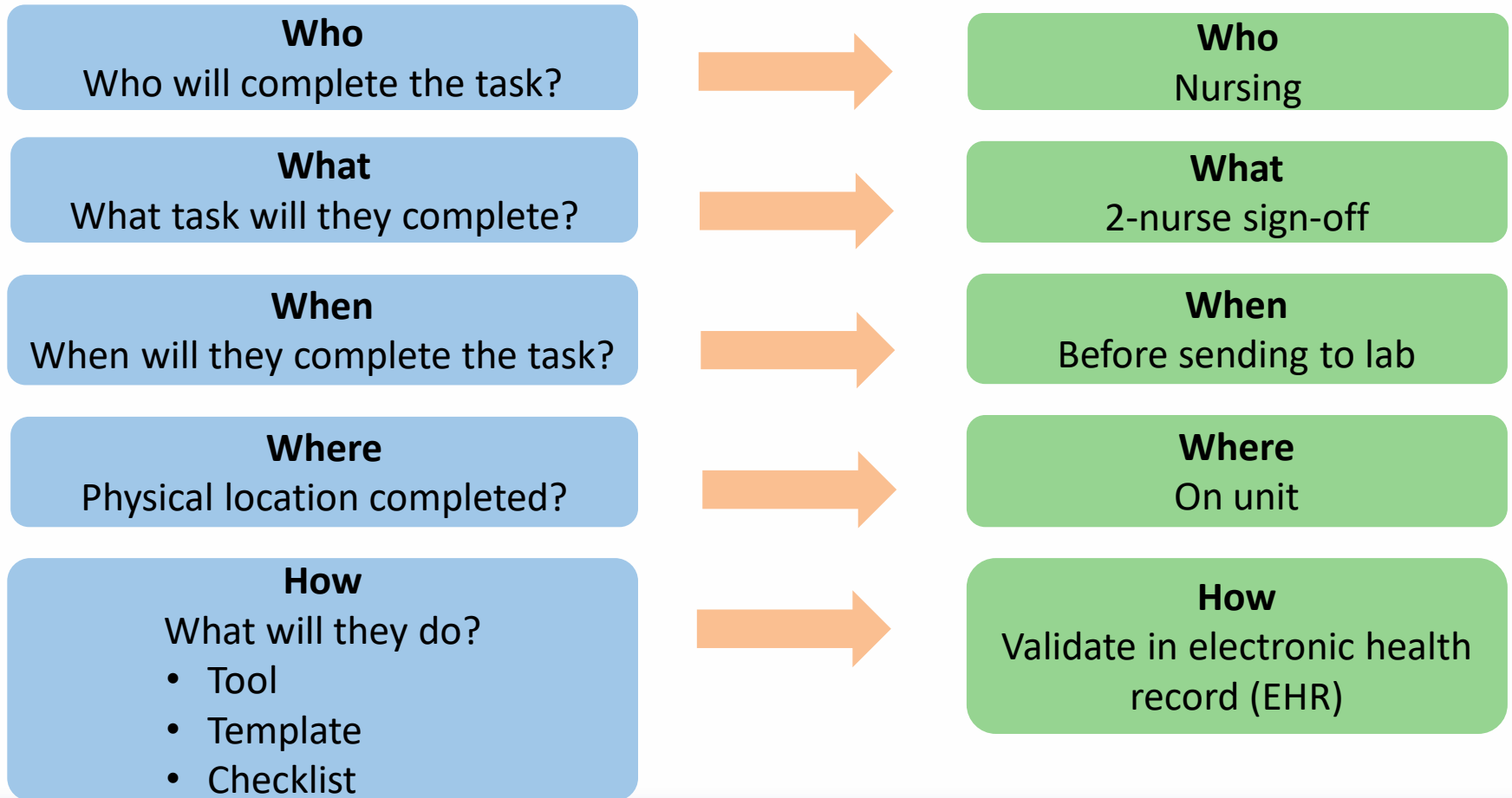


# Step 3: Standardization—Example



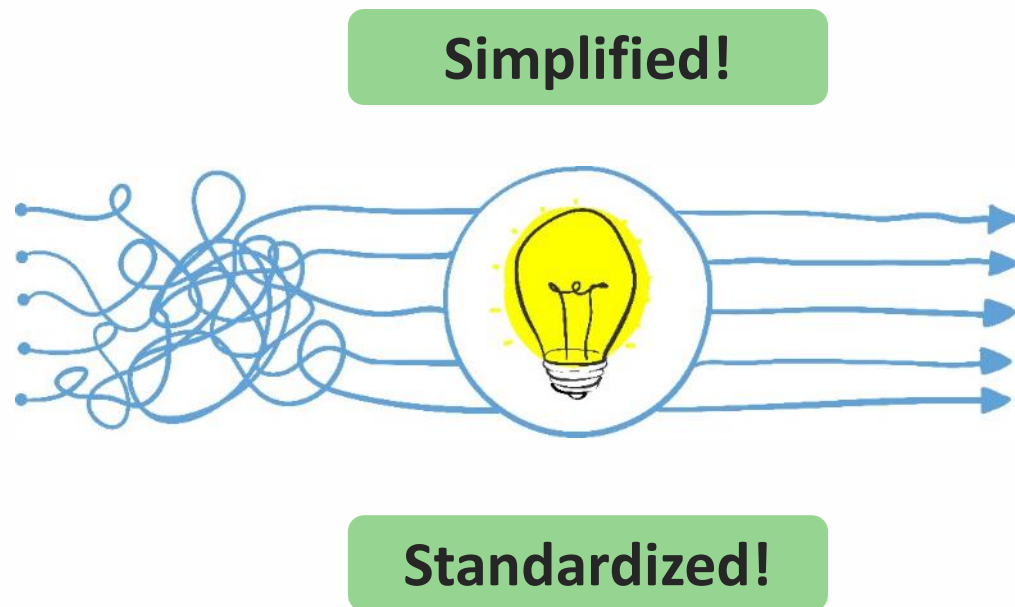
# Step 3: Standardization—Future State Process

## CDI Testing Process



# Reminder: Keep It Simple!

