Quality Assessment of Colonoscopy Reporting:

A Comparison of Colonoscopy Reports Before and After CO-RADS

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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
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 healthcare provider
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 two samples of colonoscopies
    • Prior to the publication of CO-RADS
    • Following the publication of CO-RADS
  – from Maryland colonoscopies paid for by Cigarette Restitution Fund (CRF) Program
Methods for Two Samples

• Selection criteria:
  – Colonoscopy performed in 2005-2006 and from July 1, 2008-June 30, 2010.
  – First screening colonoscopy in the CRF program
  – One report per provider in which
    • Polyp(s) were identified and biopsied during the colonoscopy
  – Analyzed each report for the presence or absence of quality indicators
  – IRB approval from UMB and DHMH as an exempt study
Sample Selection

Sample 1 pre-CO-RADS

788 colonoscopies met selection criteria

Performed by 110 endoscopists

38 endoscopists performed 1-2 colonoscopies

72 endoscopists performed ≥ 3 colonoscopies

Sample 2 post-CO-RADS

938 colonoscopies met selection criteria

Performed by 103 endoscopists

33 endoscopists performed 1-2 endoscopies

70 endoscopists performed ≥ 3 endoscopies
Methods: Sample

One colonoscopy randomly selected from each provider (if > 1 colonoscopy; N=213)

CDB ID and cycle numbers sent to LHDs

LHD de-identified the reports and faxed/mailed to DHMH

DHMH/UMB and CDC reviewed and analyzed in Sample 1

DHMH/UMB reviewed and analyzed data in Sample 2*

*One report received from Sample 2 did not have a biopsy, so was removed from the analysis
Analysis

• Proportion of reporting quality indicators measures in Study Sample 1 and Study Sample 2 were compared using chi-square statistic
RESULTS
Comparison of Quality Indicators in Colonoscopy Reports, CRF program, 2005-2006 and 2008-2010

- Informed Consent*
- Indication^
- ASA classification**
- Sedation HCP**
- Sedation med**
- Quality of bowel prep^
- Specific cecal landmark^
- Polyp location^
- Polyp size in mm**
- Specific morphology**
- Specific biopsy method*
- Withdrawal time**

** p-value < 0.05       * 0.05 ≤ p-value < 0.01       ^ p-value ≥ 0.10
Measures that Improved

- The following measures improved in 2008-2010
  - Client’s co-morbidity using the ASA classification
  - Polyp size in mm or cm
  - Polyp’s specific morphology
  - Withdrawal time in the report

- Documentation of informed consent and specific biopsy method improved, but were not statistically significant
Measures that Remained the Same

• The following measures remained the same in 2008-2010
  – Indication for the procedure (high in both periods)
  – Quality of the bowel preparation
  – Stating the specific cecal landmarks in the report
  – Polyp location (high in both periods)
Who Provides Sedation for Colonoscopy

• Between 2008-2010, there was increased reporting of ‘Monitored Anesthesia Care,’ indicating an anesthesiologist or nurse anesthetist was providing sedation

• Along with this, there was a decrease in the reporting of specific sedation medications
  – Most likely because this information is on the anesthesia record
Limitations

- One report per endoscopist
- Complete record may not have been sent to LHD
- Reporting of polyp indicators (more than one polyp per report) may be biased
Conclusions

• Variation in the reporting of key quality CO-RADS indicators
  BUT IMPROVED between 2006 and 2010!

• More detailed reporting of quality indicators will:
  – Improve quality: “What gets measured, gets done!”
  – Allow for quality assessment
  – Improve overall supporting documentation for recall interval
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