

ESGE quality parameters in colonoscopy: How to ensure their adoption?



Authors

Raf Bisschops^{1,2}, Mário Dinis-Ribeiro^{3,4}

Institutions

- 1 Department of Gastroenterology and Hepatology, University Hospitals Leuven, Leuven, Belgium
- 2 TARGID, KU Leuven, Leuven, Belgium
- 3 Gastroenterology Department, Portuguese Oncology Institute of Porto, Porto, Portugal
- 4 MEDCIDS, Faculty of Medicine, University of Porto, Porto, Portugal

Bibliography

Endosc Int Open 2021; 09: E1463–E1465

DOI 10.1055/a-1486-6788

ISSN 2364-3722

© 2021. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14,
70469 Stuttgart, Germany

Corresponding author

Raf Bisschops, University Hospital Gasthuisberg –
Gastroenterology, 49 Herestraat Leuven 3000, Belgium

Fax: +0032344419

raf.bisschops@uzleuven.be

“Quality means doing it right when no one is looking” Henry Ford (July 30, 1863 – April 7, 1947)

Quality in endoscopy is a theme that has become increasingly important in the last decade. The focus in this area was traditionally always oriented towards performance of colonoscopy; however, it also applies to all other fields of endoscopy. To underscore this, the European Society of Gastrointestinal Endoscopy (ESGE) launched the ESGE quality improvement committee in 2013 to develop performance measures (PMs) for all endoscopic procedures and endoscopy services [1–6]. After performing a systematic review of available evidence to support the development of PM, it is now time to audit to assess how these measures been adopted in real life.

In that regard, in this issue, Spada et al present the results of a large-scale survey, based on the ECQI questionnaire, which was developed before the publication of the ESGE PMs for the lower gastrointestinal tract [7]. Therefore, they used approximations to estimate the real-life quality performance in relation to the ESGE PMs. They managed to reach 91 practitioners from 52 institutions in 12 European countries and collected data on quality of colonoscopy. Although the authors used self-reporting, which has an inherent risk of underreporting of low quality, they found overall that there is a clear need for quality improvement, or at least adoption of the measurements of quality. Indeed, you only know the quality of your own endoscopy practice unless you obtain the metrics.

It is important to underscore that measuring quality is not just about getting your metrics right. Indeed, the development

of the ESGE PMs was based on evidence that they are directly related to patient outcomes. For years we have known that the adenoma detection rate (ADR) correlates directly with risk of interval cancers; therefore, it is considered to be an important PM for colonoscopy [5,8]. However, linking pathology databases to endoscopy reporting remains a challenge even in the third decade of the 21st century. This was clearly illustrated in the ECQI report, with a reporting rate for ADR of approximately 30%. Because of the difficulties in automatic auditing of ADR, the polyp detection rate (PDR) has been suggested as a valid surrogate marker for ADR [5]. However, this was only routinely recorded in 42% of institutions. Even more astonishing is the fact that photo-documentation of the cecum was performed in only 77.5% of the procedures. It is incomprehensible to us that in an era in which every image of travelling, hiking or food can be shared instantaneously with the entire world, photo-documentation in endoscopy remains problematic. Would we accept it if radiologists provided a written report without the images?

In view of these findings, the ECQI group needs to be congratulated for undertaking this important survey on quality, and also for their courage in publishing these data, which provide a sobering reality check and underscore the need for better dissemination and adoption of the ESGE PMs.

Does this mean that by definition, the endoscopists who were surveyed are underperforming? Of course not, but we simply cannot know unless the metrics from the PMs are available. Referring to the quote from Henry Ford at the beginning

of this editorial, one would wonder if anyone would buy a car without access to technical details on performance and crash tests. Nobody wants to play the crash test dummy, so why should our patients? They have the right to know if the quality of care they sign up for meets the current quality requirements.

The reasons for this are clear. First and most importantly, the quality of colonoscopy and the endoscopists directly determines the patient's outcome, as illustrated by ADR and withdrawal time [8, 9]. Second, as with this ECQI initiative, any audit of endoscopy practices that are not systematically monitored for quality often reveals underperformance and leads to improved performance in and of itself. So often, endoscopists are not aware of their own underperformance. Third, even more importantly, if underperformance is identified, initiatives can be undertaken to correct this and improve quality, and by extension, patient outcomes.

This is nicely illustrated by the recent QUACOL initiative in Russia. During the first audit, clear underperformance for colonoscopy was shown for ADR (18%), bowel cleansing (77%), cecal intubation rate (86%) and withdrawal time measurement (64%). Interestingly, by addressing these issues and discussing the quality standards for colonoscopy in major meetings and 50 dedicated workshops, voluntary participation in this project rose from 14 to 82 centers. In addition, just by raising awareness about the importance of them, rates of ADR, bowel cleansing, and cecal intubation increased to the ESGP PM target standards [10].

