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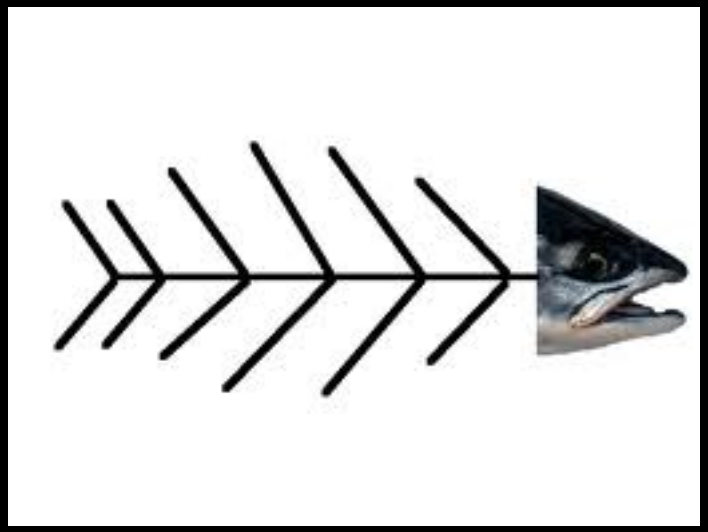
March 6, 2015



# THERE'S SOMETHING FISHY GOING ON: USE OF FISH BONE DIAGRAMS AS A QUALITY IMPROVEMENT TOOL FOR PSYCHIATRY RESIDENTS AND THEIR PROGRAMS

# No disclosures

# Objectives

- Describe how having residents participate in fish bone diagrams can help them to achieve a systems-based practice Milestone.
- Use a fish bone diagram to analyze the underlying contributory factors to a problem within their residency program.
- Identify next steps for incorporating the use of root cause analysis within a quality improvement curriculum for psychiatry residents.

# Agenda

- Background
- Example of use of a fishbone diagram within a residency program
- Your turn!

# Why QI as a tool for residency programs?

- QI is a systematic way to study a problem. It makes us more efficient in figuring out the causes of a problem, intervening with changes to try to fix the problem, and measuring if we actually made the problem better.

# Why QI?

- *"Every system is perfectly designed to get the results that it gets."*

  -Don Berwick, MD

  Former Administrator of Center for Medicare and Medicaid Services

# Lots of QI tools…

- PDCA cycles
- Process maps
- Fishbone diagrams

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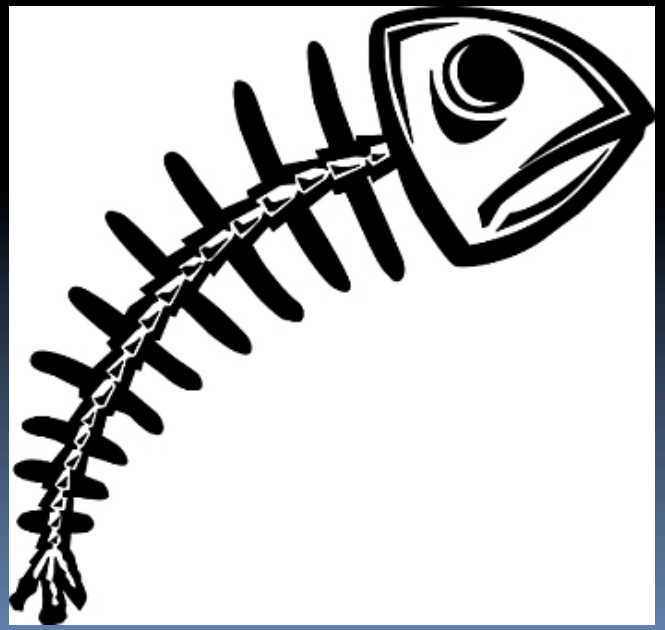
- PDCA cycles
- Process maps
- **Fishbone diagrams**



