



QUALITY ASSESSMENT OF COLONOSCOPY

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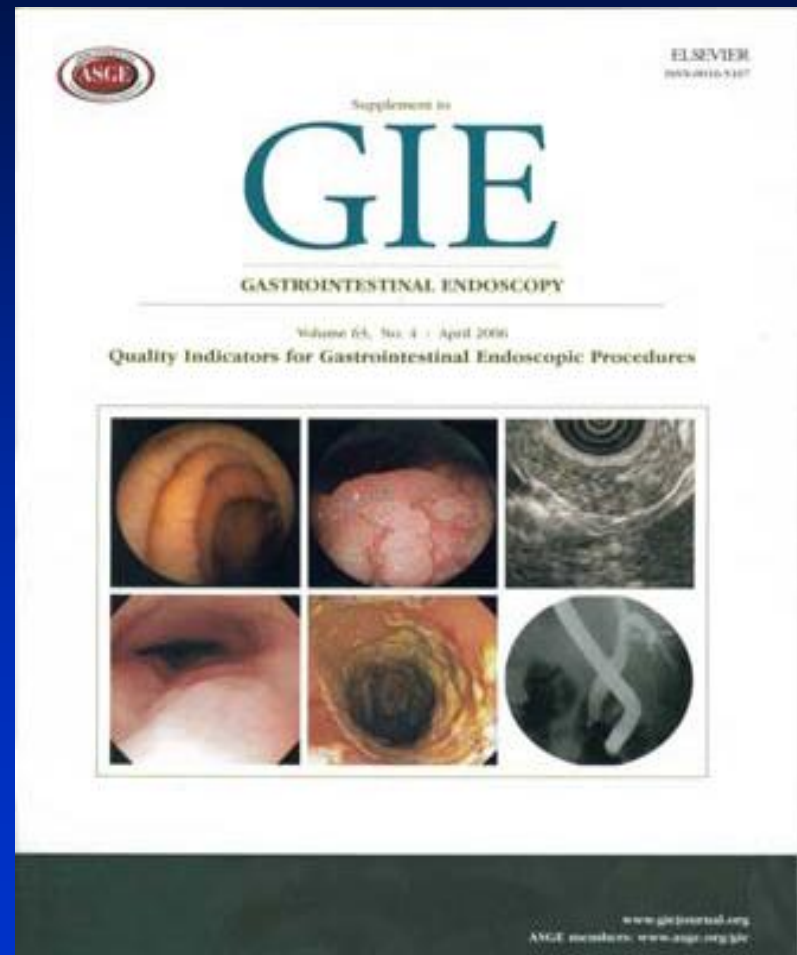
Colonoscopy

- Widely used
- Screening CRC
- Increasing number

- Variation performance
- Missed lesions
- Complications / Costs
- Legal / insurance



Quality Indicators ?





Quality Indicators ?

REVIEW

17

Quality assurance and recommendations for quality assessment of screening colonoscopy in Belgium

E. Macken¹, T. Moreels¹, P. Pelckmans¹, M. Peeters², D. Baert³, H. Reynaert⁴, D. Delooze², J. Vannoote⁵, M. Hiele⁵, J.L. Coenegrachts⁶, P. Hoste⁷, E. Van Cutsem⁵, G. D'Haens⁸ and the Flemish Society of Gastroenterology VVGE

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Acta Gastroenterol Belg, 2009; 72: 17-25



Quality Indicators

PRE

INTRA

POST



- | | | |
|--------------------------|--------------------------|---------------------|
| - Appropriate Indication | - Bowel preparation | - Documentation |
| - Unit Facilities | - Cecal intubation | - Complication rate |
| - Surveillance intervals | - Withdrawal Time | - FU pathology |
| - Sedation / analgesia | - Adenoma detection rate | - FU instructions |



Sedation / Analgesia

- Missed lesions
- Cecal intubation
- Patient comfort and satisfaction
- Deep sedation (propofol) versus moderate sedation (midazolam) ?
- Patient satisfaction better with propofol



Bowel preparation

- (Photo) documentation
- No standardized reporting system
- Excellent – Good – Mild – Poor
- Split-dose regimen
- Adequate preparation : polyps > 5 mm

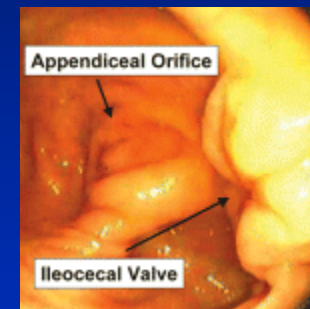
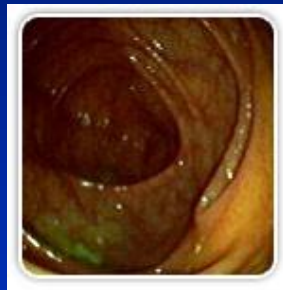
Gupta et al. Endoscopy 2007

