

# **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

Rex DK, et al. Am J Gastro, 2006:(101)873-885

# 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)

Lieberman DA, et al. Gastrointestinal Endoscopy 2007 (65)6:757-766

# 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

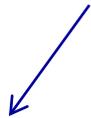
# Sample Selection

## Sample 1 pre-CO-RADS

788 colonoscopies met selection criteria



Performed by 110 endoscopists



38 endoscopists performed 1-2 colonoscopies

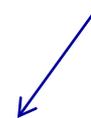
72 endoscopists performed  $\geq 3$  colonoscopies

## Sample 2 post-CO-RADS

938 colonoscopies met selection criteria



Performed by 103 endoscopists



33 endoscopists performed 1-2 endoscopies

70 endoscopists performed  $\geq 3$  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\*

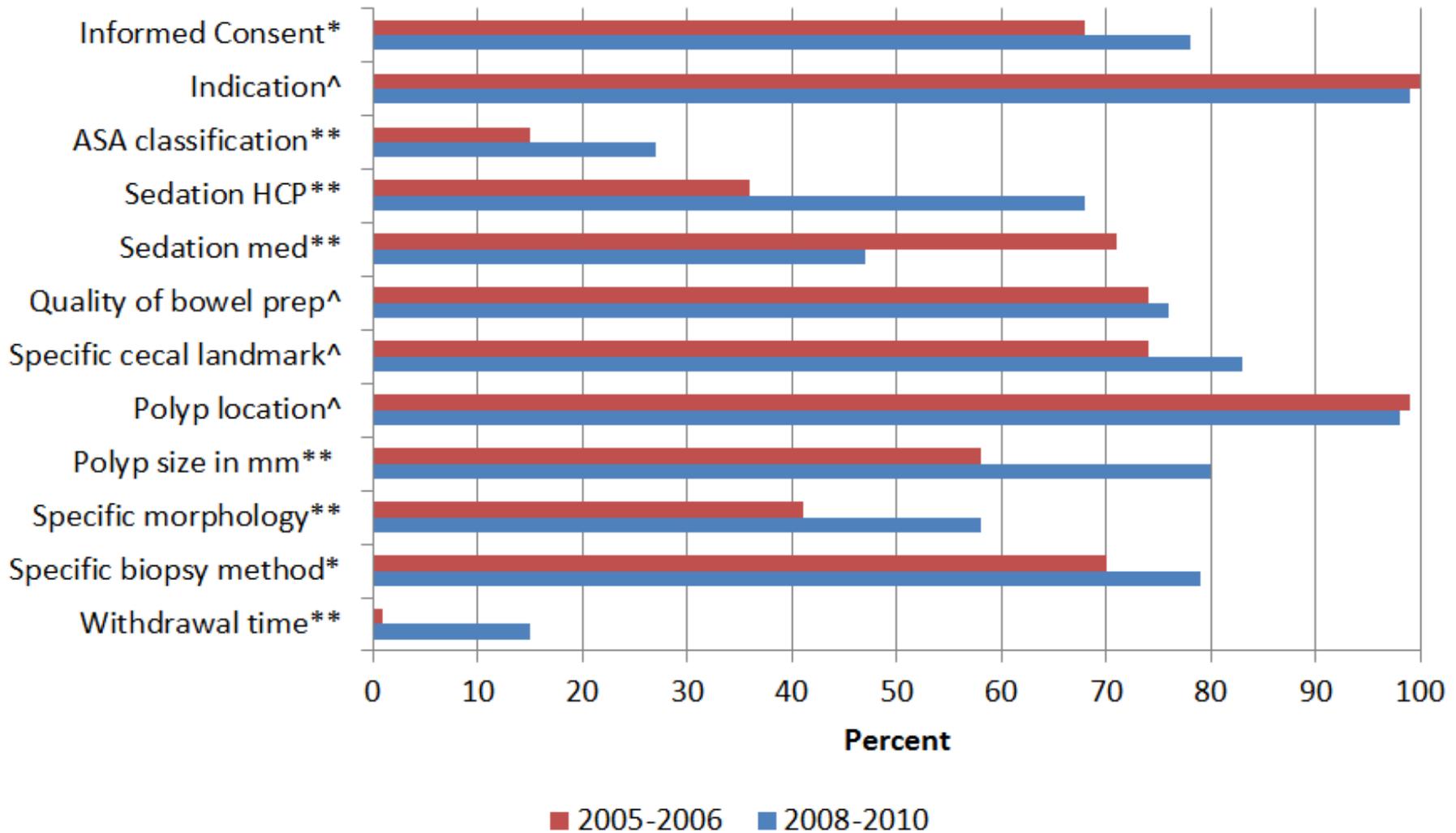
\*One report received from Sample 2 did not have a biopsy, so was removed from the analysis

# 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



\*\* 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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