

# Quality Indicators for Colonoscopy

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# Quality Indicators for Colonoscopy

- What defines a “good” quality indicator?
- Why is this important?
- \*\*What are the updated quality indicators?
- How do we implement quality indicators into our practice?

***\*\*This presentation will focus on quality indicators for colonoscopy for colorectal cancer (CRC) screening***



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# **\*\*What is a “good” quality indicator?**

- Evidence-Based Impact on Outcome
- Variation in Performance
- Reliably Measured
- Feasible to Measure
- Useful to “Customers” - Patients, Payers, etc.

*\*\*adapted from criteria employed by National Quality Forum*



# Example of “good” quality indicator

- Adenoma Detection Rate (ADR):
  - High ADR is associated with low “post-colonoscopy” CRC (e.g., also called “missed CRC” - CRC found within 3-4 years after normal screening colonoscopy).
  - ADR is reported to vary from ~10% to ~ 40%.
  - You can reliably measured ADR using histology to confirm adenoma vs. hyperplastic polyp.



# Example of “good” quality indicator

- Adenoma Detection Rate (ADR):
  - Feasible to Measure - Yes. We already report polyp/histology results to patients along with recommended time for repeat colonoscopy.
  - Patients may eventually be able to see ADR on public databases and use this to choose endoscopists.
  - Payers may eventually use ADR to modify reimbursement for colonoscopy.



# Example of “bad” quality indicator

- Post-procedure abdominal discomfort:
  - There is no reliable link between post-procedure abdominal discomfort and an important outcome, such as hospitalization.
  - There is no documented variation among endoscopists in frequency of post-procedure abdominal discomfort.
  - This outcome can not reliably be measured. It is not an objective outcome. It is based on the patient’s subjective assessment.



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# Why Is This Important?

- The purpose of colonoscopy is to reduce CRC and improved quality *should* reduce post-colonoscopy or “missed” CRC.
- To minimize risks to patients.
- To maximize cost-effectiveness of CRC screening with colonoscopy...and



# Why Is This Important?

- *Reimbursement will decrease if you fail to report quality measures to the Center for Medicare and Medicaid Services (CMS).*
- *By 2016, reimbursement for colonoscopy will also be pegged to your success at meeting/surpassing numerical targets for different quality measures.*

*Visit the ASGE Advocacy web page for detailed information on the Physician Quality Reporting System and Value-Based Payment Modifier.*



# Physician Quality Reporting System

- What is PQRS?
  - Quality reporting program that provides incentive payments and payment adjustments based on whether endoscopists satisfactorily report data on quality measures.
  - Program is required by law.
  - Initially authorized by Congress in 2006. Affordable Care Act extended incentives through 2014 and required a penalty beginning in 2015.



# Physician Quality Reporting System

- Why Participate in PQRS?
  - PQRS reporting forms the basis for Physician Compare.
  - The Value-Based Payment Modifier is tied to PQRS participation.

*Visit the ASGE Advocacy web page for detailed information on the Physician Quality Reporting System and Value-Based Payment Modifier.*



# ***Measurement is now the new normal***

Ashish K. Jha, MD, MPH



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***100% adherence to each quality indicator is not expected!***

***No one achieves cecal intubation in every single colonoscopy!***



# **\*\*What Are the Updated Quality Indicators?**

- Quality Indicators that should be met in > 98% of colonoscopies:
  - Informed consent is documented.
  - Quality of bowel preparation is reported.
  - Withdrawal time is measured and reported.
  - Endoscopic removal of pedunculated polyps and large (< 2cm) sessile polyps should be attempted before surgical referral.

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## **\*\*What Are the Updated Quality Indicators?**

- Documented Appropriate Indication for Colonoscopy: > 80%
- Bowel preparation is adequate: 85%
- Cecal intubation:  $\geq$  95%
- Average withdrawal time in negative screening colonoscopies:  $\geq$  6 minutes

***\*\*This presentation will focus on quality indicators for colonoscopy for colorectal cancer (CRC) screening***



# **\*\*What Are the Updated Quality Indicators?**

- Adenoma Detection Rate: 25%
  - 30% in men and 20% in women
- Perforation: < 1 in 1,000
- Post-polypectomy bleeding: < 1%
- Recommend appropriate interval between colonoscopies after completing procedure and reviewing histology: 90%