# Fishbone Diagrams (=Ishikawa Diagrams, Cause and Effect Diagrams)

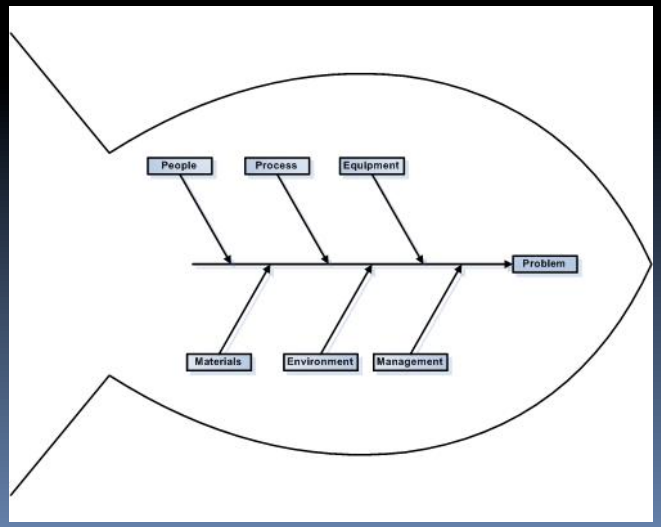
- Give us a way to explore ALL of the factors that could be causing a complicated problem, rather than just the most obvious ones
- This allows us to solve the problem more quickly and more completely, rather than just addressing part of it and having the problem run on and on
- Can reveal systems problems that will cause trouble again if not recognized/addressed
- Fishbone diagrams=brainstorming + mind map

# Fishbone Diagrams: another (major) reason to care=MILESTONES!

| SBP1. Patient Safety and the Health care Team<br>A: Medical errors and improvement activities<br>B: Communication and patient safety<br>C: Regulatory and educational activities related to patient safety | | | | |
|---|---|---|---|---|
| **Has not Achieved Level 1** | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| | 1.1/A Differentiates among medical errors, near misses, and sentinel events | 2.1/A Describes the common system causes for errors | 3.1/A Describes systems and procedures that promote patient safety | 4.1/A Participates in formal analysis (e.g., root-cause analysis, failure mode effects analysis) of medical errors and sentinel events |
| | 1.2/B Recognizes failure in teamwork and communication as leading cause of preventable patient harm | 2.2/B Consistently uses structured communication tools to prevent adverse events (e.g., checklists, safe hand-off procedures, briefings) | | |
| | 1.3/C Follows institutional safety policies, including reporting of problematic behaviors and processes, errors, and near misses | 2.3/C Actively participates in conferences focusing on systems-based errors in patient care | | 4.2/C Develops content for and facilitates a patient safety presentation or conference focusing on systems-based errors in patient care (i.e., a morbidity and mortality [M&M] conference) |

# Fishbone Diagrams: How to Do It

- Step 1: Identify the problem
- Step 2: Work out the major factors involved
- Step 3: Identify possible causes
- Step 4: Analyze your diagram



# Step 1: Identify the problem

- Write down the exact problem you face (if appropriate, identify who is involved, what the problem is, and where/when it occurs).
- Then, write the problem in a box on the right-hand side of a large sheet of paper, and draw a line across the paper horizontally from the box.
- This arrangement looks like the head and spine of a fish and gives you space to develop your ideas.

