The new WEO CRC SC Taskforce on Colonoscopy quality assurance: Disseminating best-practices worldwide

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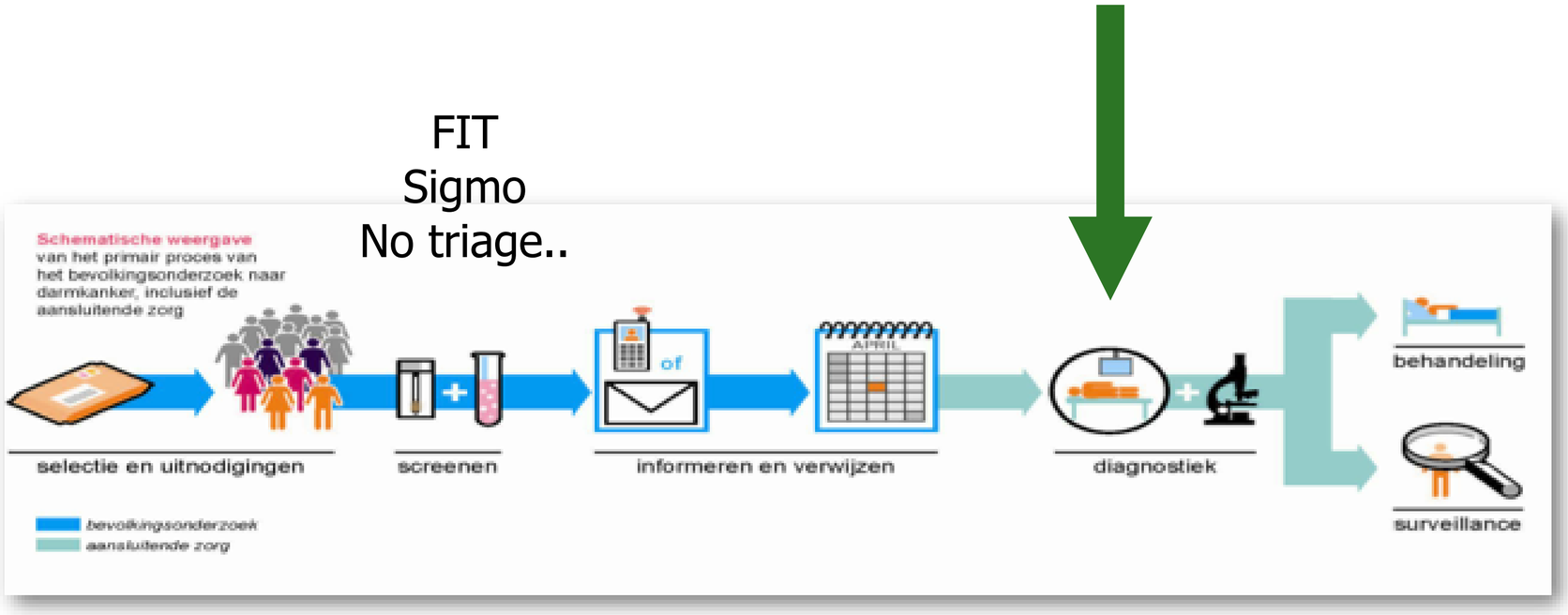
Disclosures

- Research grant: FujiFilm
- Consultancy: FujiFilm, Olympus, Ambu, Intervenn & Exact Sciences
- Speakers’ fee: Olympus, GI Supply, PAION, FujiFilm & IPSEN/Mayoly

Every screening program: colonoscopy

FIT
Sigmo
No triage..



Colonoscopy

- Gold standard for detection of CRC

- But not perfect!
  - Not 100% protection for CRC: post-colonoscopy CRCs
  - Overdiagnosis & treatment of small polyps.. surveillance
  - Invasive: burdensome, risks ... participation
  - High costs, issues on capacity, sustainability

