

Appendix. Robotic Objective Structured Assessment of Technical Skills Assessment Form and Likert Scale With Scoring Anchors

Depth Perception/Accuracy

1	2	3	4	5
Constantly overshoots target, slow to correct		Some overshooting but quick to correct		Accurately directs the instruments to target

Force/Tissue Handling

1	2	3	4	5
Breaks model, ring, or suture; damages needle		Moves or bends wire; minor trauma to model or needle, frays suture		Handles model, suture, and/or needle well; appropriate traction

Dexterity

1	2	3	4	5
Poor coordination of hands; repetitively drops ring or band; inappropriately drops needle; poor suture management		Suboptimal interaction between hands, any drops of ring or band. Suboptimal suture or needle management.		Expertly uses both hands; transfers rings/bands without dropping. Optimal needle or suture management.

Efficiency

1	2	3	4	5
Uncertain movements with little progress		Slow; movements reasonably organized		Confident, fluid progression, adjusts quickly

Instructions: Rate individual performance on each drill using the scoring guidelines

Drill #1 - Tower Transfer: Subject should pick up rubber band, transfer to other hand, place on tower, proceeding from shortest to tallest tower. If subject fails to transfer band between hands, points should be deducted from "Dexterity".

Depth Perception _____ Force/Tissue Handling _____ Dexterity _____ Efficiency _____

Total Score: /20

Drill #2 - Roller Coaster: Move black ring from right to left side of the model without dropping the ring.

Depth Perception _____ Force/Tissue Handling _____ Dexterity _____ Efficiency _____

Total Score: /20

Drill #3 - Big Dipper: Use CT-1 or GS-21 needle. Pass needle from point #1 to #5 in sequential order.

Depth Perception _____ Force/Tissue Handling _____ Dexterity _____ Efficiency _____

Total Score: /20

Drill #4 - Railroad Tracks: Use CT-1 or GS-21 needle with 0-Vicryl or 0-Polysorb suture trimmed to 8-inches in length. Pass needle from top to bottom dots in sequence to run the suture line from right to left.

Depth Perception _____ Force/Tissue Handling _____ Dexterity _____ Efficiency _____

Total Score: /20

Drill #5 - Suturing: Use CT-1 or GS-21 needle with 8-inch 0-Vicryl or 0-Polysorb suture. Place one figure-of-eight stitch with 4 square knots (1 surgeons knot followed by 3 single throws).

Depth Perception _____ Force/Tissue Handling _____ Dexterity _____ Efficiency _____

Total Score: /20

Siddiqui NY, Galloway ML, Geller EJ, Green IC, Hur H-C, Langston K. Validity and reliability of the Robotic Objective Structured Assessment of Technical Skills. Obstet Gynecol 2014;123.

The authors provided this information as a supplement to their article.