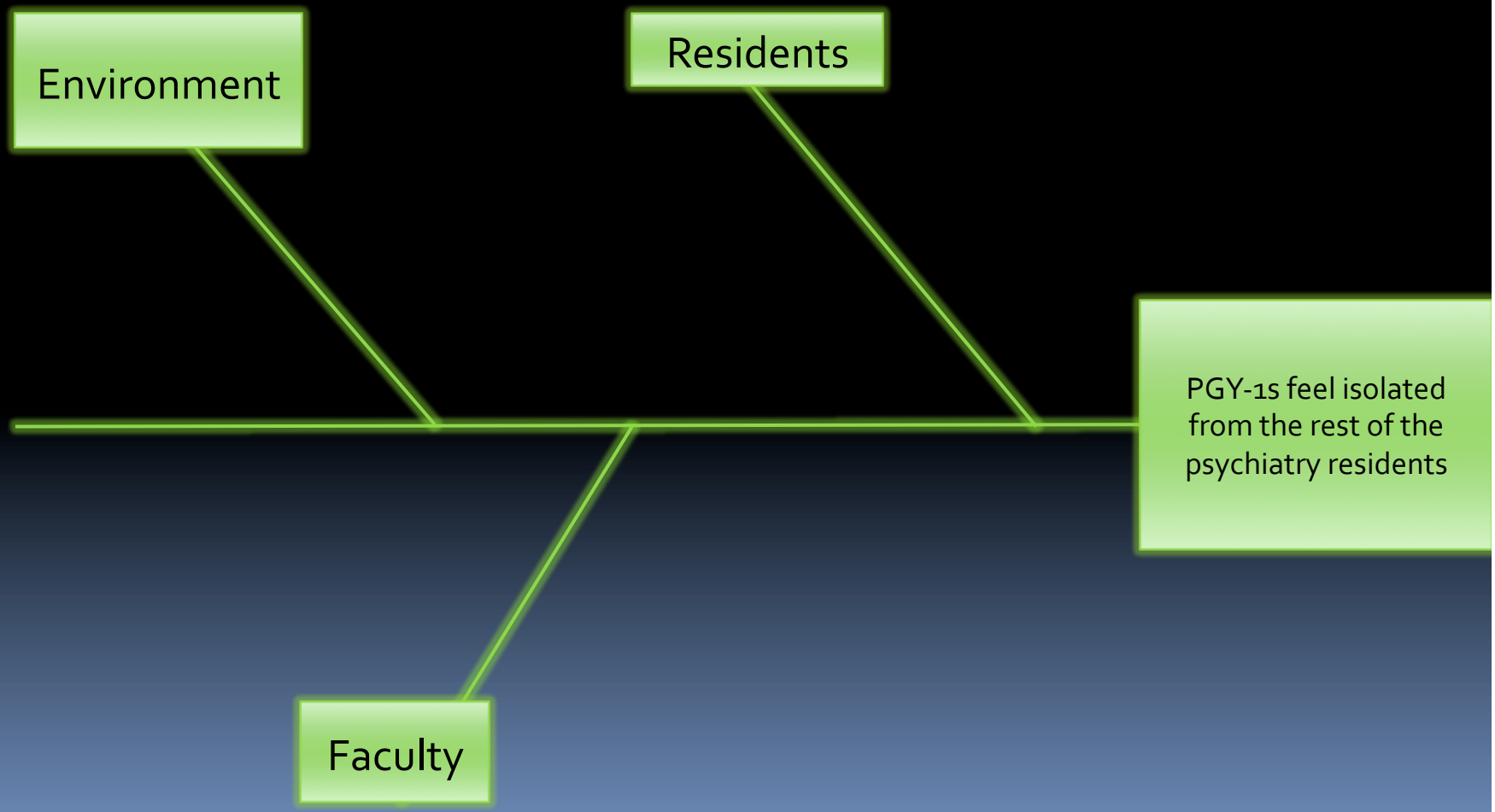
# Step 1:  Identify the problem

PGY-1s feel isolated from the rest of the psychiatry residents

# Step 2: Work out the major factors involved

- These may be people involved with the problem, management, equipment, materials, environment, process, etc.
- Draw a line off the "spine" of the diagram for each major factor/category, and label each line.

