| Procedure | Level | Nonoperative/Preoperative | Intraoperative | Postoperative |
|---|---|---|---|---|
| **Image-guided abscess drainage** | 1: Limited Participation<br><br>Demonstrates basic understanding of how the tools operate. Has very basic skills.<br><br>Framework:<br>What a learner directly out of medical school should know. The attending shows and tell during the procedure. | -Demonstrates an understanding of the procedural indications but may not understand contraindications.<br>-Able to identify relevant finding on imaging but may not be able to determine a safe approach to performing the drain placement<br>-Obtains an H&P inclusive of basic focused exam<br>-Aware of SIR guidelines for preprocedural labs and medication holds<br>-Respectfully communicates basic facts of the procedure but inconsistently discusses potential complications or alternatives | -assists with preparation of sterile procedural field<br>-maintains a sterile field<br>-identifies relevant anatomy on intraprocedural imaging including target collection and adjacent structures<br>-follows intraprocedural directions but does not know specific devices and handles tools inefficiently<br>-in cases performed under moderate sedation, learner is not familiar with typical medication dosages and needs direction from the attending | -Explains the procedure basics to the the referring team but needs prompting to cover post-procedure care plan and signs of complications<br>- Unfamilar with post drainage complication and needs attending direction for next step of care |
| | 2: Direct Supervision<br><br>Demonstrates an understanding of the steps of the procedure but requires direction to accomplish in a safe manner<br><br>Framework:<br>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. | -Demonstrate and understanding of both procedural indication and contraindications, alternative treatments, complications and post procedure care plan<br>-Able to identify a safe approach for drainage on pre procedure imaging on straighforward cases without attending direction<br>-Respectfully communicates facts of procedure and discusses potential complications or alternatives for straighforward cases but may need direction for more complicated cases<br>-Identify the imaging modality needed for optimal drainage | -able to prepare a sterile field and position the patient appropriately only needing minimal direction from the attending<br>-identifies drainage target on intraprocedural imaging and identifies a safe approach on intraprocedural imaging, needing only minimal attending direction<br>-familiar with the tools and able to perform the beginning of the case but needs significant intraprocedural direction to successful complete the procedure.<br>-in cases performed under moderate sedation, learner is familiar with typical medication dosages | -Explain the procedure to the patient and team with approperiate post-procedure care plan and signs of complication<br>-Understand and identify post drainage complications and can initiate intervention, but need attending direction for plan progression |

| | | | | |
|---|---|---|---|---|
| | 3. Indirect Supervision<br><br>Can do a basic, straightforward drain placement but may not recognize abnormalities or nuances of a more advanced case<br><br>Framework:<br>The learner can perform straightforward drain placements. The attending gives passive help. This passive help may be given with the attending scrubbed in for more advanced cases or during a check-in for more routine cases. | -Understand and explain procedure indication and contraindication, alternatives, complications and post care plan for both simple and complex drainage cases<br>-Identify safe approach for drainage including complex multistep cases with occational attending direction/suggestion<br>-Respectfully communicate the procedure, complication for complex cases<br>-Identify in general tools require for procedure with some guidence from attendence | -able to prepare the field and patient without attending direction<br>-Identified the drainage target on intraprocedural imaging with safe approach without attending direction<br>-familar with tools and step of the procedure without intraprocedural direction<br>-Identify deviation from expected course of the procedure and seek help from attending | -Explain and execute the post procedure plan to the patient and team including follow up care<br>-Manage post drainage complication with attending assistance |

| | | | | |
|---|---|---|---|---|
| | 4. Practice Ready<br><br>Can perform more advanced drain placement cases and manage the drain independently<br><br>Framework:<br>The learner can perform all straightforward drain placements and most advanced cases and can manage post procedural complications and can manage the drain independently<br>The attending is available as needed but is not routinely needed | • full understanding of the indications, contraindications, and potential complications of the procedure including type of collection and possible effects on duration of drain (tumor abscess, fistula, etc), common pathogens and the appropriate antibiotics that should be use, relevant lab values and appropriate mitigation effects.<br><br>• independently the optimal modality and position for safe approach for drain placement on pre-procedural imaging, including in complex cases with anatomical variations or difficult access<br><br>• Independently conduct an informed consent discussion with the patient and family, respectfully communicating the procedure's facts, potential complications, and alternative options. This includes individualizing the discussion to the patient's specific needs and ensuring comprehension, adapting explanations based on patient understanding and clinical context.<br><br>• Coordinate recommendations members of treatment team to optimize patient care. | • Be able to prepare the sterile field and position the patient independently<br><br>• Independently identify the drainage target and a safe drainage approach even in challenging anatomy or complex cases<br><br>• familiar and dexterous with the tools and able to perform advanced cases from beginning to end in a safe and efficient manner, including independently selecting the appropriate tools and techniques<br><br>•In cases performed under moderate sedation, sedate the patient appropriately, including using using both pharmacological and non-pharmacological methods.<br><br>• Recognize technical and anatomic causes of complications and independently modify technique to achieve drainage goals. They should be able to reposition complex drainage tubes<br><br>•Be capable of guiding junior trainees through the technical steps of the procedure. | • Manage post-procedural complications independently. They should be able to recognize. and treat complications such as bleeding, infection, or drain dysfunction without supervision in straightforward and complex cases<br><br>•Independently explain the procedure to the patient and discuss post-procedure expectations and warning signs of serious complications. This involves counseling patients on post-procedure care plans, including things like drain flushing/aspirating, dressing changes, and return precautions<br><br>• Coordinate Follow-up and Long-term management and care of drains and discuss alternatives to chronic drain management with a multidisciplinary team |