

14th April 2020

Dear editors/reviewers:

RE: World Journal of Gastroenterology Manuscript NO: 54133

Thank you for taking the time to review our submission and for your helpful feedback. Our responses to your specific comments and queries are indicated in red below your original comments.

1. This study does not provide the written informed consents obtained from the patients who underwent colonoscopy. Please provide the informed consents.

Response: All patients in the UK are consented for both courses and training in other units and that this is documented in the patient records. Individual patient consent was not required for the purposes of this study as all data were entered by trainees as anonymized procedural data within their training e-portfolios. Moreover, upon signing up to the use of the JETS e-portfolio, trainees sign a disclaimer acknowledging for their training data to be used towards audit and research purposes.

2. The authors concluded that timing of course attendance appears to be at earlier stages of training. However, in this study, they did not compare among the three groups. They overstated.

Response: The cohort was divided into three groups of experience based on the number of procedures performed prior to the course. This was used to denote whether attendance was early (<70 procedures), intermediate (70-140 procedures) or late (>140 procedures). This, along with the analysis, were presented under the Results section. Under Methods, Statistical Analysis, we have made this clearer by adding: "This was used to denote early, intermediate or late attendance of the BSC."

3. The authors should compare the improvement of the outcome between the endoscopists who attended the BSC and those who did not attend the BSC. If possible, please show how much the BSC cost.

Response: Thank you. The BSC is mandated so there are no endoscopists who progress through training who do not attend the BSC. The BSC costs approximately £1050, but vary year-by-year, and as such, cost was not included in the manuscript. We have now provided a reference for the BSC where readers can access course information including availability and costs, but this is only available for UK trainees who are signed onto the JETS e-portfolio.

4. The ethics committee's consent is not stated in the manuscript. More information of ethics should be included.

Response: Ethics was not considered necessary for this study. All data from patients and trainees were anonymized (see Point 1). We have provided a separate letter from JAG providing approval for the study.

5. Please discuss which factors of the BSC have improved the endoscopist's procedure.

Response: It is not possible to say for sure, but in the Discussion, we state: *“Attendance of the BSC improved the completion and patient-based metric of PICI in all trainees, with the effect equivalent to performing an additional 17-30 training procedures. This may be attributable to both didactic and hands-on course elements, which provides a holistic approach to training beyond technical skills. The course covers a colonoscopy curriculum ranging from sedation, lesion recognition, optimal positions and troubleshooting techniques. During hands-on sessions, trainees are subjected to rigorous performance review of technical aspects, e.g. scope handling, loop avoidance and resolution, to non-technical skills, e.g. situational awareness, which can impact on progress and patient comfort.”* We believe this to still hold true and therefore have not revised this.

6. Please indicate what the PICI target should be.

The original paper stated there should be no target/benchmark because comfort cannot be reliably assessed between units. Having said that, we think it should be at least 50% in UK practice and 80% is an achievable aspirational goal. Under Discussion, Limitations, we have added: *“Third, PICI is a novel outcome measure without an existing standard for benchmarking. Based on data extrapolated from the last UK colonoscopy audit, PICI was achieved in 54.1% of procedures. Therefore, we believe that the PICI rate should be at least 50% in UK practice, with 80% being an achievable aspirational goal.”*

Yours faithfully,

Keith Siau and Roland Valori (on behalf of co-authors)