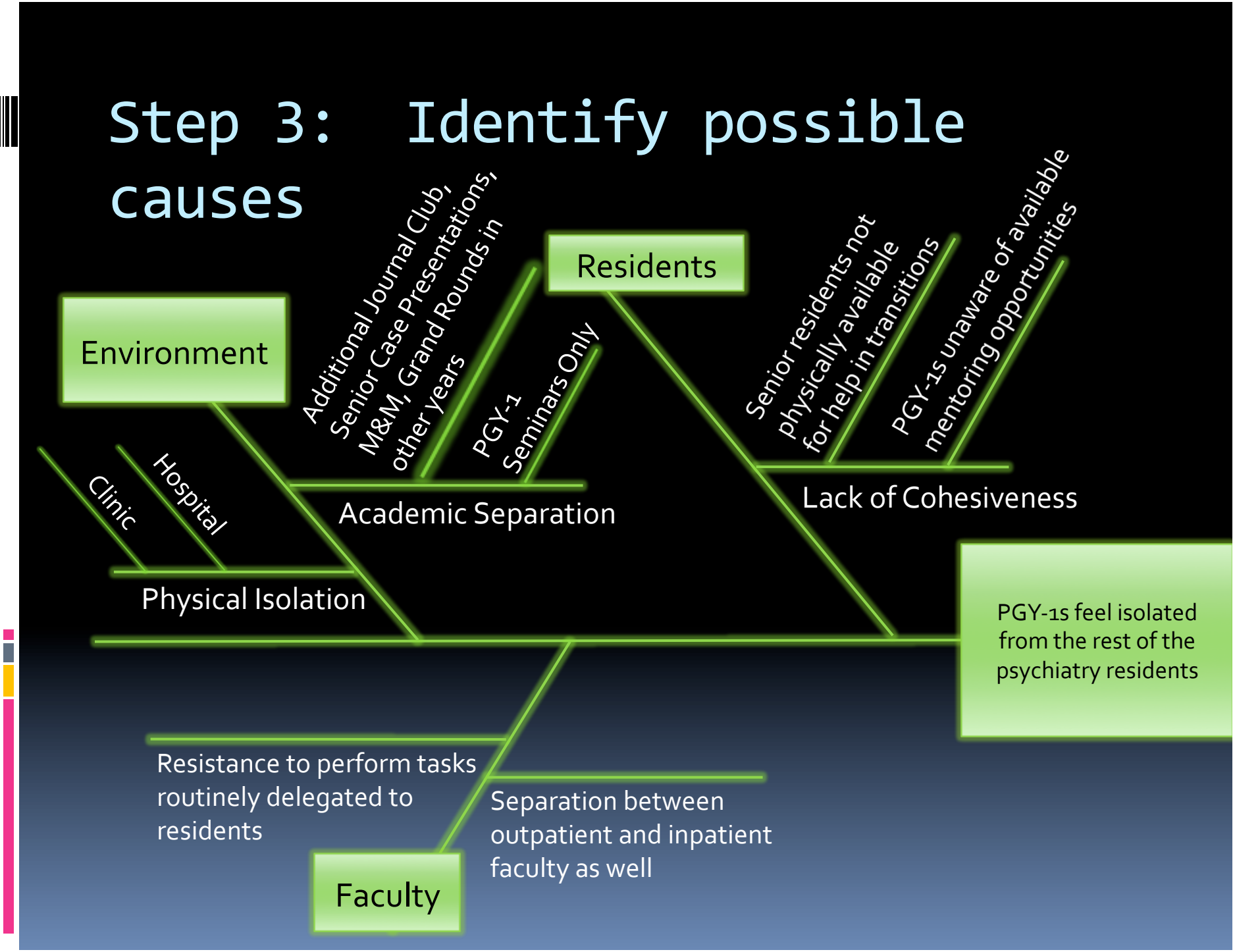
# Step 2: Work out the major factors involved



# Step 3: Identify possible causes

- For each of the factors you considered in step 2, brainstorm possible causes of the problem that may be related to the factor.
- Show these possible causes as shorter lines coming off of the "bones" of the diagram.
- Where a cause is large or complex, it may be best to break it down into smaller causes. Show these as lines coming off each cause line.