Optimal colonoscopy

Detection of all (pre)malignant lesions

&

Accurate optical diagnosis

&

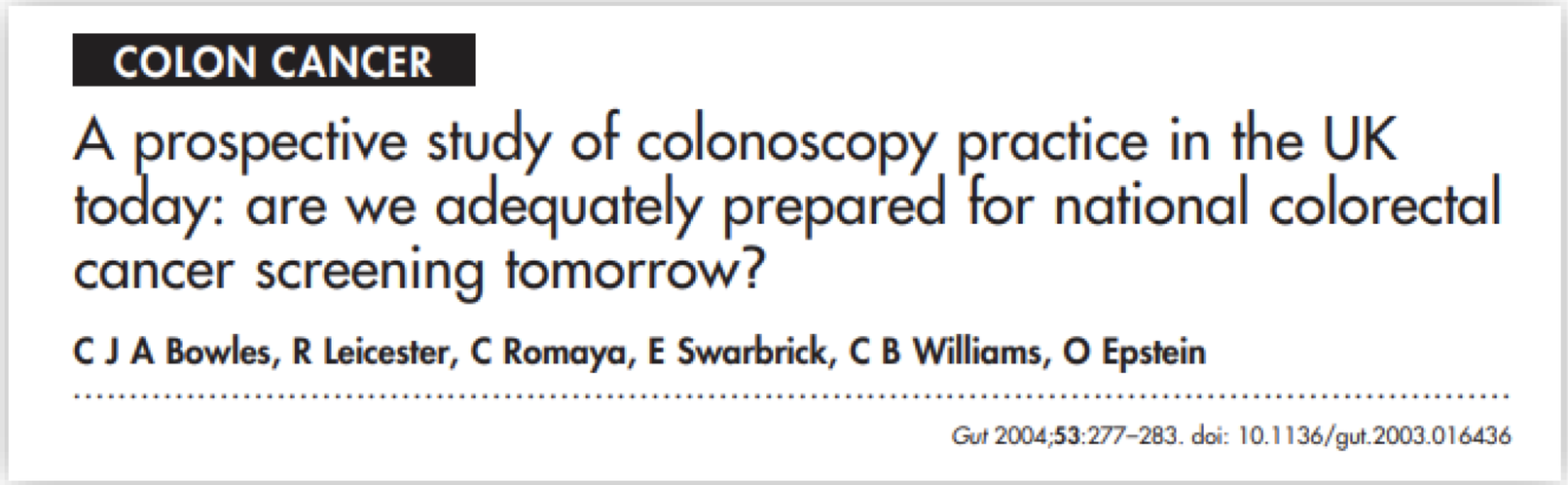
Complete resection of relevant lesions

&

Adequate surveillance

Acceptable & low-risk experience for the patient

Quality of colonoscopy: history



COLON CANCER

A prospective study of colonoscopy practice in the UK today: are we adequately prepared for national colorectal cancer screening tomorrow?

C J A Bowles, R Leicester, C Romaya, E Swarbrick, C B Williams, O Epstein

Gut 2004;**53**:277–283. doi: 10.1136/gut.2003.016436

- Before start of UK BCSP: cecal intubation rate (CIR) in UK only 57%
- Nobody expected this..