Aoun et al. Gastrointest Endosc 2005;62:213-8

Rex D. K., et al. AmJof Gastroenterology 2006;101(4): 873-885

Cecal Intubation

- Surrogate marker of `complete colonoscopy`
- Notation and photodocumentation of landmarks



- Experience - Bowel preparation - Sedation
- > 90% for all cases > 95% for screening



Withdrawal time

- Strong association with adenoma detection rate
- ≥ 6 min ~ higher detection rate

Any neoplasia : 28.3% vs 11.8%; $P < .001$

Advanced neoplasia : 6.4% vs 2.6%; $P < .005$

- Technique or Time ?
- Time cecal intubation – rectal retrovision of anal area

* Barclay et al. *NEJM* 2006;355:2533-41

** Sawhney et al. *Gastroenterology* 2008;135(6):1845-7



Adenoma detection rate

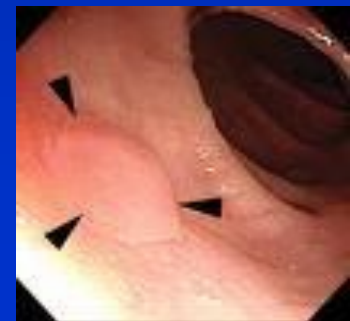
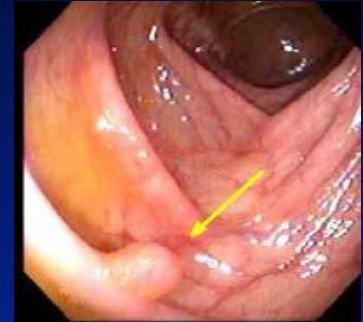
- Important quality indicator
- Adenoma Miss Rate (*)
 - > 10 mm = 2%
 - 5 - 10 mm = 13%
 - < 5 mm = 26%
- Lower protective effect for proximal CRC (**)
 - Failed cecal intubation
 - Worse bowel preparation
 - Altered Tumor biology – Flat lesions

* Van Rijn et al. *Am J Gastroenterology* 2006;101:343-350

** Brenner, *Gut* 2006; Singh, *JAMA* 2006; Lakoff, *Clin GastroE Hepatol* 2008; Singh, *gastrointest Endosc* 2007; Bressler, *GastroE* 2004

Adenoma detection rate

- Demography of the patient population
- Quality of the examination
- Operator dependency
- Technical factors
- Polyp





Adenoma detection rate

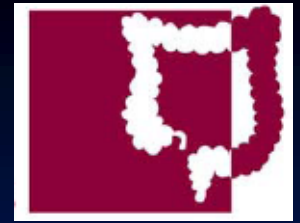
**Adenomas should be detected
in > 25 % of men and > 15 % of women
more than 50 years old and healthy**

Photodocumentation



Complications

- **Perforation rate varies in literature**
 - 1 / 500 in higher risk
 - 1 / 1000 for screening groups
- **Technique is crucial**
- **Submucosal saline injections – clipping**
- **Bleeding is most common**