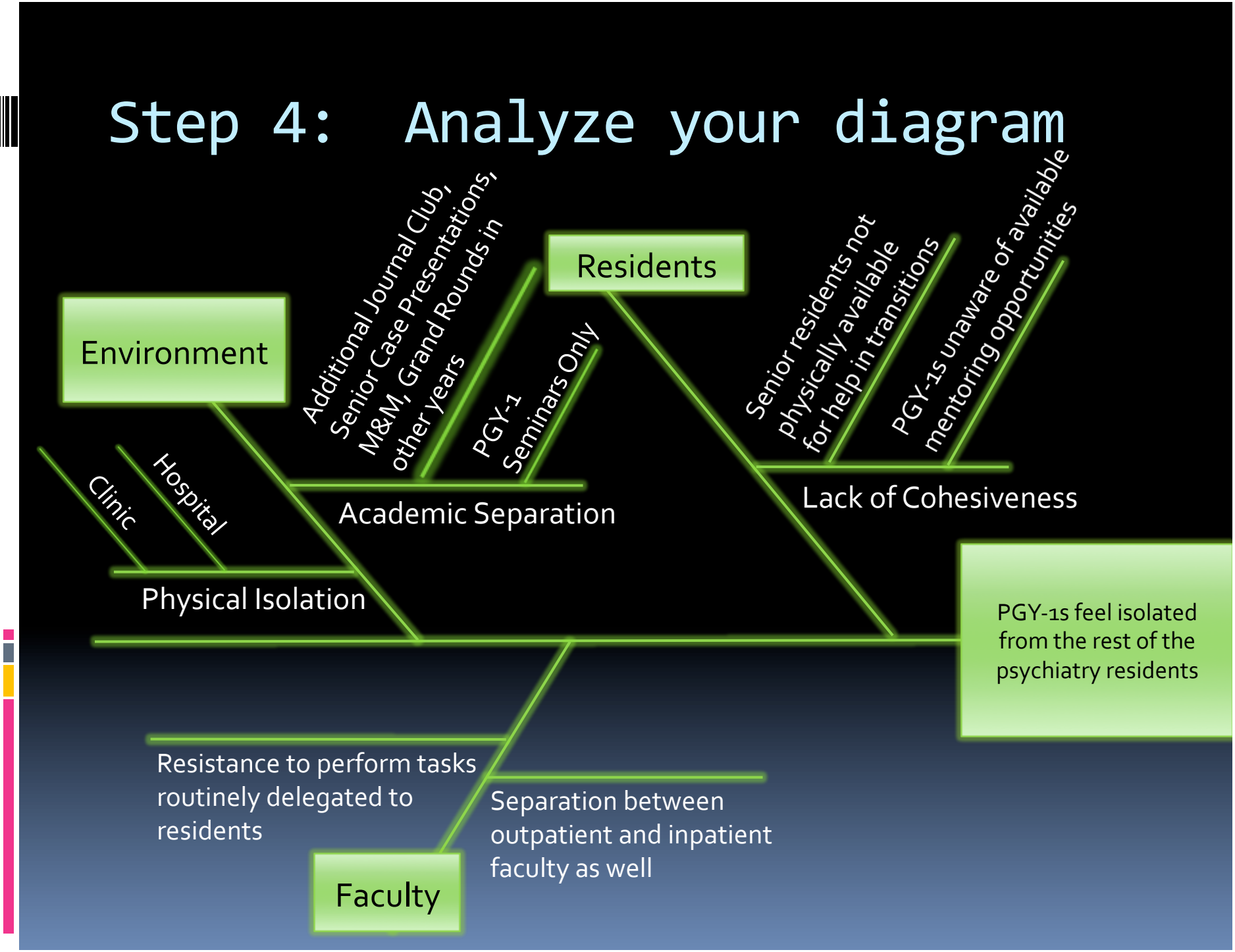
# Step 3: Identify possible causes



# Step 4: Analyze your diagram

- By this point, you should have a diagram showing all of the possible causes of the problem that you can think of.
- You can now investigate the most likely causes further, which may involve meeting with stakeholders, sending out surveys/ emails, etc. This is designed to test which of the possible causes is/are actually contributing to the problem.