- Don't make the process too complex to follow.
- Incorporate natural workflows.
- Solicit input from frontline staff.

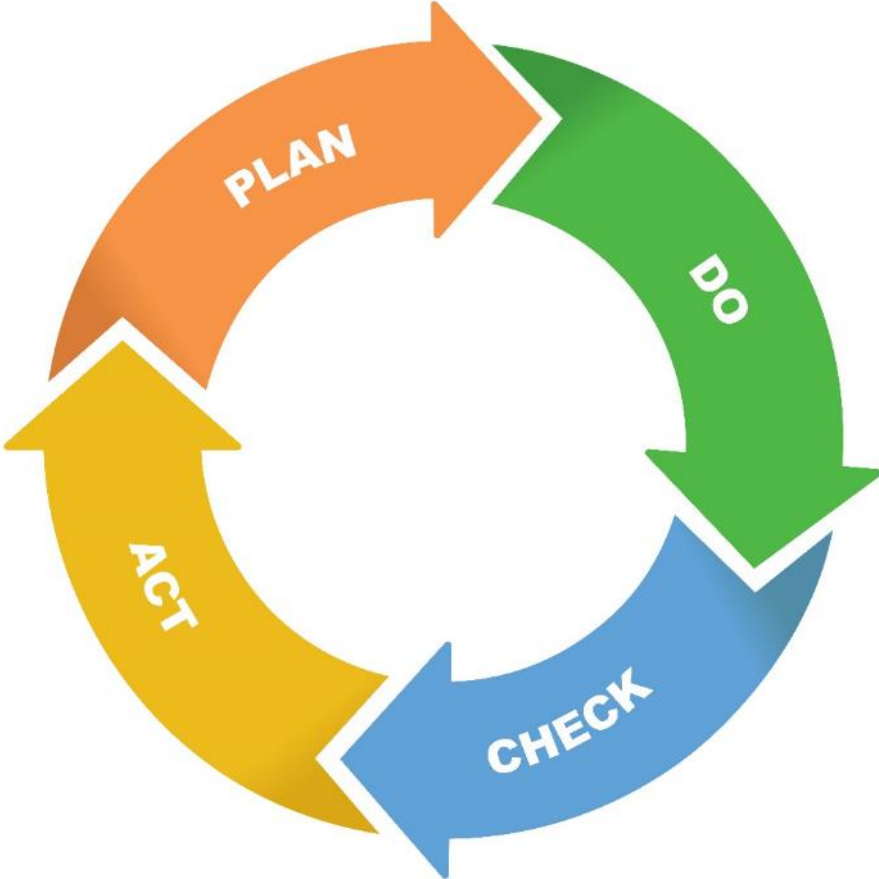


# Getting It Right

TEST!

