Procedure	Level	Nonoperative/Preoperative	Intraoperative	Postoperative
Thyroid fine-needle aspiration	1: Limited Participation 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.	- Demonstrates an understanding of the indications for thyroid FNA (e.g., suspicious nodules on ultrasound or Bethesda criteria) but may not recognize all contraindications (e.g., uncorrected coagulopathy, overlying infection) - Able to identify relevant neck anatomy on ultrasound, but may not be able to determine a safe approach to performing the aspiration - Obtains an H&P inclusive of basic focused exam -Aware of SIR guidelines for preprocedural labs and medication holds - Communicates basic elements of the procedure but inconsistently addresses potential risks or alternatives to FNA	- Assists with preparation of a sterile procedural field and can maintain a sterile field with supervision - Identifies basic thyroid anatomy on ultrasound, including thyroid lobes, isthmus, trachea, and common surrounding landmarks - Understands the principles of targeting thyroid nodules under ultrasound guidance, including the difference between on-axis (in-plane) and off-axis (out-of-plane) approaches, but is unable to consistently apply them in practice - Demonstrates conceptual understanding of how to anesthetize the thyroid capsule and overlying soft tissues but requires direct instruction and feedback to perform the task - Follows intraprocedural directions but handles instruments and probe inefficiently, often requiring correction	- Explains basic aspects of the thyroid FNA procedure to the patient but requires prompting to address post-procedure expectations, including typical soreness, minor bruising, and activity restrictions - Does not consistently counsel patients on warning signs of complications such as neck swelling or hoarseness and skin bruising - Demonstrates basic familiarity with the Bethesda classification system but cannot reliably explain its clinical implications or how results guide next steps - Provides limited or no guidance on post-procedural pain control unless directed by the attending - In the setting of a post-biopsy complication, requires direct attending intervention for assessment and 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 identify an appropriate and safe approach to target thyroid nodules using ultrasound with minimal attending input in cases with normal anatomy - Demonstrates understanding of the indications, contraindications, and potential complications of thyroid FNA, including management of anticoagulation and recognition of high-risk features - Applies TIRADS (Thyroid Imaging Reporting and Data System) to characterize nodules and support FNA decision-making based on risk stratification - Demonstrates a basic understanding of thyroid physiology, including the roles of TSH, T3, and T4, and their relevance in nodule evaluation and systemic thyroid function - Communicates procedural details, risks, and alternatives effectively for straightforward cases, but may require guidance for complex cases	- Able to prepare a sterile field and position the patient appropriately with only minimal direction from the attending - Identifies the target thyroid nodule and relevant landmarks on intraprocedural ultrasound, and selects a safe needle trajectory with minimal attending input in cases of normal anatomy - Demonstrates understanding of causes of nondiagnostic aspirates but requires attending assistance to troubleshoot technique or modify approach - Familiar with fine needle aspiration techniques, including non-suction, aspiration with syringe, and combination methods, and understands when each may be preferred - Knows the indications for using small bore needles (e.g., 25G or 27G), and selects appropriate needle types for routine FNA but may require confirmation before use Able to initiate the case and align the needle under ultrasound guidance, but requires significant intraprocedural direction to maintain needle visualization, reach the target safely, and complete the aspiration effectively	- Explains the procedure, expected recovery, and common post-procedure symptoms with minimal prompting - Identifies and communicates warning signs of serious complications but may require attending support when fielding unexpected patient questions or concerns - Demonstrates working knowledge of the Bethesda classification system, and understands general management implications for common results, but may require clarification for less common scenarios - Recommends appropriate post-procedural pain control using non-opioid analgesics and basic comfort measures - In the setting of a post-biopsy complication, recognizes the problem and initiates basic management steps, but requires attending input for definitive treatment decisions