# Step 4: Analyze your diagram



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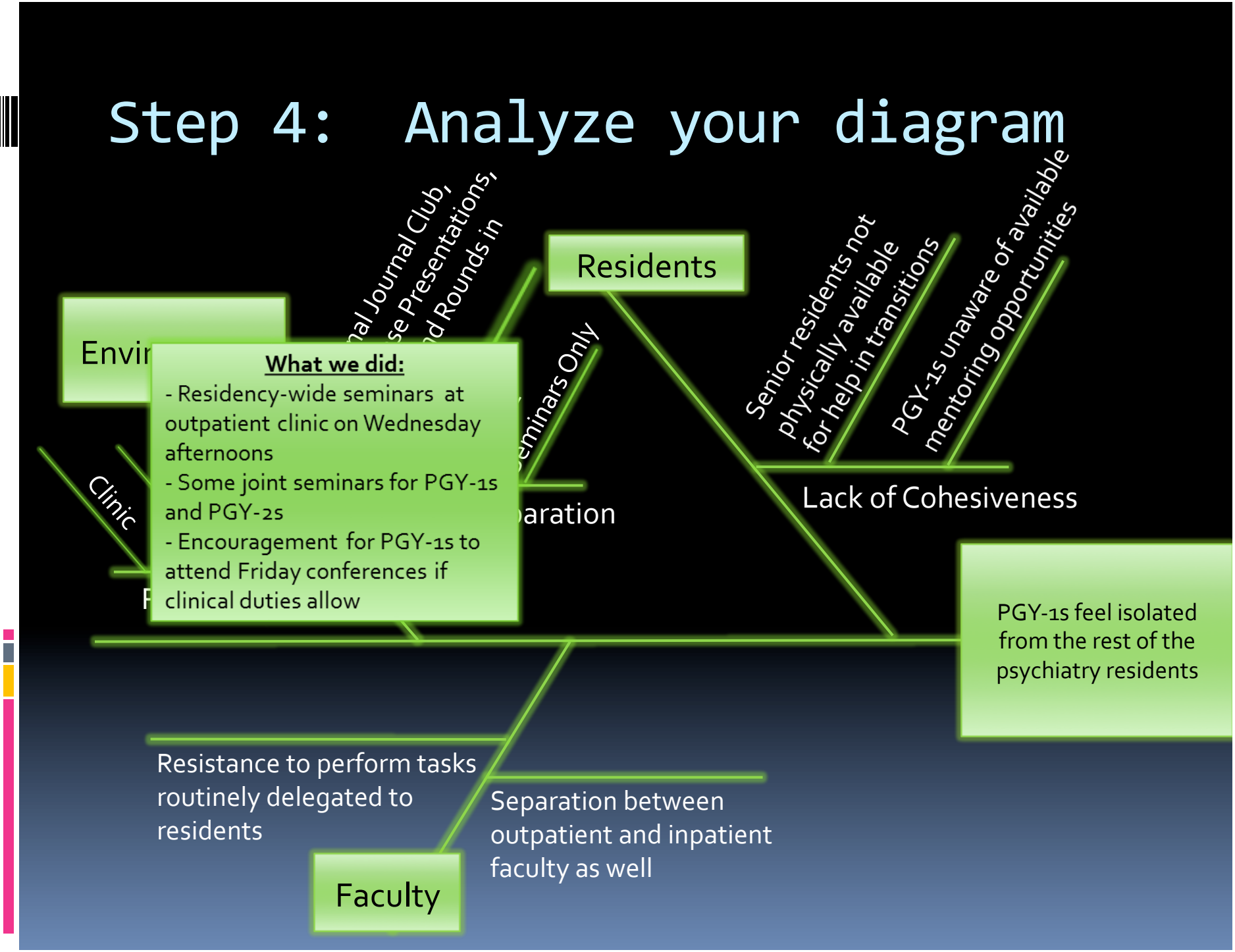

