Procedure	Level	Nonoperative/Preoperative	Intraoperative	Postoperative
Paracentesis	1: Limited Participaton Demonstrates basic understanding of how the tools operate. Has very basic skills. Framework: What a learner directly out of medical school should know. The attending shows and tell during the procedure.	-Understands the pathophysiology, differential diagnosis for the causes of ascites, and the rationale for drainage of ascites. -Performs a history and physical and lab evaluation independently -Aware of SIR guidelines for preprocedural labs and medication holds	-assists with preparation of sterile procedural field -maintains a sterile field -Be able to identify free fluid vs loculated fluid and distinguish these from the bladder, solid organs (liver/spleen) as well as the bowel -Be able to identify inferior epigastric arteries and lateral circumflex iliac artery branches on ultrasound	-understands what labs should be sent (gram stain, cell count with differential, culture and sensitivity, total protein, albumin) -aware of what complications to look out for including hypotension and tachycardia due to bleeding vs due to paracentesis induced circulatory dysfunction but needs attending direction to manage -In the setting of complication, not familiar with next steps
	2: Direct Supervision Demonstrates an understanding of the steps of the procedure but requires direction to accomplish in a safe manner Framework: The learner can use the tools but may not know exactly how, what or where to do it. The attending actively helps throughout the case to maintain forward progression.	-able to review preoperative imaging (US/CT/MRI) to identify ideal pocket for aspiration -demonstrates an understanding of the indications, contraindications, alternatives and potential complications -communicates facts of procedure and discusses potential complications or alternatives for straghtforward cases but may need direction for more complicated cases -aware of how much fluid needs to be removed & if it is therapeutic vs diagnostic	-able to prepare a sterile field and position the patient appropriately only needing minimal direction from the attending -familiar with the tools to drain ascites -identifies a safe approach on intraprocedural imaging, needing only minimal attending direction -able to see the needle throughout the entirety of the procedure with attending guidance -able to adjust the US settings to optimize needle and ascites imaging -effectively instills anesthetic into the dermis as well as on the peritoneum to minimize pain, with minimal attending direction	-able to manage hypotension with fluid or blood resusicitiation as needed, with minimal attending guidance -appropriate dosing and administration of albumin in the setting of high SAAG ascites.
	3: Indirect Supervision Can do paracentesis in a large pocket but may need guidance in loculated/complex/small pocket of ascites Framework: The learner can perform straightforward paracenteses. The attending gives passive help. This passive help may be given with the attending scrubbed in for more complex paracenteses or during a check-in for more routine paracentesis.	-independently review imaging to identify ideal pocket -independently communicates facts of procedure, potential complications/alternatives for simple and complex cases	-independently gathers all tools, prepare the patient and field -facile with the tools -successfully guides a junior resident in performing a straighforward paracentesis -may need passive help in performing more difficult paracentesis (complex, loculated, small ascites pocket)	-able to guide a junior resident in performing postoperative management

	4: Practice Ready Can perform easy and complex paracenteses and manage post paracentesis hemodynamics Framework: The learner can perform all straightforward and complex paracenteses and can manage post-paracentesis complications independently The attending is available as needed but is not routinely needed	-able to talk to a hepatologist, medical oncologist , surgeon about the rationale for ascites management -understand the management of high SAAG ascites with diuretics (lasix/spironolactone) -understands the differential for bloody ascites (cancer, TB, or iatrogenic etc)	-able to drain small pockets of ascites near vital structures such as the liver, bladder, bowel and spleen independently -facile in finding and visualizing the needle the entire procedure	-counsel patients on causes of ascites and offers treatment options (ie: tunneled peritoneal drain for malignant ascites, TIPS, peritoneo-venous shunt, maximal diuretic therapy) -able to diagnose and manage SBP