***\*\*This presentation will focus on quality indicators for colonoscopy for colorectal cancer (CRC) screening***



# Document Appropriate Indication for Colonoscopy: > 80%

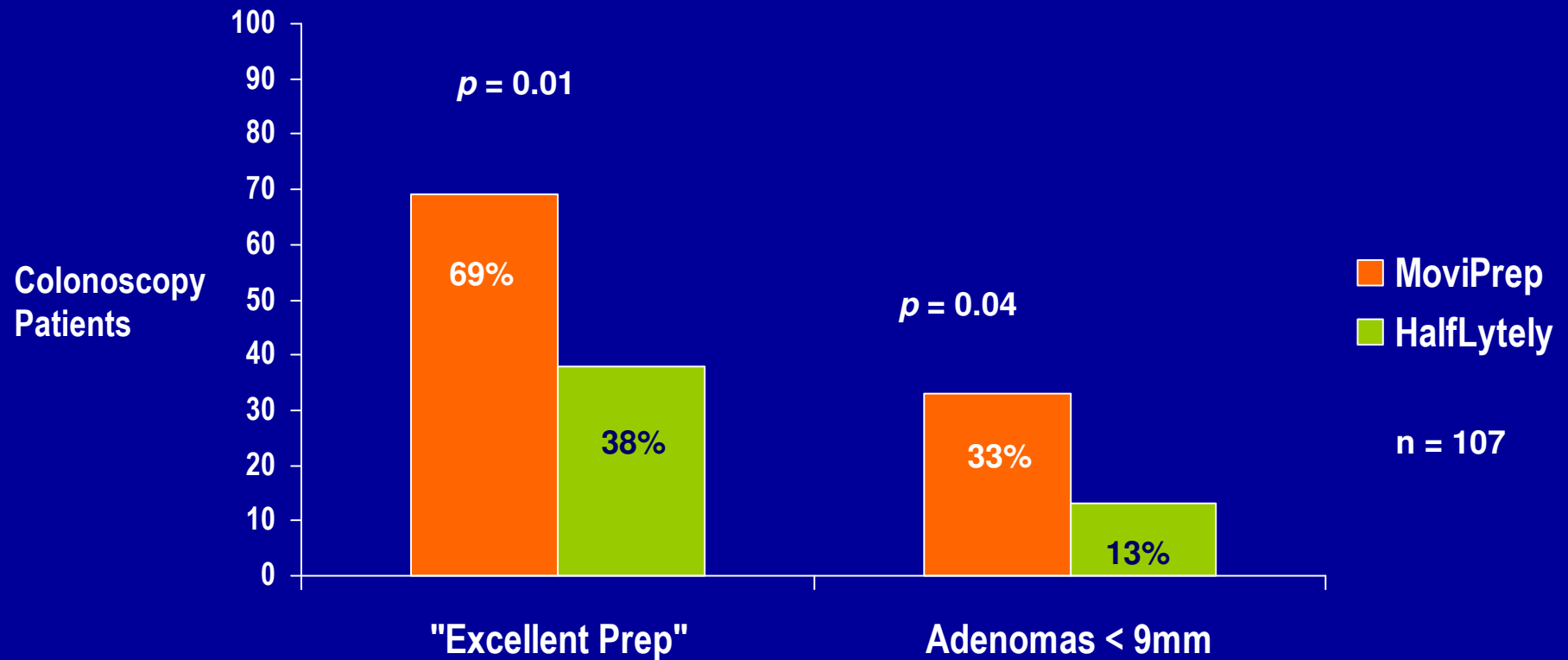
- Did the patient have a colonoscopy in the past?
- If prior colonoscopy, document the date of the colonoscopy.
- If prior colonoscopy, document findings of colonoscopy, including number, size, and histology of polyps.
- Based on history of prior colonoscopies, performance of the colonoscopy should be indicated based on CRC screening guidelines.
- ***Goal: Reduce inappropriate colonoscopies.***

***Yes - The endoscopist is expected to obtain reports of prior colonoscopies before scheduling/performing another colonoscopy.***



# Bowel Preparation is Adequate: 85% of Outpatient Procedures

## Excellent Bowel Cleansing = Higher ADR



Cohen LB, et al. *Alimentary Pharmacology and Therapeutics* 2010; 32: 637. The LUSTER Study: Moviprep® (PM/AM Split Dosing) vs. HalfLyte® (PM-Only Dosing)



# Bowel Preparation is Adequate: 85% of Outpatient Procedures

- Frequency of inadequate bowel preparation that requires repeat colonoscopy within 1 year should be < 15%.
- If this goal isn't met, then bowel preparation protocols, including patient education, choice of purgative, and protocol for administering the purgative, including use of the split-dose protocol, should be re-examined.
- ***Goal: Minimize need to repeat colonoscopy.***



# Bowel Preparation is Adequate: 85% of Outpatient Procedures

- What interventions may minimize inadequate bowel preps:
  - Institute split-bowel preparation. Ingesting the 2<sup>nd</sup> half of bowel preparation 6 hours prior to colonoscopy is optimal.
  - Avoid use of popular, non-FDA approved, MiraLax® plus Gatorade™ bowel preparation. Four liters of GoLyteLy® split produces superior cleansing vs. MiraLax® + Gatorade™ split.
  - Use more aggressive bowel preparation regimens for patients at high risk for inadequate preparation (e.g., history of constipation, diabetic, opioid-use, history of poor bowel prep in the past).



# Cecal Intubation $\geq$ 95% with Photo Documentation

- Cecal intubation rates have been associated with higher rates of interval proximal colon cancer.<sup>1</sup>
- If colonoscopy is aborted due to poor prep or severe colitis, then this procedure is not included in the calculation.
- Photograph appendiceal orifice and ileocecal valves in separate photos.

