

DELAY IN ADMITTED PATIENTS WITH CIRRHOSIS

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Background

- Individuals with decompensated cirrhosis are at high risk of hospitalization and readmission.
- Delayed paracentesis is associated with increased mortality.
- There is often a delay in paracentesis due to lack of procedural experience.

Aim

- Implement a pilot study to increase resident paracentesis experience.
- Decrease the delay in time to paracentesis.

Methods

- Implemented a quality improvement project over five contiguous months focusing on increasing resident paracentesis experience.
- Interventions included:
 - Providing educational material to rotating residents.
 - Supervising residents performing paracenteses to increase procedural experience.
- Outcomes were:
 - Procedural competency defined as performing at least five paracenteses.
 - Assessing clinical outcomes of the paracenteses performed.
 - Reduction in time to paracentesis.
- Reduction in time to paracentesis was determined based on comparison to next available time for interventional radiology to perform the paracentesis.

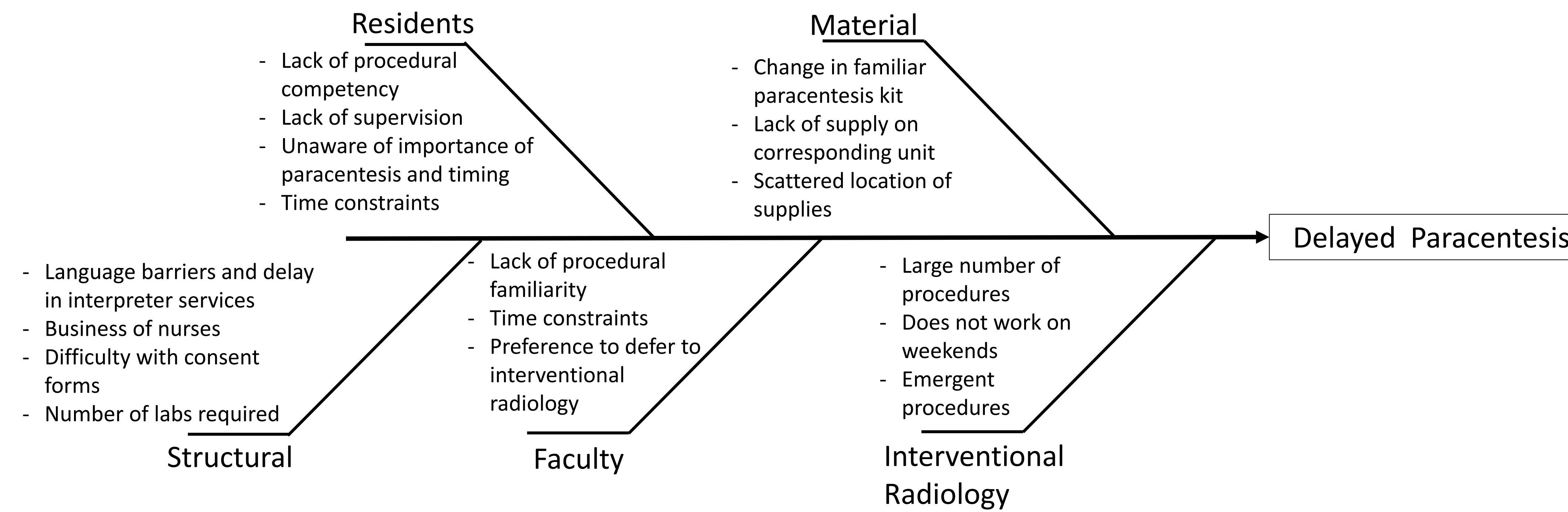


Figure 1. Fishbone diagram of barriers to paracentesis

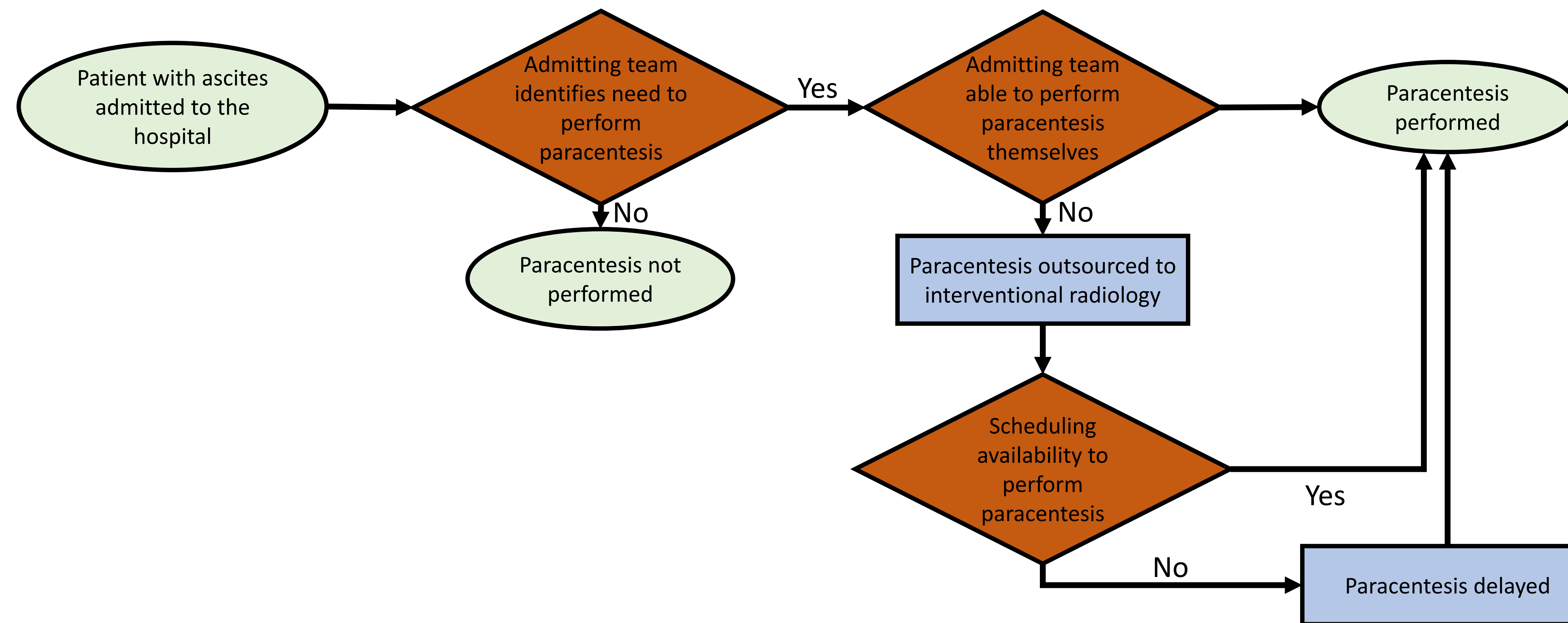


Figure 2. Process map of performing paracenteses.

Results

Table 1. Breakdown of results following the intervention

Total number of residents participating in pilot	5
Residents competent in paracenteses prior to intervention (%)	0 (0)
Total number of paracenteses performed	11
Residents competent in paracenteses following intervention (%)	4 (80)
Total time to paracentesis reduction (hr)	364
Average reduction in time to paracentesis (hr)	33.1