TEST!

TEST!



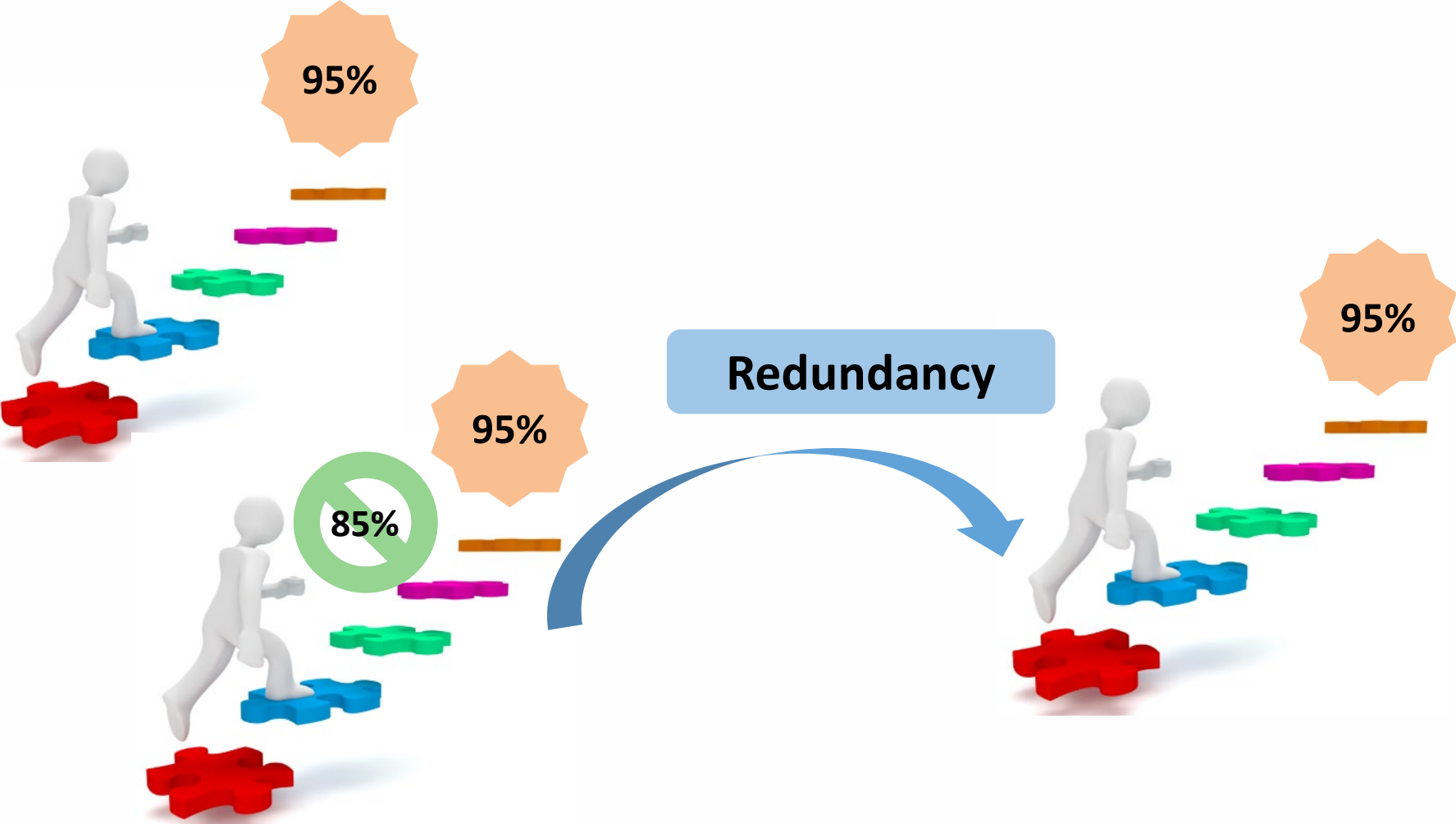
ADAPT!

