**Fishbone Diagram**Logo

Description automatically generated

**Instructions**

Fishbone Diagrams are commonly used Root Cause Analysis (RCA) tools. The root cause is the highest-level cause of a problem, or the factor that should be permanently eliminated to see improvement. As with a weed, the challenge must be ‘rooted out’ to prevent it from reappearing in the future. RCA helps identify implementation, programmatic and systems level factors. The Fishbone Diagram starts with the problem identified by the team, which is placed at the head of the fish. The backbone of the fish lists factors that may impact the problem: Procedures, Policies, Place, and People:

* **Procedures** refer to the way tasks are defined, understood, or performed. With complex processes and procedures, there may be a lack of shared understanding which could cause delays and unnecessary errors.
* **Policies** includes how the problem may be impacted by internal or external factors, such as agency norms or governmental regulations. While it may be impossible to shift federal policy, teams may have some authority to shift internal policies that are contributing to their problem.
* **Place** refers to the physical environment in which the problem is occurring and includes technology considerations. For example, an agency firewall may be preventing staff from using Google Forms to collect family feedback data.
* **People** and teams may need additional training or support to prevent the problem from occurring. For example, different staff performing the same task may need to be trained together and/or provided a standard work document to ensure they are aligned in their work.

Teams should complete the last factor, People, after considering the other three. This provides the team with the overall systems context for their identified problem before considering the human element. Often, the People factor leads to finger-pointing (e.g., “If Audrey just did her job right) as opposed to thinking about the supports needed to consistently do the work well.

The team should use a brainstorming process, guided by available and disaggregated data, to identify potential reasons or causes for each factor. Data from experience, observation, focus groups and surveys can be used to populate causes. Once the diagram is complete, evaluate the fishbone.

* Look for recurring themes across factors.
* Look at the balance. Which factors have the most causes?

In terms of next steps, the team may consider focusing on factors with the most related causes, or prioritizing causes that may be most likely to impact the identified challenge. In some complex cases, the causes identified in the Fishbone Diagram may require further examination. Teams may want to use the Five Whys to drill down to find the root cause of one or more of the listed reasons.

These resources were adapted from the work of IPRO, the Medicare Quality Improvement Organization for New York State, and the Centers for Medicare & Medicaid Services (CMS), https://atlanticquality.org/download/508\_7\_1-12-14\_RCA\_Toolkit\_final.pdf; the American Society for Quality. (2018). http://asq.org/learn-about-quality/root-cause-analysis/overview/overview.html; iSixSigma. Determine the Root Cause: 5 Whys. https://www.isixsigma.com/tools-templates/cause-effect/determine-root-cause-5-whys/; and The Fundamentals of Business Process Management. http://fundamentals-of-bpm.org/.

**Fishbone Diagram – Template**

| **Procedures** | | | | |  |  | **Policies** | | | | |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |  |
|  |  |  |  |  | | | | |  |  |  | | | | |  |  |  | **Problem** | | | |
|  |  |  |  |  |  | | | | |  |  |  | | | | |  |  |  | | | |
|  |  |  |  |  |  |  | | | | |  |  |  | | | | |  |
|  |  |  |  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |
|  |  |  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |
|  |  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |  |
|  |  |  | | | | |  |  |  | | | | |  |  |  |  |  |  |  |  |  |
|  | **Place / Technology** | | | | |  |  | **People** | | | | |  |  |  |  |  |  |  |  |  |  |