Quality Project On

Colonoscopy

VVGE

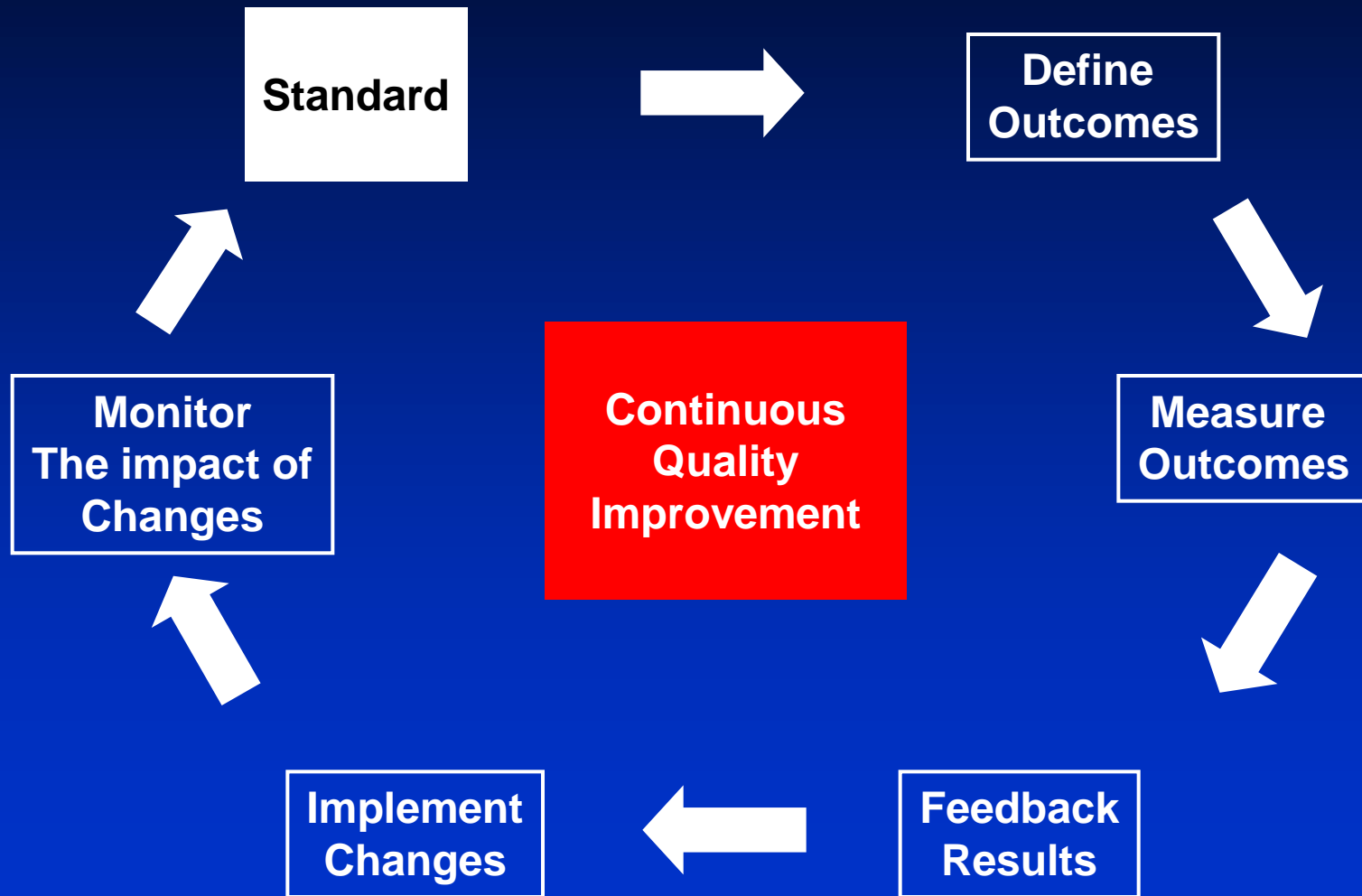


Aim

- 1/ *To asses* actual quality of colonoscopies
 - 2/ *To improve* quality for individual colonoscopists
 - 3/ *To develop* guidelines
- Flemish population screenings program for CRC



Aim





Method

- **Duration : 9 months**
- **Participation during 3 consecutive months**
- **Voluntary and anonymous**
- **Registration relevant aspects of colonoscopy**
- **Individual confidential feedback**



Method

Invitation
All VVGE members



Documents



Registration

Voluntary !

Participation form
Questionnaire
Agreement Local EC

3 consecutive months
First of each month



Data registration

- **Online**

link

password / login

- **Parameters**

Patient characteristics

preprocedure : sedation, facilities, type/place preparation

Intraprocedure : quality preparation, cecal intubation,
withdrawal time

postprocedure : surveillance interval, FU, therapy



Additional Data

- Informed Consent
- Photo documentation
- APO report
- Patient satisfaction forms



Information

www.vvge.be :

New Items : Quality project colonoscopy

| KWALITEITSPROJECT COLONOSCOPIES IN VLAANDEREN | | |
|---|-------------|--|
| DOCUMENTEN | PROCEDURE | LITERATUUR |
| § Protocol | § STAP 1 | Acta, Macken et al. 2009, 72, 17-25 |
| § Deelname formulier | § STAP 2 | |
| § Vragenlijst Centrum | § STAP 3 | |
| § Informed Consent | § STAP 4 | |
| § Tevredenheidskaart | § Flowchart | |
| § Verzekeringsattest UZA | | |
| § Gunstig advies Centraal EC UZA | | |
| § Benodigde documenten voor locale Ethische Commissie | | Contact: www.kwaliteitsprojectvvge@gmail.com |



Conclusions

- **Quality assurance for colonoscopy**
- **Quality improvement program**
- **Quality parameters**
 - Sedation
 - Bowel preparation
 - ≥ 6 min withdrawal time
 - ≥ 95 % Cecal intubation
 - 15 – 25% adenoma detection rate

