

1) Problem Statement: (Describe the problem and its effect)

Tips to help define the problem statement:

- Describe the problem (when/what/where)
- Quantify the gap between the problem and the ideal (how much) and for what period (time)
- Describe the effect/impact of the problem (severity)
- Use numbers and data whenever possible
- Don't include the solution or actions needed to resolve the problem

Ex: The pharmacy at UC San Diego experienced an average patient medication pick-up wait time of 30 minutes from 9/2022 – 11/2022. This resulted in an average of five complaints per day, decreasing patient satisfaction and creating a negative experience for anyone walking through the building.

2) Current State: (Depiction of the current state, it's processes, and problems / issues)

Tips to help observe and document the current process:

- Do a process map: SIPOC, Value Stream Map, Spaghetti Diagram, Linear Flow Chart/Swim Lane
- Collect and analyze data: select metrics, measure and quantify the data, analyze trends
- Get the voice of the customer (VOC): interviews, surveys, focus groups, interview experts, find pain points
- Research best practices: literature review, competitor analysis, benchmarking

3) Goal: (What is the goal? How will it be measured? Need standard / basis for comparison)

Tips to defining a goal statement:

- Ask what is the ideal outcome (often the inverse of the problem statement)
- Goal elements: **DO** - action verb (e.g., increase, reduce, etc.), **TO** – what/who, **BY** – how much and when.

Ex: Decrease the length of time to process Travel and Mileage reimbursement rates from an average of 13 days to 6 days by January 31 20XX.

4) Root Cause Analysis: (Investigation depicting the problems' root causes)

Root Cause Analysis:

- Examines underlying, not “surface” causes
- By asking “Why” as much as necessary
- To make the impactful solution(s) clear, and
- To eliminate the problem permanently

Tools: Eight Wastes (LEAN); 5 Whys; Pareto / Data; Fishbone; Cause and Effect Diagram

<https://dfa.uci.edu/learning/ excel/lss-tools.xlsx>

5) Solutions: (Action plan and findings of the tested solutions)

Transfer root causes to solutions, and prioritize solutions into an action plan (ease of implementation matrix).

Root Cause	Tested Solution	Responsible	Due	Results/Findings
List and prioritize root cause	Develop and test solutions	Assign esponsible person	Assign due date	Capture results from test

6) Check: (Summary of results from the solutions, overall goal successes, and supporting metrics)

Check” the results of the “solutions” and the “goal.” Was target achieved? Was the root cause eliminated? What worked? What didn't? Are there additional supporting metrics that need to be tracked?

Goal / Metric	Baseline	Target	Current
Description of quantified goal/metric	Metric result at current state	Target result	Metric result after solution implemented

7) Act: (Action taken as a result of the “Check,” and the plan to sustain results)

Actions to take as a result of the check:

- Did it improve? (communicate with stakeholders, continue tracking, raise target)
- Did it not change at all? (continue monitoring, wait for solution uptake, involve process owners and refine solutions)
- Did it get worse? (continue monitoring, wait for solution uptake, involve process owners and refine solutions, conduct another mini PDCA)
- Use [project management tools](#) ([project charter](#), [schedule template](#), [status report](#), [PCDA](#), etc.) and change management methodologies ([project close out](#), communication plan, etc.)

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