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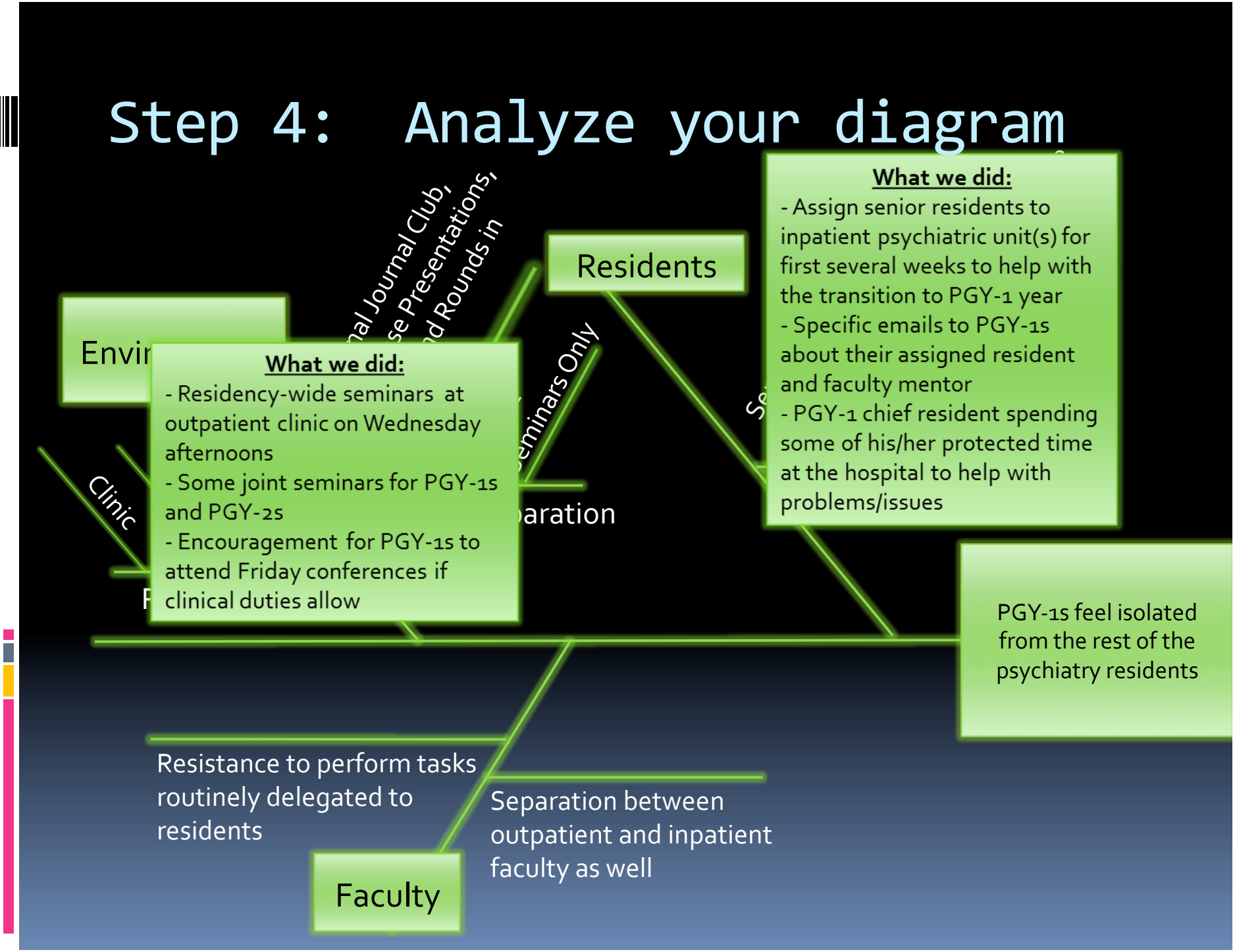

