

Establishing a regional laparoscopic skills club for core surgical trainees – a pilot study

Conor McCann, Samantha Russell, Mark Evans, Jessica Lockhart, Jack Kennedy, Rebekah Wilson, Sophie Davidson, Rachael Coulson, Trevor Thompson, Niall McGonigle

BACKGROUND

Laparoscopic simulation is an effective method for developing and maintaining skills in laparoscopic surgery, core surgical trainees in Northern Ireland report limited opportunities to access surgical simulation as well as limited confidence with regards to various aspects of laparoscopy

We established a regional laparoscopic skills club for core surgical trainees in Northern Ireland to try and bridge this gap. This was regionally co-ordinated and supported by Consultants and senior trainees in local units.

METHODS

All core surgical trainees in Northern Ireland were invited to participate in a regional laparoscopic skills club. Trainees completed an initial assessment of six simulated tasks on a laparoscopic box simulator and received feedback. Trainees were loaned laparoscopic box simulators and participated in locally organised skills club sessions as well as having the option to practice at home

After completion of a 6-week period, trainees returned to re-attempt the six simulated tasks. We also collected qualitative feedback regarding perceived confidence in laparoscopy.

Aims were to improve trainee performance in simulated tasks and level of confidence in laparoscopy.

Contact Information:
conor.mccann@hscni.net

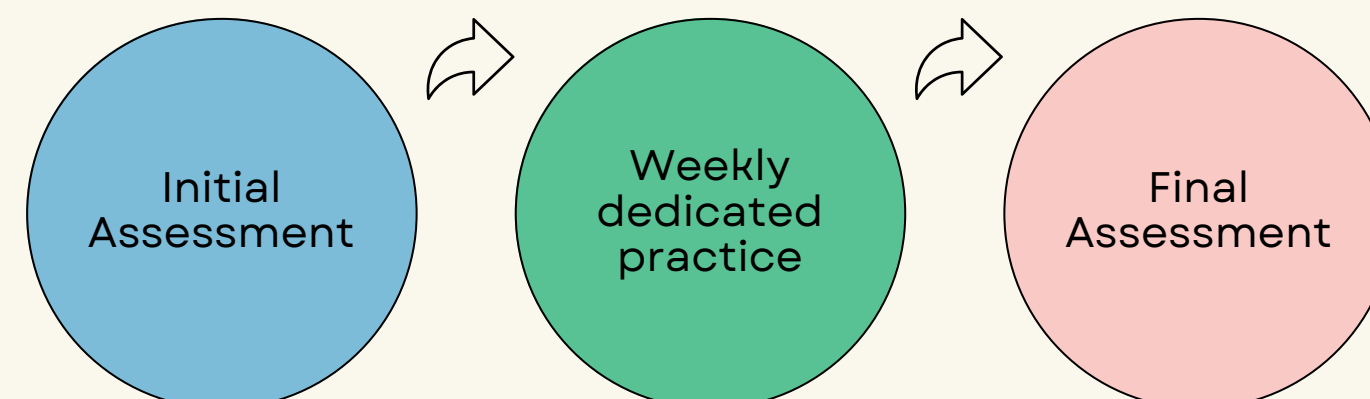
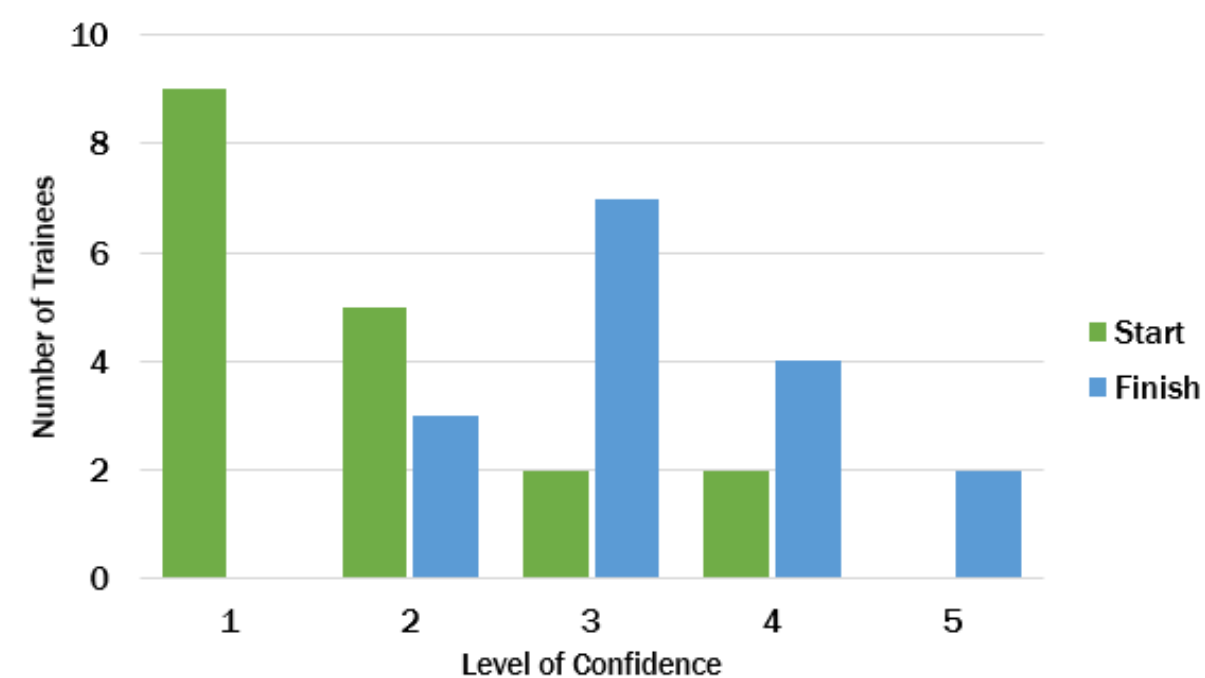
RESULTS

22 trainees initially registered to participate, with 18 completing the programme.

83% were in their first year of surgical training (CT1). 61% were in General Surgery rotations, with others in Urology, ENT, Plastic Surgery, Cardiothoracic surgery and Trauma + Orthopaedics

Improved trainee confidence

Figure 1: Survey results where trainees were asked to rank their overall level of confidence in laparoscopic surgery from 1-5 (1=not confident; 5 = extremely confident)



Overall pass rate improved from 5% to 55%

Overall pass rate of all tasks at initial attempts was 5%, which improved to 55% after completion of the skills club

18.4 minutes median overall improvement

Median amount of time to complete all 6 tasks was 1101.5 seconds lower than first attempts (IQR 734-1292) = 18.4 minutes

Positive trainee feedback

"Marked improvement. Senior staff have noticed my improvement. I feel more confident and prepared for higher surgical training. Thoroughly enjoyable."

"I thought the club was brilliant....Having the group sessions and being able to submit assessments for grading provided some extra motivation to continue practicing. I found my scores for the tests significantly improved over the 6 week period and I have been able to take opportunities to perform parts of laparoscopic procedures in work and now feel more confident to do so."

CONCLUSION

Our laparoscopic skills club sessions, with regular dedicated practice and the option of at-home practice, have improved laparoscopic skills and confidence in core surgical trainees.

We now hope to expand this further and integrate the programme into core surgical training over the coming years.