ESGE Quality indicators: implementation in ongoing programs

Cesare Hassan
Why ESGE?

- ESGE Quality Committee
  - Quality is universal
  - Strong methodology
  - Synthetic output

- **BASIC** colonoscopy - NOT BASIC
  - Competence (training/education)
  - Technique/Technology
  - Organization
ESGE Lower-GI Key-Quality Ind. (KQI)
ESGE Lower-GI KQI - Synthetic

Key performance measures (minimum target):
- Rate of adequate bowel preparation (≥ 90%)
- Gecal intubation rate (≥ 90%)
- Adenoma detection rate (≥ 25%)
- Appropriate polypectomy technique (≥ 80%)
- Complication rate (N/A)
- Patient experience (N/A)
- Appropriate post-polypectomy surveillance (N/A)

Minor performance measures:
- Time slot for colonoscopy
- Indication for colonoscopy
- Withdrawal time
- Polyp detection rate
- Polyp retrieval rate
- Tattooing resection site
- Advanced imaging assessment
- Adequate description of polyp morphology

Name of presenter
Why ESGE-KQI in organized (FIT) program?

- Individual variability → Programmatic variability
# ESGE Lower-GI Key-Quality Ind. (KQI)

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**Minor performance measures**

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Programmatic Caecal Intubation Rate

Would you like to be screened by that program?
ESGE Lower-GI Key-Quality Ind. (KQI)

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Name of presenter
Programmatic Complication rates

Would you like to be screened by that program?
ESGE Lower-GI Key-Quality Ind. (KQI)

- **Pre-procedure**
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  - Time slot for colonoscopy
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- **Patient experience**
  - Patient experience (N/A)

- **Post-procedure**
  - Appropriate post-polypectomy surveillance (N/A)
Appropriateness of endoscopic surveillance recommendations in organised colorectal cancer screening programmes based on the faecal immunochemical test

Manuel Zorzi,1 Carlo Senore,2 Anna Turrin,3 Paola Mantellini,4 Carmen Beatriz Visioli,4 Carlo Naldoni,5 Priscilla Sassoli de’ Bianchi,5 Chiara Fedato,3 Emanuela Anghinoni,6 Marco Zappa,4 Cesare Hassan,7 the Italian colorectal cancer screening survey group
Original Article

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<th>Diagnosis</th>
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<th>Expected TC according to EuGL</th>
<th>Difference</th>
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<tr>
<td>Negative/ non-adenomatous polyp</td>
<td>1818</td>
<td>0</td>
<td>+1818</td>
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<tr>
<td>Low-risk adenoma</td>
<td>5146</td>
<td>0</td>
<td>+5146</td>
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<tr>
<td>Intermediate-risk adenoma</td>
<td>8444</td>
<td>8694</td>
<td>-250</td>
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<tr>
<td>High-risk adenoma</td>
<td>2452</td>
<td>2470</td>
<td>-18</td>
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<tr>
<td>Total</td>
<td>17,860</td>
<td>11,164</td>
<td>+6696</td>
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EuGL, European guidelines for quality assurance in colorectal cancer screening and diagnosis; TC, total colonoscopy.
Why ESGE-KQI in organized (FIT) program?

• Individual *variability* → Programmatic variability
Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) quality improvement initiative

At a service level, the implementation of key performance measures may well require investment in hardware to accommodate a more efficient auditing process. We want to encourage hospital management to support the implementation of these performance measures in their endoscopy services. We think that, in an era where general hospital accreditation has become increasingly important, hospital administrations will be more susceptible to support such actions. Moreover, we owe it to our patients to overcome individual or financial barriers to ensure that endoscopy
Why ESGE-KQI in organized (FIT) program?

• Setting....IDEAL!
  – Continuous
  – **Standardized enriched-disease setting**
  – Endoscopy+histology
  – Indications
## ESGE Lower-GI Key-Quality Ind. (KQI)

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Name of presenter
Sigmoidoscopy - intubation rate

Would you like to be screened by that endoscopist?
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Name of presenter
Standardized setting

DETECTION RATE

PREVALENCE

FIT+

ACCURACY

ENDOSCOPIST
Detection rate in FIT+ colonoscopy

Des

Acc

Detection rate in FIT+ colonoscopy

x 100 colonoscopie

primo esame

es. successivi

21,0

18,7

4,8

2,8

ad. avanzato
carcinoma
Would you like to be screened by that endoscopist?
ESGE Lower-GI **Key-Quality Ind. (KQI)**

### Domains
- Pre-procedure
- Completeness of procedure
- Identification of pathology
- Management of pathology
- Complications
- Patient experience
- Post-procedure

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Name of presenter
Evaluation of colonoscopy performance based on post-procedure bleeding complications: application of procedure complexity-adjusted model

Authors
Roger G. Blanks¹, Claire Nickerson², Julietta Patnick², Colin Rees³, Matthew Rutter⁴

Fig. 3  Comparison of PASAER versus crude rate per 1000 for all colonoscopists in England conducting more than 100 procedures between 2006 and 2012. PASAER, procedure-adjusted standardized adverse event ratio.
ESGE Lower-GI Key-Quality Ind. (KQI)
Modifiable factors associated with patient-reported pain during and after screening colonoscopy

Marek Bugajski,¹,² Paulina Wieszczy,²,³ Geir Hoff,⁴,⁵ Maciej Rupinski,¹,² Jaroslaw Regula,¹,² Michal Filip Kaminski¹,²,³,⁵
ESGE-KQI in organized (FIT) program: Open Issues

- ADR vs A-ADR
Advanced adenoma/All adenoma ratio per program
ESGE-KQI in organized (FIT) program: Open Issues

- ADR vs A-ADR

- What cut-off for ADR in FIT+?
Correlation between adenoma detection rate in colonoscopy- and fecal immunochemical testing-based colorectal cancer screening programs

Joaquín Cubiella¹·*, Antoni Castells²·*, Montserrat Andreu³, Luis Bujanda⁴, Fernando Carballo⁵, Rodrigo Jover⁶, Ángel Lanas⁷, Juan Diego Morillas⁸, Dolores Salas⁹ and Enrique Quintero¹⁰; on behalf of the COLONPREV study investigators

ADR NO-FIT+ = ADR FIT

20% 45%
ESGE-KQI in organized (FIT) program: Open Issues

- ADR vs A-ADR
- What cut-off for ADR in FIT+?
- Can we improve KQI in organized programs?
Leadership training to improve adenoma detection rate in screening colonoscopy: a randomised trial

Michal F Kaminski,¹ John Anderson,² Roland Valori,³ Ewa Kraszewska,¹ Maciej Rupinski,¹ Jacek Pachlewski,¹ Ewa Wronska,¹ Michael Bretthauer,⁴,⁵ Siwan Thomas-Gibson,⁶ Ernst J Kuipers,⁷ Jaroslaw Regula¹
I. Bowel prep: split dosing improves ADR

Multicenter RCT, Italy
690 FIT+ve screening subject
Split dose 2L PEG-Asc vs. Full dose (day before) 2L PEG-Asc
Primary study end-point: ADR

Multivariable analysis:
ADR: RR 1.22 95% CI 1.03-1.46
AdvADR: RR 1.35 95% CI 1.06-1.73

Gut in press
ESGE-KQI in organized (FIT) program

• Colonoscopy KQI should be integrated in the output of screening programs

• Programmatic variability may be used to prioritize retraining interventions

• KQI to be recalibrated for specific settings

• Training and tech still needed to reduce variability
RESEARCH FOR QUALITY FOR PROGRAMS

Senore

Grazzini

Zorzi