How and Why to Create a Fishbone Diagram

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Background

- This tool was originally developed by Ishikawa in 1968
- Also called cause-and-effect diagram, Ishikawa diagram, or a fishbone diagram
- This QI tool is used to help teams explore and diagram causes that are contributing or causing a certain situation or outcome.
- It graphically displays the relationship of the causes to the effect and to each other, helping teams identify areas for improvement.

Template: Cause and Effect Diagram

Team: ____________________________ Project: ________________________

1. Desired Effect
2. Categories of causes for effect
3. Fishbones
4. Branch-Bones

- People
- Environment
- Materials
- Methods
- Equipment
Tip: Develop the causes by asking “Why?” until you have reached a useful level of detail — that is, when the cause is specific enough to be able to test a change and measure its effects.

Here is an example of how to ask “why?” five times:

1. Why did the patient receive the wrong medication?
   - The nurse did not complete patient identification.
2. Why did the nurse not complete patient identification?
   - The patient did not have a wristband.
3. Why did the patient not have a wristband?
   - The wristband had been removed for a procedure and not replaced.
4. Why was the wristband not replaced?
   - The printer for the wristbands was not working.
5. Why was the printer not working?
   - The staff needed to support IT had been reduced and was overworked.

The problem identified by the fifth “why” is very different from the original event.