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4. Available at: https://en.wikipedia.org/wiki/The_Singularity_Is_Near. Accessed June 7, 2021.
5. Balzora S, Issaka RB, Anyane-Yeboah A, et al. Impact of COVID-19 on colorectal cancer disparities and the way forward. *Gastrointest Endosc* 2020;92:946-50.
6. Koulaouzidis G, Marlicz W, Koulaouzidis A. Telemedicine in the time of COVID-19: better late than never. *Am J Gastroenterol* 2021;116:1088-9.
7. Koulaouzidis A, Marlicz W, Wenzek H, et al. Returning to digestive endoscopy normality will be slow and must include novelty and telemedicine. *Dig Liver Dis* 2020;52:1099-101.
8. Mori Y, Kudo SE, Misawa M. Can artificial intelligence standardise colonoscopy quality? *Lancet Gastroenterol Hepatol* 2020;5:331-2. <https://doi.org/10.1016/j.gie.2021.05.007>

Working with fellows improves adenoma detection rate during screening colonoscopies



To the Editor:

We read with interest the results of the well-designed multicenter randomized clinical trial by Facciorusso et al.¹ This study is a valuable addition to the endoscopy literature and to previously published single-center studies confirming that fellows' participation during colonoscopies increases adenoma detection rates (ADRs).²⁻⁴ However, most of these studies are small, with the inclusion of <1000 colonoscopies. Therefore, we performed a large-scale analysis from a real-world national endoscopic database, the Clinical Outcomes Research Initiative (CORI) ver.4.

The CORI is maintained by the National Institute of Diabetes and Digestive and Kidney Diseases, supported by the National Institute of Health. We determined the ADR comparisons between the screening

colonoscopies with and without fellows' participation. Patients with symptoms, a history of any polyp, or serrated polyps on index colonoscopy, and those requiring high-risk screening or surveillance colonoscopies, were excluded.

There were a total of 161,066 colonoscopies from 2008 to 2014, which were performed on first-time average-risk patients. The analysis results showed that the ADR was 22.5% and 16.5% with and without fellows' participation, respectively (Fig. 1). The ADR in our analysis is lower than that in the study by Facciorusso et al,¹ which could be due to the fact that our analysis included only average-risk patients for screening colonoscopies. We arrived at a similar conclusion pertaining to a significantly better ADR with fellows' participation compared with nonparticipation for tubular adenomas (<1 cm and >1 cm) as well as villous/tubulovillous adenomas (Table 1). However, fellows' participation was associated with a significantly longer mean withdrawal time. In our analysis, Veterans Affairs facilities were overrepresented by the fellows' involvement (85% of the fellows' sites) compared with community-level facilities with nonparticipation (79% of nonfellows' sites).

To conclude, a symbiotic relationship between the fellows and the attending physician increases ADR but at the expense of longer withdrawal time.

DISCLOSURE

Dr Tharian is a consultant for Medtronic and Boston Scientific. The other authors disclosed no financial relationships.

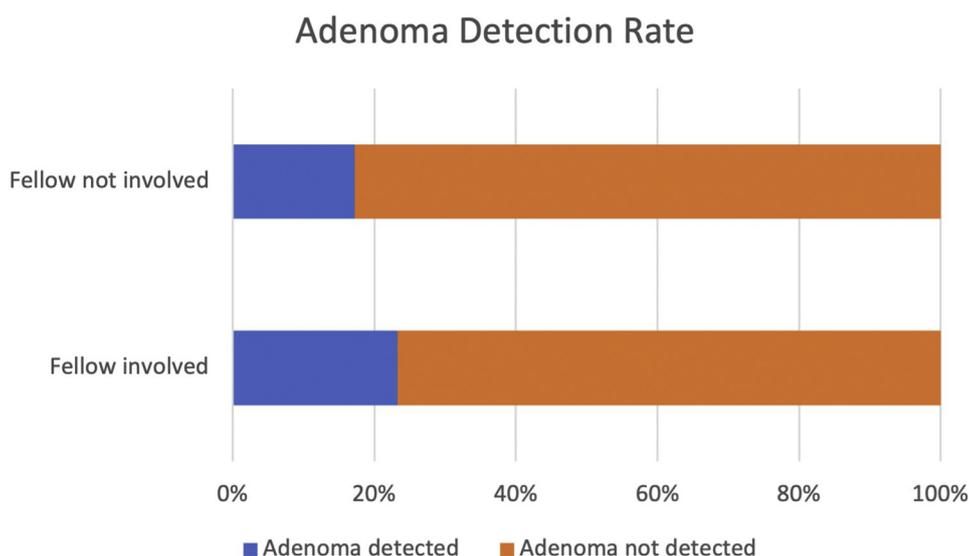


Figure 1. Adenoma detection rate compared with and without fellows' participation during screening colonoscopies.

TABLE 1. The influence of fellow participation or nonparticipation on adenoma detection rate during screening colonoscopies

Factor	Fellows' participation		P value
	Yes (n = 7697)	No (n = 153,437)	
Baseline characteristics			
Age (mean ± SD)	60.82 (±0.21)	62.08 (±0.85)	NS
Gender (% male)	4043 (86.8)	70,961 (50.8)	<.001
Boston Bowel Prep Score	8.47 (±0.012)	7.85 (±0.067)	NS
Cecum reached (%)	95.6	99.7	NS
Mean withdrawal time (min:sec)	23:07	14:12	<.001
Adenoma detection (by histologic analysis)			
Villous/tubulovillous (%)	224 (2.9)	3248 (2.1)	<.001
Tubular adenoma >1 cm (%)	301 (3.9)	4653 (3.0)	<.001
Tubular adenoma <1 cm (%)	1205 (15.7)	17,399 (11.3)	<.001
Procedures by facility			
Community-level facility (%)	313 (4)	122,336 (79)	Not applicable
Tertiary-level facility (%)	388 (5)	5578 (4)	
Veterans Affairs facility (%)	6541 (85)	18,220 (12)	
Military facility (%)	0	73	
Health maintenance organization (%)	455 (6)	7230 (5)	

NS, not significant; SD, standard deviation.

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REFERENCES

1. Facciorusso A, Buccino VR, Tonti P, et al. Impact of fellow participation on colon adenoma detection rates: a multicenter randomized trial. *Gastrointest Endosc* 2020;92:1228-35.

2. Eckardt AJ, Swales C, Bhattacharya K, et al. Does trainee participation during colonoscopy affect adenoma detection rates? *Dis Colon Rectum* 2009;52:1337-44.
3. Qayed E, Shea L, Goebel S, et al. Association of trainee participation with adenoma and polyp detection rates. *World J Gastrointest Endosc* 2017;9:204-10.
4. Buchner AM, Shahid MW, Heckman MG, et al. Trainee participation is associated with increased small adenoma detection. *Gastrointest Endosc* 2011;73:1223-31.
<https://doi.org/10.1016/j.gie.2021.05.008>

Hybrid endoscopic full-thickness resection for difficult colorectal lesions



To the Editor:

We read with great interest the article by Mahadev et al¹ on the outcomes of a hybrid technique with the use of EMR and endoscopic full-thickness resection (FTR) for polyps not amenable to standard techniques. The authors compare the outcomes of lesions treated with FTR alone or with a hybrid approach: EMR combined with FTR. Primary outcomes included technical success, clinical success, and rates of R0 resection. For the standalone FTR group, the authors defined R0 resection as histologically complete resection (ie, lateral and deep resection margins free of neoplasm or adenoma). For hybrid procedures, because piecemeal resection was performed at the periphery of