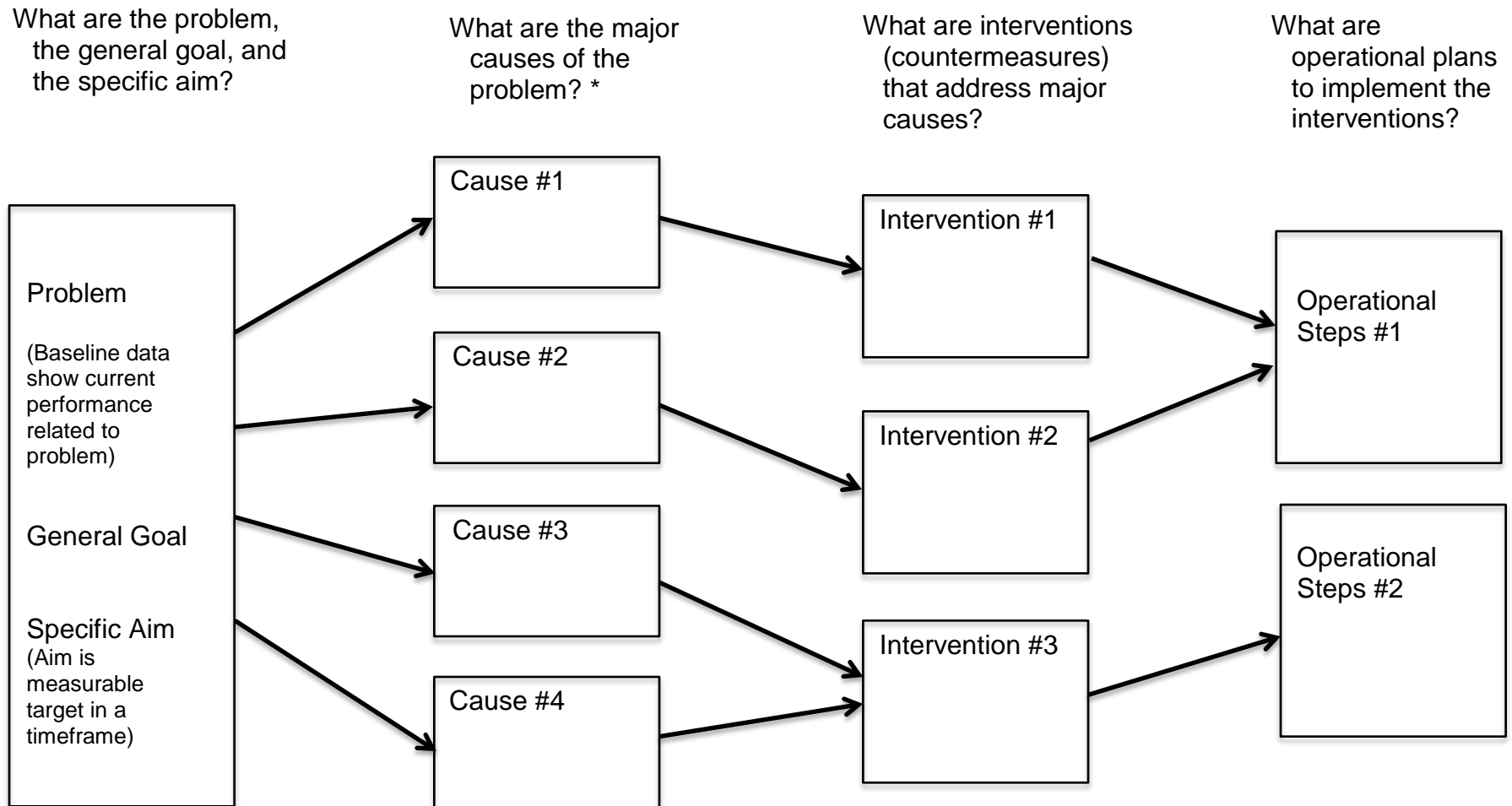


Figure 1. Structured Problem Solving: Logic Diagram for a Proposed Improvement Cycle



* Some approaches to identifying major causes:

- Consider categories of causes, e.g., people, materials, equipment, method, environment.
- Consider steps in workflow, e.g., SIPOC: suppliers, inputs, process, outputs, controls.
- Within important categories and steps, to identify underlying/root causes “ask why” (5 times).

Some common causes and interventions that address them:

- | | |
|--|---|
| • People are not aware, don't understand | Education about evidence for and importance of the goal |
| • People believe performance is OK | Feedback of data on actual performance and the problem |
| • People forget or do not have time | Standard roles, processes, and reminders for reliability and efficiency |