ADOPT!

ABANDON!



# Step 4: Redundancy



# What Is Redundancy?

Back-Up Plan!



Redundancy is an *integrated* process to improve the overall outcome and increase reliability.

# Another Example

80/100 patients = 80%



Redundancy

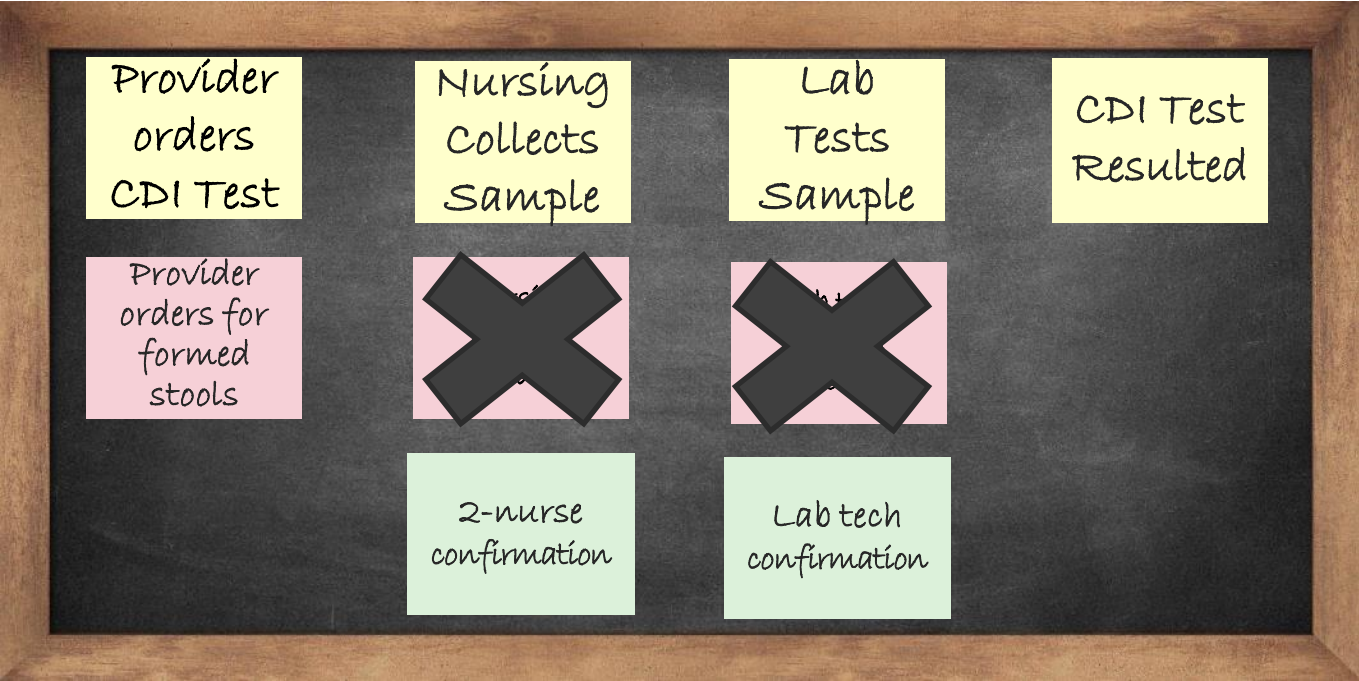
16/20 patients = 80%



96/100 patients = 96%



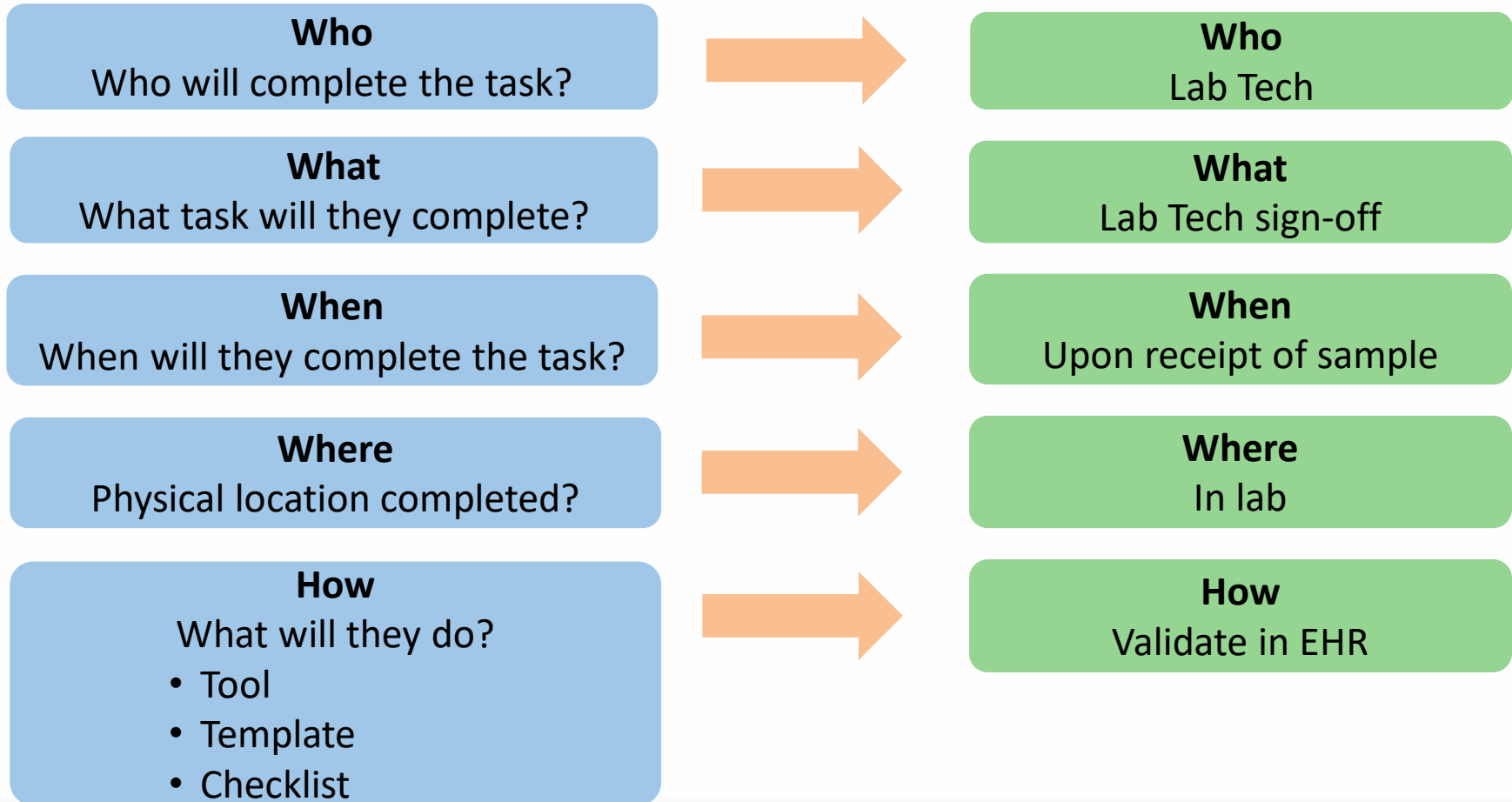
# Step 4: Redundancy—Example



Redundant  
Process

# Step 4: Redundancy—Future State Process

## CDI Testing Redundancy Process



# Key Take-Aways

- When designing new processes, it is important to ensure they are reliable.
- A reliable process achieves a 95% or greater success rate.
- Only use this process for non-catastrophic processes.
- Standardize, simplify, and test!
- Build in redundancies to improve outcomes.





# Thank you!

Questions: [hospitalquality@hsag.com](mailto:hospitalquality@hsag.com)

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