Documentation Practices of Withdrawal Time and Bowel Preparation Quality in Screening Colonoscopy Reports in a Large Academic Health Center

AUTHORS:

Robert Tamai, MD¹ Folasade P. May, MD, PhD, M. Phil¹⁻⁴

AFFILIATIONS:

¹Vatche and Tamar Manoukian Division of Digestive Diseases, Department of Medicine, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA

²David Geffen School of Medicine, UCLA, Los Angeles, CA, USA

³Greater Los Angeles Veterans Affairs Healthcare System, Los Angeles, CA, USA

⁴UCLA Kaiser Permanente Center for Health Equity, Jonsson Comprehensive Cancer Center, UCLA, Los Angeles, CA, USA

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BACKGROUND:

Appropriate documentation of colonoscopy quality indicators is critical to assess and monitor colonoscopy quality assurance. However, comprehensive documentation is time-consuming, burdensome, and highly variable among clinicians. This variation hinders efforts to accurately capture, measure, and track colonoscopy quality. The aim of our study was to characterize the screening colonoscopy documentations practices for withdrawal time and bowel preparation quality among gastroenterologists within a large, academic health center.

METHODS:

We conducted a retrospective, cross-sectional chart review study. A random number generator was utilized to select 10 screening colonoscopy reports from each gastroenterologist within the health system who performed at least 20 screening colonoscopies between March 2022 and June 2023 (n=43), for a total of 430 reports. We abstracted data on relevant clinical and procedural information as well as pathology results. The primary outcome measures were the frequency of documentation of 1) withdrawal time and 2) bowel prep quality in screening colonoscopy procedure reports. We also abstracted data on method of documentation of bowel prep quality. Relevant clinical and procedural data were described using frequencies, means, and SDs as appropriate.

RESULTS:

We included 430 total reports from 43 gastroenterologists in the health system. Of the 430 reports reviewed, withdrawal time was documented in 232 (54%) reports. The average documented withdrawal time was 12.3±8.4 minutes. Bowel prep quality was documented in 415 (97%) reports. For reports in which bowel prep quality was documented, 331 (80%) reports used the Aronchick Scale only, 21 (5%) used the BBPS only, 11 (3%) used a binary scale only (adequate vs. inadequate), and 51 (12%) used both the BBPS and Aronchick Scale (Table 1).

There were 9 of 43 (21%) gastroenterologists at ASGE target performance of withdrawal time documentation, and 38 of 43 (88%) gastroenterologists at target performance for bowel preparation quality documentation (Table 2).

CONCLUSION:

We demonstrate that within a large academic medical center, both withdrawal time and bowel prep quality are documented at frequencies below the American Society of Gastrointestinal Endoscopy (ASGE) guideline recommended performance targets (>98%). For reporting of bowel preparation quality, only a small percentage of reports utilized a standardized scale (i.e. BBPS). Future quality improvement interventions, such as the implementation of a standardized template for screening colonoscopies, may help to improve rates and quality of important documentation for important quality indicators.

Table 1. Frequency of Quality Indicator Documentation in Screening Colonoscopy Reports, (n=430)

Quality Indicator	n (%)
Withdrawal Time	
Rate of Documentation	232 (54)
Average Time (min)	12.3±8.4
Bowel Preparation Quality	
Rate of Documentation	415 (97)
Type Measure Used	
Binary Only (i.e. Adequate vs Inadequate)	11 (3)
Boston Bowel Prep Score (BBPS)	21 (5)
Aronchick Scale (i.e. Excellent, Good, Fair, Poor)	331 (80)
Both BBPS and Aronchick Scale	51 (12)

Table 2. Gastroenterologist Performance of ASGE Quality Indicator Targets, (n=43)

	ASGE Goal	Providers at Goal
Quality Indicator	(%)	n (%)
Withdrawal Time Documentation	>98	9 (21)
Bowel Preparation Quality Documentation	>98	38 (88)