1. Baxter N, Sutradhar R, Forbes DD, Paszat LF, Saskin R, Rabeneck L. Analysis of administrative data finds endoscopist quality measures associated with post-colonoscopy colorectal cancer. *Gastroenterology* 2011;140:65-72.



# Adenoma Detection Rate 25%: 30% in men and 20% in women

- ADR is the quality indicator with the strongest association to post-colonoscopy CRC or “missed” CRC.
- ADR is number of screening patients with at least one adenoma divided by total number of patients aged 50 years or older screened with colonoscopy. If procedure aborted due to inadequate prep or other reason (e.g., patient discomfort), then procedure is not included in the calculation.
- The updated ADR target is increased from 20% (25% in men and 15% in women).





# Adenoma Detection Rate 25%: 30% in men and 20% in women

- Frequency of “missed” CRC increases dramatically with ADR  $< 20\%$  vs. ADR  $\geq 20\%$ .
- New data demonstrates:
  - maximal decrease in “missed” CRC with ADR  $\geq 32\%$ .
  - “Missed” CRC decreases as ADR increases from  $< 20\%$  to 20-25% to 25-32%.
  - For each 1% increase in ADR, risk of “missed” CRC decreases by 3%.
- Avg withdrawal in negative screening colonoscopy  $\geq 6$  min.
  - ADR decreases when **MEAN** withdrawal time  $\leq 6$  min.
  - Withdrawal does NOT have to be  $> 6$  min for EVERY colonoscopy.



# Intervention Associated with Higher ADRs

- Increase withdrawal time up to 8-10 minutes.
- Get more “excellent” bowel preps by adjusting your bowel preparation protocol.
- Retroflex in the cecum.
- Publicly report mean ADR for group and privately report ADR for each individual endoscopist.

Lee TJW, Blanks RG, Rees CJ, et al. *Endoscopy* 2013; 45: 20-26

Cohen LB, et al. *Alimentary Pharmacology and Therapeutics* 2010; 32: 637.

Hewett D, Rex D. *Gastrointest Endosc* 2011; 74: 246-52.

Coe SG, Crook JE, Diehl NN, et al. *Am J Gastroenterol* 2013; 108: 219-26.



# Document Appropriate Recommendation for Timing of Next Colonoscopy: 90%

- Goal: Reduce inappropriate colonoscopies.
- Recommended intervals for next colonoscopy after
  - ◆ Zero adenomas = 10 years;
  - ◆ 1-2 small adenomas = 5-10 years;
  - ◆ > 3 small adenomas or 1 large adenoma = 3 years.<sup>1</sup>
- The endoscopist is expected to document histology and their written recommendation to patient in a database.



***Wait - What about “fair” bowel preps?  
Aren’t they associated with “missed”  
adenomas in patients with zero adenomas?***

***Why can’t we recommend colonoscopy in  
3-5 years for these patients?***

***If prep was “fair” and you may have missed  
adenomas, then reschedule colonoscopy  
within 1 year! Many post-colonoscopy  
cancers diagnosed < 36 months of index  
colonoscopy.***



# Post-procedure Quality Indicators?

- Perforation: < 1 in 1000
- Post-polypectomy bleeding: < 1%
- Within 2 years, CMS will probably institute post-colonoscopy hospitalization < 7 days for specific ICD-9 codes (e.g., GI bleeding).



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## GIQuIC: An ASGE-ACG benchmarking program

*Improve outcomes through better documentation.*

*Set the stage for improved reimbursements.*

Metrics from participating physicians, ASCs, offices and hospitals will be shared to:



...identify gaps in care

...develop quality indicators

...provide benchmarking reports

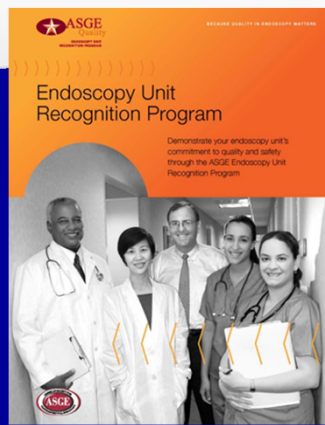
...submit PQRS data for reimbursement

*For additional information go to [www.giquic.org](http://www.giquic.org)*



# ASGE Endoscopy Unit Recognition Program (EURP)

*Get recognized for promoting quality and safety  
in your endoscopy unit!*



*See "Clinical Practice" at ASGE online.*





# PQRS Resources

- **QualityNet Help Desk:**
  - Program and measure-specific questions
    - ◆ (866)288-8912
    - ◆ [qnetsupport@sdps.org](mailto:qnetsupport@sdps.org)
- **CMS Website:**
  - How to get started
  - Measure specifications
  - Reporting mechanisms/criteria
    - ◆ [http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/How\\_To\\_Get\\_Started.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/How_To_Get_Started.html)



# Additional Questions

- **Regulatory Compliance**  
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