Quality Assessment of Colonoscopy Reporting:
A Study of Maryland’s CRF CRC Screening Program Colonoscopy Reports

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What is a Quality Indicator?

• A measurement or flag used as a guide to monitor, assess, and improve the quality of patient care

The Ottawa Hospital -
http://www.ottawahospital.on.ca/hp/dept/nursing/qi/indicators-e.asp
Why have Quality Indicators for Colonoscopy?

• To set standards for quality of care
• Identify areas for improvement
• To ensure good communication between endoscopist and referring physician
What are the Quality Indicators for Colonoscopy?

Colonoscopy report should document:

• Informed consent with discussion of risks
• Patient co-morbidities
• Indication for procedure
• Sedation used
• Quality of the bowel prep
• Cecal intubation and notation of landmarks
• Description of polyps
  – Location, size, morphology, removal
• Withdrawal time
• Complications

Multi-Society Task Force on CRC
Publication of CO-RADS-2007

• Standardized reporting is one of the first steps to quality improvement
• Colonoscopy Reporting And Data Systems (CO-RADS)

National CRC Roundtable (NCCRT)
Objective of Study

• To evaluate the quality of colonoscopy reports:
  – according to the recommendations of CO-RADS
  – in a sample of colonoscopies performed prior to the publication of CO-RADS
  – from Maryland CRF colonoscopies
Methods

• Selection criteria:
  – Colonoscopy performed in 2005-2006
  – First screening colonoscopy in the CRF program
  – Polyp(s) were identified and biopsied during the colonoscopy

• Analyzed reports for 25 indicators
  – By colonoscopy report (110 reports)
  – By polyp (177 polyps)

• IRB approval from UMB and DHMH as an exempt study
Methods: Sample

788 colonoscopies met selection criteria

performed by 110 endoscopists throughout Maryland

38 endoscopists performed 1-2 of the 788 colonoscopies

72 endoscopists performed >= 3 of the 788 colonoscopies
Methods: Sample

One colonoscopy selected from each provider (N=110)

CDB ID and cycle numbers sent to LHDs

LHD de-identified the reports and faxed to DHMH

DHMH and CDC reviewed and analyzed
Results: Consent and Co-morbidity

- Informed consent documented: 68%
- Past medical hx or co-morbidity mentioned: 36%
  - American Society of Anesthesiologist (ASA) classification: 15%
  - Text describing other medical conditions or physical exam: 21%
Results: Sedation Use

- Sedation
  - Medication name 71%
  - Medication dose 65%
  - Sedation provider 25%
Results: Indication for Colonoscopy

• Indication included in report: 100%
  – Screening, no other indication 41%
  – Screening, average risk or high risk 19%
  – Family history 8%
  – Surveillance 2%
  – Follow-up to a positive screening test 4%
  – Symptoms 26%
Results: Quality of Bowel Preparation

- Quality of Prep included in report: 73%
  - Excellent, good, or well prepared: 47%
  - Poor or inadequate: 6%
  - Adequate: 6%
  - Fair or suboptimal: 8%
  - Other descriptor: 5%

- Quality of prep not included in report: 27%
Results: Extent of Examination

- Extent of exam (cecum reached): 98%
- Documentation of landmarks: 82%
  - Specific anatomic landmark (appendiceal orifice, ileocelecal valve, terminal ileum): 72%
  - Other descriptors (light in the right lower quadrant, ‘landmarks’): 10%
Results: Polyp Location

• Location included in report: 99%
  – By distance from anal verge 8%
  – By segment of colon 82%
  – By both 9%

• Location not included in report: 1%
Results: Polyp Size

• Polyp size: 87%
  – By number (mm/cm) only 37%
  – By descriptive term only 29%
  – By both 20%

• Size not included in report: 13%
Results: Morphologic description

- Polyp morphology described in report: 53%
  - Pedunculated, sessile, or flat: 41%
  - Other descriptors: 12%
- No morphologic description: 47%
- 95% mentioned biopsy method
- 80% mentioned specimen retrieval
  - Inferred rather than stated
- Completeness of polyp removal (?)
Results: Withdrawal Time

• Withdrawal Time documented: 1%
Limitations

• One report per endoscopist
• Colonoscopy reports were selected from a time prior to the publication of CO-RADS
• Use of reporting tools
• Quality indicators may be reported elsewhere in patient medical record
  – Patient’s past medical history
  – Informed consent
  – Sedation
  – Pathology specimens
  – Endoscope model
Conclusions

• Variation in the reporting of key quality indicators prior to CO-RADS

• More detailed reporting of quality indicators will:
  – Allow more accurate interpretation and recommendation of recall intervals
  – Improve overall quality of colonoscopy and documentation supporting recall interval
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