

That's a really insightful challenge to tackle! Bridging the gap between data exploration and domain relevance is essential for making your findings truly impactful. Here are some strategies to help you relate your exploratory figures back to the project:

1. Start with the Problem Statement

Before you dive into the analysis, clearly define the problem you are trying to solve or the question you are trying to answer. This will help guide how you interpret your figures.

Example:

- **Problem Statement:** "Identify factors contributing to high patient readmission rates."
 - **Interpretation Approach:** When looking at distribution plots or correlations, frame your insights around how they relate to readmission, like patient age or specific conditions.
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2. Tie Each Plot to a Specific Question

Make sure each figure answers a specific question or hypothesis. Instead of just generating plots, think about what you want to learn from each.

Example Questions:

- What patterns can I see in patient demographics related to readmission?
- Are there any unusual trends or correlations between medical conditions and treatment outcomes?

Tip: Annotate your plots with text that explicitly answers the question.

3. Use the "So What?" Test

Every time you generate a plot, ask yourself, "**So what does this mean for the project?**"

- If the answer isn't clear, reconsider why you made that plot in the first place.
 - Frame your interpretation in terms of its **business or operational impact**.
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4. Summarize with a Sentence or Two

After each plot, write a brief summary that connects the result back to the project's goal. Use a simple format:

- **Observation:** What do you see?
- **Implication:** Why does it matter?
- **Recommendation:** What should be done?

Example:

"The box plot shows that patients aged 65+ have significantly higher readmission rates compared to younger patients. This suggests that age may be a key factor in predicting readmission, and targeted interventions could reduce hospital readmission in older populations."

5. Use Comparisons and Contrasts

Humans naturally understand insights when they see comparisons. Instead of just showing a single plot, compare multiple groups or trends side by side.

Example:

- Compare readmission rates between different treatment types or hospital departments.
- Contrast the distribution of vital signs between readmitted and non-readmitted patients.

Framing Statement:

“While treatment A has a 20% higher readmission rate than treatment B, age differences between treatment groups account for part of the discrepancy, suggesting age-specific protocols may be beneficial.”

6. Contextualize with Domain Knowledge

If possible, bring in external knowledge or research to frame your findings. This makes your interpretation sound more grounded and authoritative.

Example:

“These results align with prior studies showing that comorbid conditions like diabetes significantly impact readmission rates. This highlights the need for integrated care approaches.”

7. Keep Your Audience in Mind

Tailor your explanations to the expertise level of your audience:

- **Technical Audience:** Highlight methodology and data integrity.
- **Non-Technical Audience:** Focus on high-level takeaways and actionable insights.

Tip: Use storytelling techniques to build a narrative that moves from data to insight to recommendation.

8. Use “Insight Statements”

Whenever you present a figure, follow it up with an insight statement:

- **Data Insight:** “This scatter plot shows a positive correlation between patient age and readmission probability.”
 - **Business Insight:** “This indicates that older patients are at higher risk, suggesting a need for age-specific post-discharge care plans.”
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9. Practice “Data Storytelling”

Create a flow where one insight logically leads to the next, forming a coherent narrative. This way, your audience doesn’t just see a series of figures but understands the story they collectively tell.

10. Rehearse Verbally

Sometimes writing the insight isn’t enough—practice saying it out loud as if you were presenting. This helps clarify your thoughts and make them more understandable.

Would you like to practice with an example dataset and work through how to frame your insights? Let me know!