

Organizational Assessment of US GI Endoscopy Units

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Objective:

The mandatory reprocessing and the potential repair of the reusable gastroscope and colonoscope may cause organizational consequences such as delays and cancellations. We sought to investigate the organization of gastrointestinal (GI) endoscopy units in the United States (US) to identify and quantify potential organizational issues and investigate whether single-use gastroscopes and colonoscopes hypothetical could prove valuable when reaching the market.

Methods:

The organizational assessment was conducted by surveying 300 US GI endoscopists. Participants were asked about gastroscope and colonoscope performance, breakage, reprocessing, availability, but also if they imagined that single-use gastroscopes and colonoscopes would prove valuable for their unit. Data were analyzed and handled using STATA 2021 (StataCorp, CA, US).

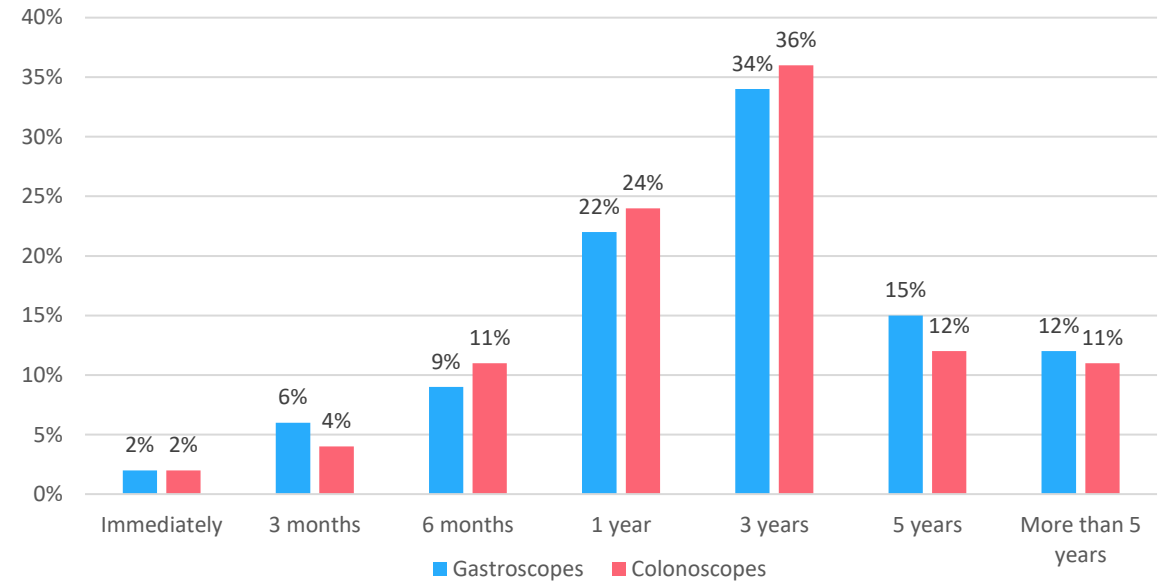
Results:

The mean time to functional degradation was 2.55 years (SE=.13 year) for gastroscopes and 2.33 years (SE=.13 year) for colonoscopes, with a mean interval between repairs of 1.18 years (SE=.05) for gastroscopes and 1.12 years (SE=.05 year) for colonoscopes. Participants estimated that 33% of esophagogastroduodenoscopy (EGDs) and 34% of colonoscopies were performed using an endoscope with reduced performance. EGDs are subject to significantly more delays due to the unavailability of the endoscope (11.1%) compared to colonoscopies (9.1%) ($p=.02$), with a mean delay time of 16.4 minutes (SE=1.4) and 18.8 minutes (SE=2.5), respectively. Lastly, 26% of participants stated single-use endoscopes could bring value to their unit, 33% did not expect more value, and 42% were unsure.

Topics:

Clinical Outcomes, Health Service Delivery & Process of Care, Medical Technologies

"When do you begin to experience functional degradation of a new reusable endoscope?"



Conclusion:

Issues are experienced in US GI endoscopy units in relation to reprocessing, delays, and degradation of reusable endoscopes, and some GI endoscopists find that single-use endoscopes potentially could bring value to their unit.