The latter initiative nicely illustrates how dissemination and adoption of quality parameters can be facilitated by national initiatives. Indeed, in real practice, many barriers to implementation of PMs can be identified [11]. Resistance to change is certainly one of them, maybe because the reality of the problem is not well perceived. It is only when one is confronted with real-life metrics, such as those from the ECQI group, that one can realize the potential problem that exists.

In addition, there are practical considerations, such as electronic reporting systems that are lacking or do not enable automatic auditing of PMs [11]. Although this challenge can be solved, as with the British National Endoscopy Database [12] or the Dutch one [13], this possibility is far from reality in many countries or centers. Nonetheless, it is time to move forward with adoption.

To overcome the complexity of measuring all PMs, on a national level, endoscopists can determine their priorities within the different fields of endoscopy. Indeed, for upper and lower endoscopy, many PMs exist and they may be perceived as too complex unless automated auditing is available. It is better to assess the top five PMs for lower gastrointestinal endoscopy than nothing at all.

What should happen now after the endeavour by the ECQI group? Unlike national initiatives in which national societies or authorities are the driving forces in enforcing and empowering changes in practice, this survey alone will probably not lead to direct change in practice. The results of it and others like it, however, should be used to raise public and political awareness on a European level and catalyse and finance further adoption and dissemination of quality PMs throughout Europe. Large sci-

entific societies like ESGE should take the lead in achieving the ultimate goal of the Quality Improvement Committee that was defined in 2013: to improve the global quality of gastrointestinal endoscopy in Europe, to deliver a patient-centered service in the field of endoscopy, and to assist all endoscopy units and endoscopists in achieving these standards [1].

Meanwhile we should not sit back and relax until this happens. Start measuring quality in your own unit now! ESGE has developed the ESGE quality check app (quality@esge.com) and measuring approximately 300 gastroscopies and 300 colonoscopies per audit would allow for an adequate snapshot of the quality of those procedures in your unit [11].

The next steps for quality in endoscopy are clear: 1) raise awareness about the need for quality assessment; 2) sensitize the public and politicians; and 3) start measuring in your own unit to ensure that your quality meets the current standards. The only way is forward towards high-quality care for our patients.

Acknowledgements

Dr. Bisschops has received a grant from Research Foundation Flanders.

Competing interests

The authors declare that they have no conflict of interest.

References

- [1] Rutter MD, Senore C, Bisschops R et al. The European Society of Gastrointestinal Endoscopy Quality Improvement Initiative: developing performance measures. *Endoscopy* 2016; 48: 81–89
- [2] Domagk D, Oppong K, Aabakken L et al. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2018; 50: 1116–1127
- [3] Valori R, Cortas G, de Lange T et al. Performance measures for endoscopy services: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2018; 50: 1186–1204
- [4] Bisschops R, Areia M, Coron E et al. Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2016; 48: 843–864
- [5] Kaminski MF, Thomas-Gibson S, Bugajski M et al. Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2017; 49: 378–397
- [6] Spada C, McNamara D, Despott EJ et al. Performance measures for small-bowel endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2019; 51: 574–598
- [7] Spada C, Koulaouzidis A, Hassan C et al. Colonoscopy quality across Europe: a report of the European Colonoscopy Quality Investigation (ECQI) Group. *Endosc Int Open* 2021; 09: E1456–E1462
- [8] Kaminski MF, Regula J, Kraszewska E et al. Quality indicators for colonoscopy and the risk of interval cancer. *N Engl J Med* 2010; 362: 1795–1803

- [9] Barclay RL, Vicari JJ, Doughty AS et al. Colonoscopic withdrawal times and adenoma detection during screening colonoscopy. *N Engl J Med* 2006; 355: 2533–2541
- [10] Korolev M, Burdyukov M, Bykov M et al. Quality of colonoscopy in Russia: Report of the Quacol (Quality of Colonoscopy) Study. *Gastroenterology* 2015; 148: S209–S210
- [11] Bisschops R, Rutter MD, Areia M et al. Overcoming the barriers to dissemination and implementation of quality measures for gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and United European Gastroenterology (UEG) position statement. *Endoscopy* 2021; 53: 196–202
- [12] Lee TJW, Siau K, Esmaily S et al. Development of a national automated endoscopy database: The United Kingdom National Endoscopy Database (NED). *United Eur Gastroenterol J* 2019; 7: 798–806
- [13] de Neree tot Babberich MPM, Ledebøer M, van Leerdam ME et al. Dutch Gastrointestinal Endoscopy Audit: automated extraction of colonoscopy data for quality assessment and improvement. *Gastrointest Endosc* 2020; 92: 154–162.e1