How to conduct a root cause analysis

Note on use: Use this tool to uncover the key drivers of your top organizational challenges. If you're root causing with a group, we recommend allocating at least 60 minutes to allow plenty of time for analysis and discussion.

What is root cause analysis?

Root cause analysis (RCA) is a method of problem solving used to uncover the causes of a specific problem. Root cause analysis can help you avoid: solving a symptom of a problem rather than the root cause, over-focusing on one root cause over another, ignoring root causes, or over- or under-estimating the impact of certain causes.

Steps for conducting a root cause analysis

1   Clearly define the problem

The most important step of a root cause analysis is starting with a clear problem definition.

Your problem statement should frame a problem without placing blame, assuming causality, or suggesting a solution.

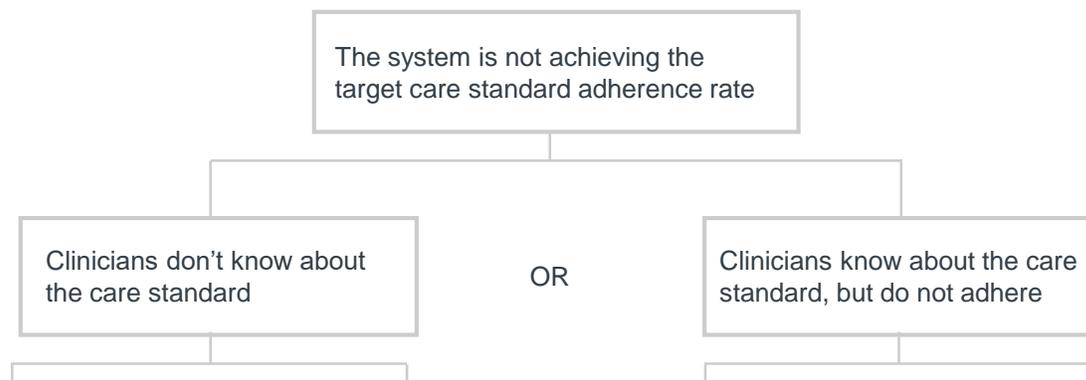| Poorly-designed problem statement	Well-defined problem statement
How can the hospital strengthen its partnerships with local skilled nursing facilities to improve the hospital's readmission rate? ⚠ Suggests a solution	The hospital's readmission rate increased over the past three years.
How can the system overcome clinician resistance to care variation reduction efforts to improve care standard adherence? ⚠ Places blame	The system is not achieving the target care standard adherence rate.

If you're struggling with any of the following steps, consider revisiting your problem statement.

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② Use "either/or" to identify the top two branches of your root cause

Once you have your problem statement, start your root cause tree by determining the problem's two immediate causes. The two causes should not overlap and should encompass all possible causes. In other words, they should be MECE (mutually exclusive and collectively exhaustive).

To pinpoint the two immediate causes, try to complete the following sentence:

"This problem exists because of either [blank] or [blank]."

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          ┌─────────────────────────────────┐
          │  The system is not achieving the │
          │  target care standard adherence  │
          │  rate                            │
          └─────────────────────────────────┘
            │                             │
┌───────────────────────┐        ┌───────────────────────┐
│ Clinicians don't know │  OR    │ Clinicians know about │
│ about the care        │        │ the care standard, but│
│ standard              │        │ do not adhere         │
└───────────────────────┘        └───────────────────────┘
            │                             │
```

③ Build out your root cause tree

Continue to ask "either, or" to build out each subsequent branch of the tree. As you add levels to each branch, take time to pressure test whether the branches are mutually exclusive:

• If there's overlap consider regrouping concepts or revisiting the previous branch.

• If the same concept appears in different parts of the tree, revisit your top two branches to see if there's something you've missed.

Feeling stumped? Switch your approach

There are two common approaches to building out a root cause tree: inductive and a deductive. To use the **deductive approach**, work your way down each branch in the tree categorically.

To use the **inductive approach**, brainstorm a list of all the potential contributors to the problem, then group them. If you hit a roadblock, consider trying the other approach or blending them.

④ Assign relative weights to each cause

Once you've identified the root causes, estimate each cause's contribution to the overall problem. Starting at the top, go row by row and assign percentages to each root cause based on its contribution to the problem.

The percentages across each row should add up to 100%. Consider both hard data and qualitative findings to ensure you allocate the right percentage to each cause. The goal is to determine where to focus your efforts, and what is out of scope.

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