**Instrument Validation Paper Outline**

Neurotology and Otology – more appropriate for the intended audience (TEES surgeons)

*Clinical Motivation:*

* “Comparison of Middle Ear Visualization With Endoscopy and Microscopy” outlines what is visible by the endoscope vs. microscope and this paper will outline how this new instrument can reach structures visualized by the endoscope
* TEES is a minimally invasive surgical technique – list benefits
* One-handed surgery
* Tools for TEES (such as...) are being developed but according to Needs Analysis study they are still not sufficient to facilitate the technique
* Need: low adoption due to learning curve thus need better instruments to facilitate the surgery

*Performance Testing:*

* Reach test protocol: print temporal bones with highlighted targets, ask surgeons to reach targets with endoscope, count how many targets were reached COMPARED TO EXISTING TOOLS
  + Will compare number of targets reached for new instrument vs. Thomassin, Panetti, Rosen needle which are commonly used tools as per “Instrumentation and Technologies in Endoscopic Ear Surgery”, “Pediatric endoscopic ear surgery in clinical practice: Lessons learned and early outcomes”, “Introducing Endoscopic Ear Surgery into Practice” where experienced TEES surgeons review TEES techniques
  + Results:

*Surgeon Feedback:*

* Survey that asks surgeons to rate performance, ergonomics, safety of tool
  + This would add length to the paper
* Results: