

**Appendix 1** to Robertson R, Vergis A, Gillman LM, et al. Effect of rater training on the reliability of technical skill assessments: a randomized controlled trial. *Can J Surg* 2018.

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**Appendix 1** – Rater assessment form

## 1) Visual Analogue Scale (VAS) for Technical Skills

Please assess the operator's performance of the task by placing an "X" along the line

The operator:

Was unable to complete the task



Could safely and independently perform the task

## 2) Checklist for Suturing and Instrument Knot-Tying\* (Surgeon's knot technique)

Item	Correctly Performed	Incorrectly Performed
1 Needle is grasped at junction of the proximal and middle third by a needle driver in the dominant hand		
2 Needle is positioned perpendicular to the tissue at intended entry site; curve of needle is followed to penetrate tissue		
3 Needle tip is grasped with driver and pulled following curve of needle through the tissue		
4 After suture is pulled through, a short tail of suture is left at needle entry site		
5 Suture is rotated twice around the needle driver, which is held in dominant hand		
6 Tail of suture is grasped with needle driver in dominant hand and the knot is pulled tight while tail is kept short		
7 Same maneuver is repeated for 2 more throws to complete knot but suture is rotated only once around needle driver on second and third throws		
8 Knot is square		
9 Tissue is well approximated but not strangulated		
10 Sutures are cut properly		

\*Modified from

- Figert PL, Park AE, Witzke DB, Schwartz RW. Transfer of training in acquiring laparoscopic skills. J AM Coll Surg 2001; 193:533-537
- Rosser JC. Rosser LE, Raghu SS. Skill acquisition and assessment for laparoscopic surgery. Arch Surg 1997; 132:200-204

## 3) Global Rating Scale

Please circle the number corresponding to the candidate's performance in each category, irrespective of training level

Performance characteristic	Rating				
Respect for tissue	1 Frequently used unnecessary force on tissue of caused damage	2	3 Careful handling of tissue but occasionally caused inadvertent damage	4	5 Consistently handled tissues appropriately with minimal damage
Time and motion	1 Many unnecessary moves	2	3 Efficient time/motion but some necessary moves	4	5 Clear economy of motion and maximum efficacy
Instrument handling	1 Repeatedly makes tentative awkward or inappropriate moves with instruments	2	3 Competent use of instruments but occasionally stiff or awkward	4	5 Fluid moves with instruments and no awkwardness
Flow of procedure	1 Frequently sopped procedure and seemed unsure of next move	2	3 Demonstrated some forward planning with reasonable progression of procedure	4	5 Planned course of procedure effortless from one move to the next
Overall performance	1 Unable to perform operation independently	2	3 Competent, could perform procedure with minimal teaching assistance	4	5 Clearly superior, able to perform procedure independently with confidence

\*Modified from Reznick R, Regehr G, Macrae H, et al. Testing technical skill via an innovative bench station examination. AM J Surg 1996; 173:226-230. 1=worst possible score, 5=best possible score