	3. Indirect Supervision Can do a basic, straightforward biopsy but may not recognize abnormalities or nuances of a more advanced case Framework: The learner can perform straightforward thyroid FNA. The attending gives passive help. This passive help may be given with the attending scrubbed in for more advance aspirations or during a check-in for more routine procedures.	- Able to independently identify a safe and effective ultrasound-guided approach to thyroid nodules on pre-procedural imaging, including in patients with normal or mildly distorted anatomy - May require direct supervision for complex cases - Demonstrates a thorough understanding of the indications, contraindications, and potential complications of thyroid FNA, including how functional imaging (nuclear medicine scans) differentiates hot from cold nodules and guides appropriateness of biopsy - Integrates understanding of thyroid physiology and laboratory evaluation (TSH, T3, T4) when assessing nodules in the clinical context - Respectfully and independently communicates the purpose of the procedure, potential complications, and alternative options with the patient or family member, including discussion of when FNA may or may not be necessary based on imaging and labs	- Able to prepare a sterile field and position the patient appropriately without assistance - Independently identifies the target thyroid nodule and surrounding anatomy on intraprocedural ultrasound, and selects a safe and effective needle trajectory, including in mildly complex cases - Recognizes technical and anatomic causes of nondiagnostic aspirates and can adjust technique or needle placement accordingly without attending intervention - Understands and appropriately selects between FNA techniques (aspiration, non suction, mixed) based on nodule characteristics and institutional preference - Independently selects the appropriate needle type and gauge (e.g., 23 vs 25 vs 27G) based on target depth, vascularity, and cellularity considerations - Requires attending oversight for only complex intraoperative decision-making	- Independently explains post-procedure expectations, including typical recovery timeline, minor discomfort or bruising, and expected timing of pathology results - Clearly communicates warning signs of serious complications and instructs patients on when and how to seek urgent evaluation - Demonstrates solid understanding of the Bethesda classification system, and can explain the general clinical significance and management implications to the patient or referring provider - Independently provides appropriate pain management recommendations, and counsels patients on activity modification and wound care if applicable - Recognizes and manages most post-biopsy complications without attending input, escalating care only for high-risk or evolving situations

	4. Practice Ready Can perform more advanced aspiration cases and manage complications Framework: The learner can perform all straightforward hip and shoulder aspirations and most advanced cases and can manage complications independently The attending is available as needed but is not routinely needed	- Able to independently identify a safe and effective ultrasound-guided approach to thyroid nodules, including in cases with anatomical variation or difficult access - May require direct supervision for high-risk or complex scenarios - Demonstrates full understanding of indications, contraindications, and potential complications, including rare but significant risks - Effectively and respectfully communicates the procedure, risks, benefits, and alternatives to patients or family members, adapting explanations based on patient comprehension and clinical context	- Identifies thyroid nodules and surrounding landmarks on intraprocedural ultrasound and selects a safe and efficient needle approach independently, including in cases with challenging anatomy - Recognizes technical and anatomic causes of nondiagnostic aspirates and independently modifies technique or needle placement to improve diagnostic yield - Independently selects and performs the most appropriate FNA technique (aspiration, non suction, or mixed) based on nodule characteristics and cytopathology requirements - Chooses appropriate needle gauge and length without oversight, factoring in target depth, vascularity, and need for multiple passes - Independently administers local anesthesia including capsule infiltration and manages patient discomfort during the procedure - Requires no attending input for typical or moderately complex procedures and is capable of coaching junior learners through the technical steps	- Independently and clearly communicates post-procedure expectations, including typical symptoms, activity guidelines, and follow-up logistics without prompting - Proactively counsels patients on warning signs of serious complications and provides clear instructions for escalation, including after-hours or emergency pathways - Demonstrates comprehensive understanding of the Bethesda classification system, can explain cytology results, and can integrate them into a coherent discussion of next steps - Independently manages post-procedural pain and discomfort with appropriate non-opioid regimens and addresses patient-specific concerns - Anticipates and manages routine complications independently, initiates appropriate interventions for less common or more serious events, and communicates findings and plans effectively with the care team and referring providers