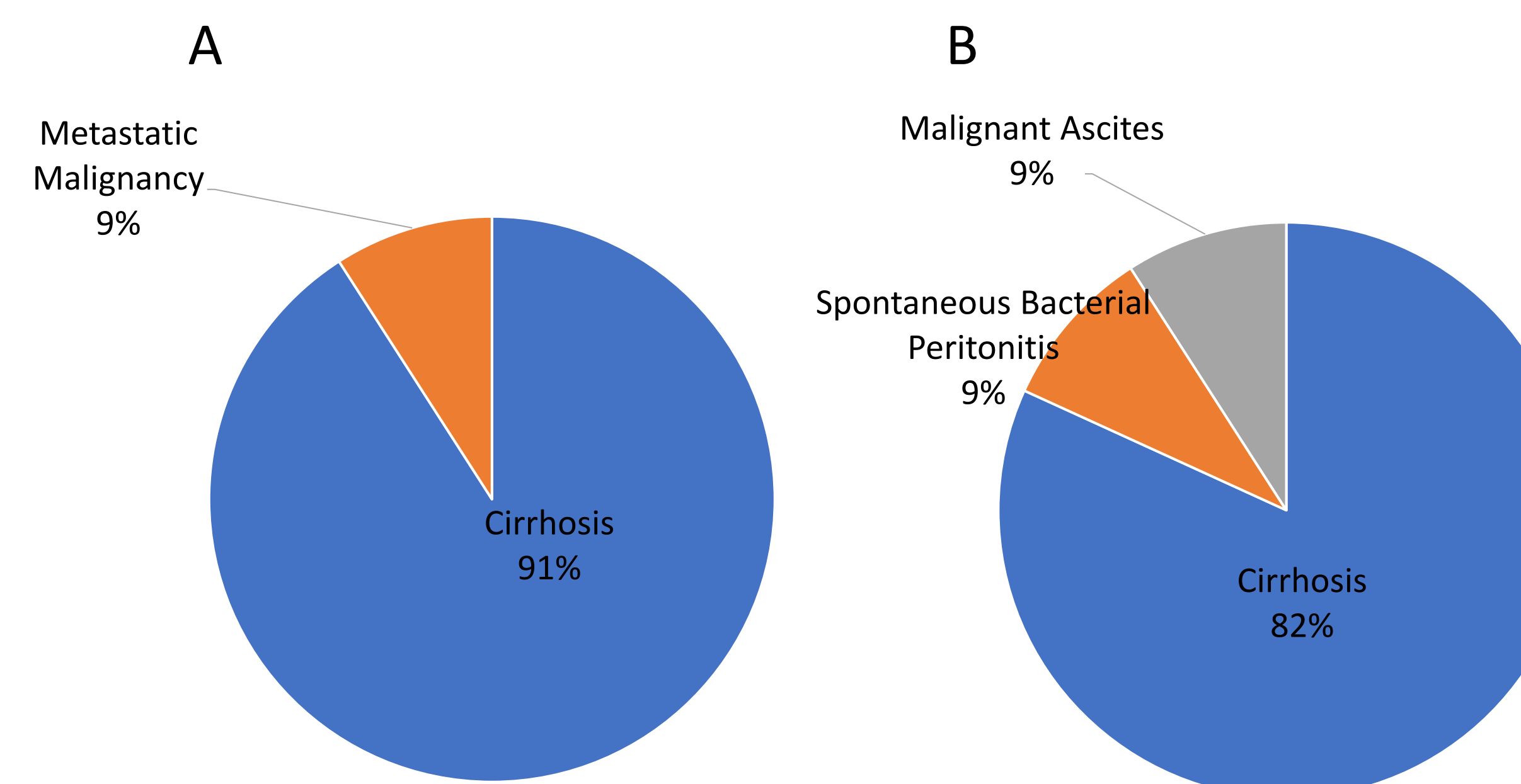


Figure 3. A) distribution of pre-paracentesis diagnosis and B) distribution of post paracentesis diagnosis.

Discussion

- There is evidence that supports delays in time to paracentesis can lead to higher mortality rates as well as higher rates of infection, hepatic encephalopathy and hepato-renal syndrome patient with cirrhosis and ascites. Additionally, the time of paracentesis is associated with the risk of mortality.
- There can be delays in time to paracentesis due to lack of procedural confidence and competency.
- The pilot study implemented here accomplished several things including:
 - Increasing procedural competency among rotating residents.
 - Decreasing the time to paracentesis compared to if the procedure was done by interventional radiologist.

Future Directions

- Expand the scope of the intervention to improve resident competency in performing paracenteses.
- Find additional ways to decrease delays in performing paracenteses.

References

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2. Tocia C, Dumitru A, Alexandrescu L, Popescu R, Dumitru E. Timing of paracentesis and outcomes in hospitalized patients with decompensated cirrhosis. *World J Hepatol.* 2020;12(12):1267-1275. doi:10.4254/wjh.v12.i12.1267