ASSESSMENT OF ADENOMA DETECTION RATE QUINTILES IN A NATIONAL BENCHMARKING REGISTRY

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Background

- Corley DA et al, NEJM 2014:37;1298-1306 found that the adenoma detection rate (ADR) was inversely associated with the risks of interval colorectal cancer (CRC)
- Interval colorectal cancer was defined as CRC diagnosis prior to the next scheduled colonoscopy examination
- In that study, ADRs of 136 gastroenterologists were classified into five quintiles
- The higher quintiles had significantly lower adjusted hazard rates for interval cancers
- The highest quintile in the Corley study had a 0.52 hazard ratio for interval colorectal cancer as compared to physicians in the lowest quintile
- The GI Quality Improvement Consortium (GIQuIC) is a benchmarking clinical registry developed in collaboration with the ACG and ASGE
- This registry prospectively collects colonoscopy data including pathology results, providing the opportunity for benchmarking and continuous quality improvement
- Data were assessed to evaluate current ADRs for US endoscopists in the quintiles described by Corley et al.

Methods

- Data included colonoscopies in GIQuIC performed between July 2010 - August 2016
- After comparing different levels of minimum procedures, for study inclusion physicians had to have a minimum of 400 procedures that met the ADR criteria (screening exams in patients 50 or older with adequate bowel preparation and photodocumentation of the cecum) in order to have a robust contribution per physician
- ADR was classified two ways: with and without sessile serrated lesions included in the ADR numerator
- Results of both were classified into the quintiles described by Corley et al

Results

- 1,182 physicians were included
- Mean ADR was 37.5% when including sessile serrated lesions and 35.9% when excluding sessile serrated lesions
- 62% of physicians were in the highest quintile described by Corley et al. (Quintile 5) or still higher (ADR >52.51%) when including sessile serrated lesions
- 56.3% physicians were in the highest quintile described by Corley et al. (Quintile 5) or still higher (ADR >52.51%) when sessile serrated lesions were excluded

	ADR *Including Sessile Serrated Lesions*	ADR *Excluding Sessile Serrated Lesions*
Physician N	1182	1182
Mean ADR % (SD)	37.5% (11.3)	35.9% (10.9)
Minimum ADR %	5.5%	5.4%
Maximum ADR %	78.5%	78.3%

Corley, et al Quintile	Corley, et al ADR Range	ADR *Including Sessile Serrated Lesions* Physician N (%)	ADR *Excluding Sessile Serrated Lesions* Physician N (%)
	<7.35%	1 (0.1%)	2 (0.2%)
1	7.35-19.05%	52 (4.4%)	55 (4.7%)
2	19.06-23.85%	81 (6.9%)	98 (8.3%)
3	23.86-28.40%	106 (9.0%)	137 (11.6%)
4	28.41-33.50%	209 (17.7%)	225 (19.0%)
5	33.51-52.51%	621 (52.5%)	580 (49.1%)
	>52.51%	112 (9.5%)	85 (7.2%)

Conclusions

- GIQuIC registry data have shown that the majority of physicians who qualified for inclusion in this study (over 1,100 endoscopists) demonstrate excellent ADRs commensurate with the highest quintile described by Corley et al and above
- GIQuIC data shows less than 5% of physicians during this time period were in the lowest quintile