Figure 2. Example of Logic Diagram for a Proposed Improvement Cycle

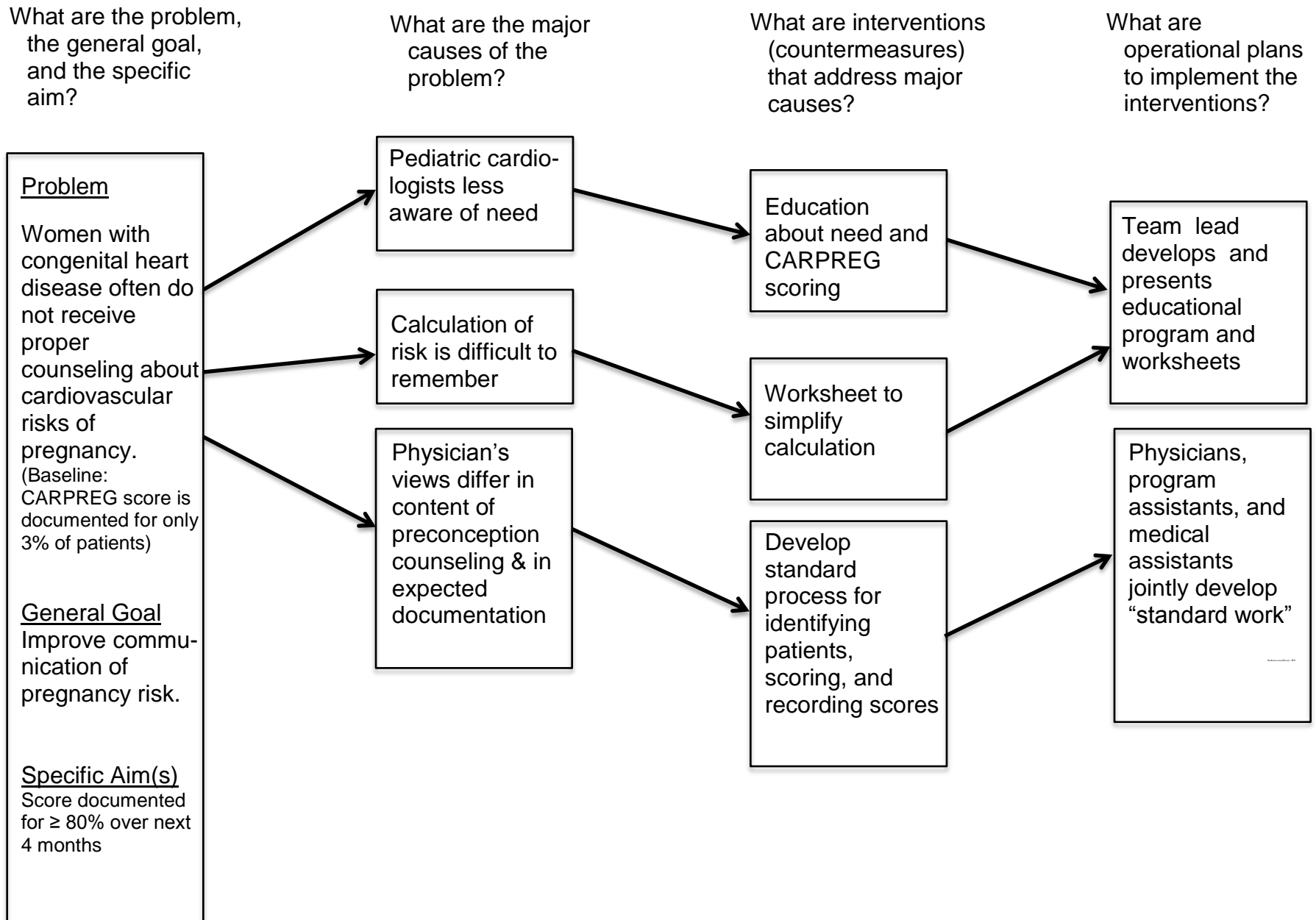


Table 1. Facilitating Structured Problem Solving: Steps, Questions, Tools

When someone identifies a likely quality or safety problem in his/her everyday work, use this illustrative guide to consider and ask questions to help the person think through how to understand and address the problem.

| Steps | Illustrative Questions | Examples of Tools |
|--|---|---|
| Identify <u>Problem</u> | Is this a problem? For whom? Why? What is the actual current performance? How do you know this is a problem? Why is this problem a priority? | Define what “customer(s)” value (consider primary and secondary customers) Go see Monitor outcomes, get data |
| Determine <u>Goal</u> | What do you really want to have happen? <ul style="list-style-type: none"> • Can you develop a SMART goal? (Specific, Measurable, Attainable, Relevant, Time-bound) | Outcomes; make sure it’s measurable Patient outcomes or satisfaction Performance guidelines Observed behaviors |
| Understand <u>Primary Causes</u> | Why is the problem occurring? Why are those factors occurring? Why do you think these are the important causes? <ul style="list-style-type: none"> • What do you actually know? • How can you find out more? | Go see Map current workflow (current value stream) Look for types of waste (e.g., processes, movement, waiting, products/actions) Root cause analysis, e.g.: <ul style="list-style-type: none"> • Ask “why” this occurs (5 times) • “Motive, means, and opportunity” analysis |
| Consider and select <u>Countermeasures</u> | What ideas do you have to address the causes? Who else would have ideas to address the causes? Who should be involved in selecting countermeasures? | Standardize work (roles, tools, processes) Visual management: <ul style="list-style-type: none"> • See status of processes • Organized places for things (5 S) Error proofing Map improved workflow (future value stream) |
| Develop <u>Operational Plans</u> | Operationally what will need to be done? Who is going to do what? When is it going to be done? Who should agree on the operational plans? | Chart showing tasks, individual responsible, and timelines (e.g. Gant chart) |