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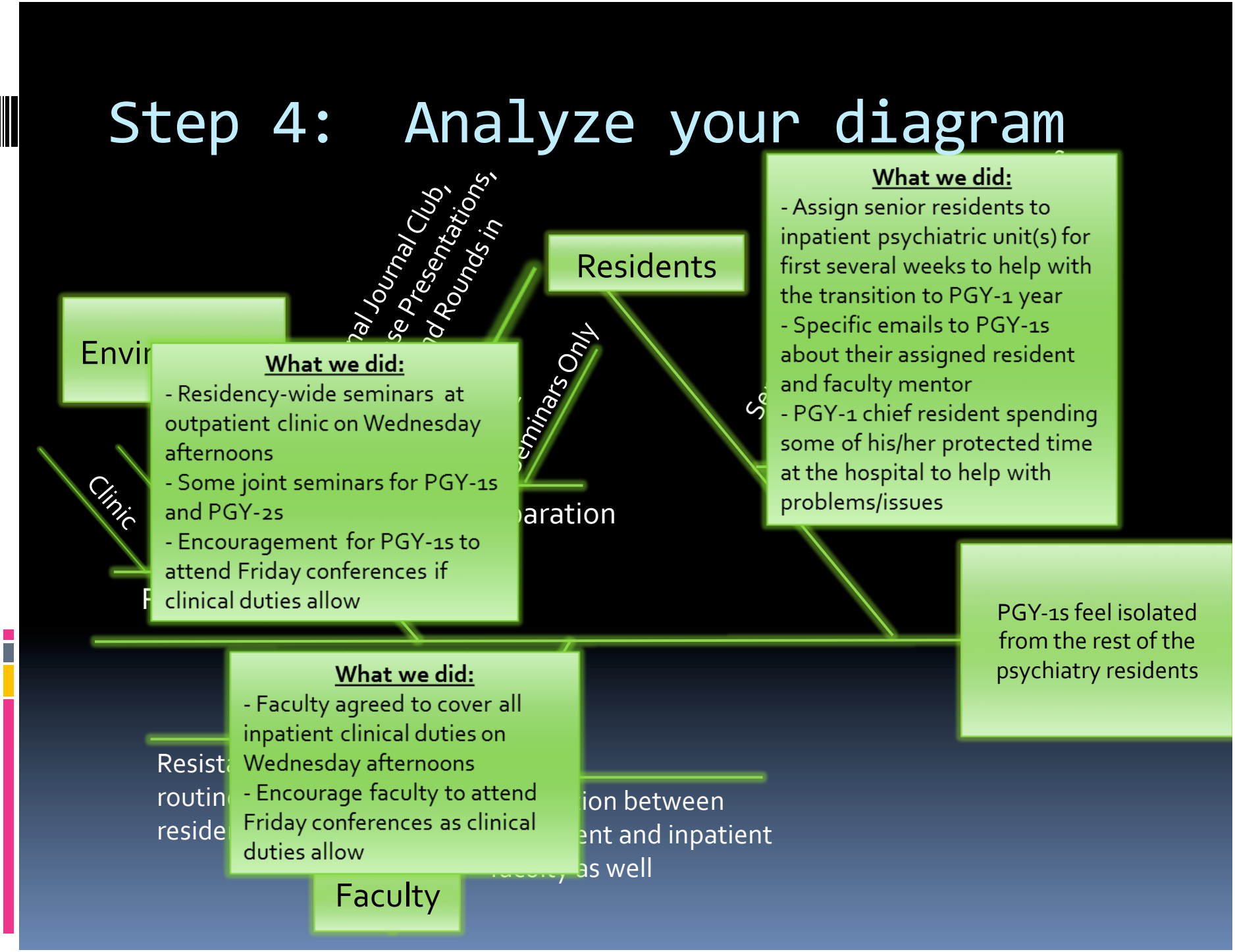
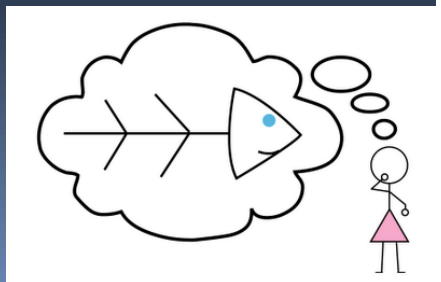


# Your turn!

- Think of a problem you are facing in your residency program (alone or with partner)
- Draw the spines on your fish for each major category of possible contributing factors Identify specific possible causes for each major "spine" and write them down
- Then we'll share as a group



# Potential categories

- people/personnel
  - residents
  - faculty
  - staff
- management
- equipment
- materials
- environment
- surroundings
- safety
- skills
- culture
- methods
- process
- et cetera …

# Thank you!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