Bowles Gut 2004

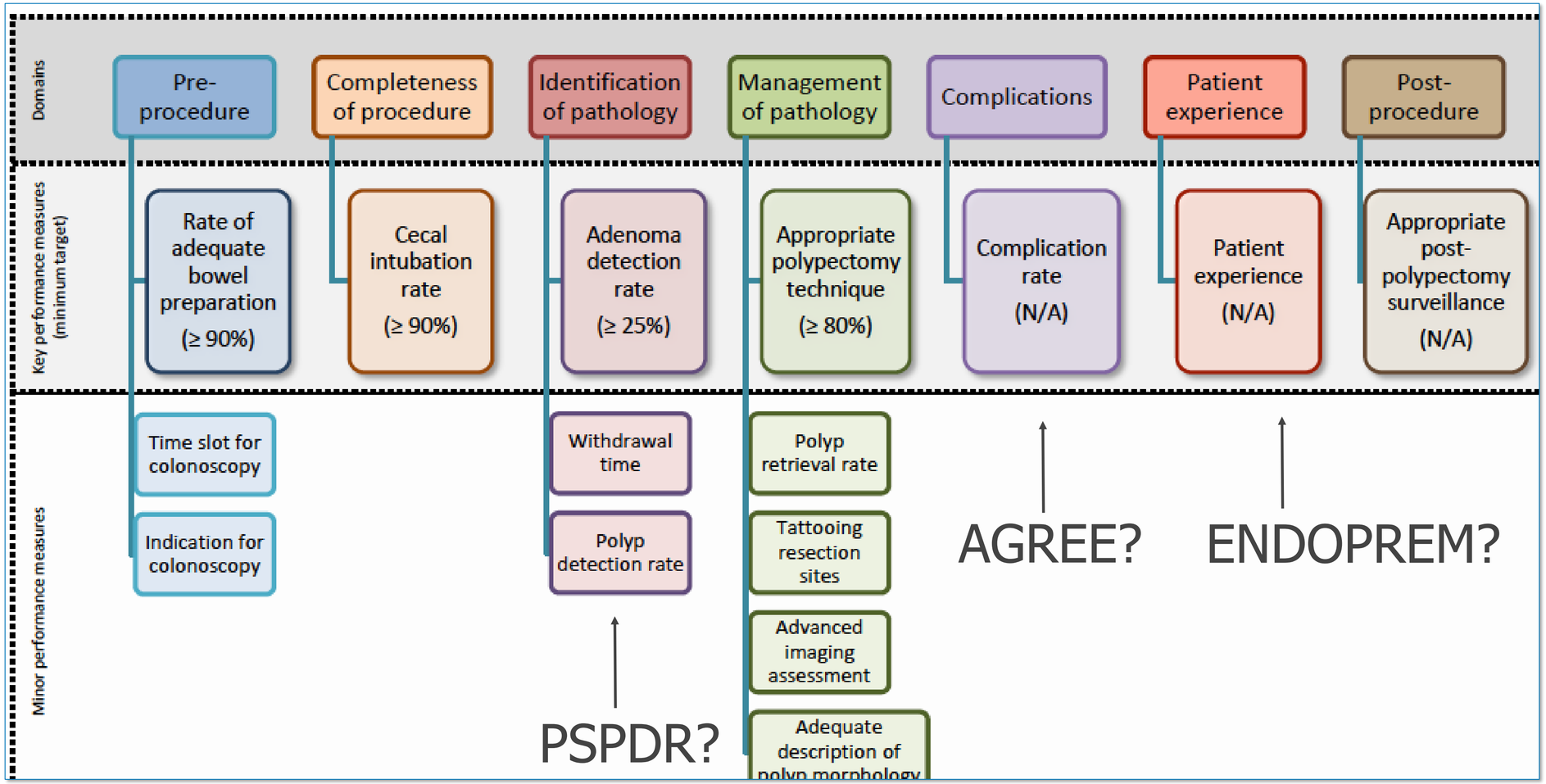
Quality of colonoscopy

- Report of Bowles led to much effort and financial support for quality improvement in the UK
- And – the start of research and development of many evidence-based quality indicators world-wide

Especially for screening: it is our obligation to deliver high quality!

Bowles Gut 2004

Quality indicators colonoscopy



Kaminski Endoscopy 2017

Monitoring: structured reporting

Individual quality report: **Endoscopist 1**
Period: 1-1-2011 – 30-04-2013 — Total number of colonoscopies 199

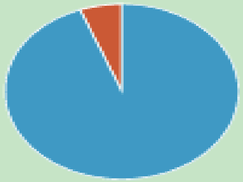
Adenoma detection rate
Number of patients 199.00 — ≥ 1 Adenoma 71.00 — **ADR** 35.68 %

Polyp detection rate
Number of patients 199.00 — ≥ 1 Polyp 99.00 — **PDR** 49.75 %

Total number of colonoscopies with Bosten score **196**
Reported in 98.5 % of procedures

Average score 7.94

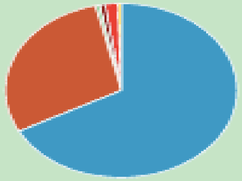
Distribution of the score



At least 6 points	94.4 %
Less than 6 points	5.6 %
Total:	100 %

Total number of colonoscopies with insertion registration **196**
Reported in 98.5 % of procedures

Maximal site of insertion



Terminal ileum	67.3 %
Cecum	29.1 %
Ascending colon	0,5 %
Splenic flexure	1,0 %
Sigmoid	1,5 %
Rectum	0,5 %
Total:	100 %

Percentage colonoscopies with sedative
Number of colonoscopies 199 — Number with sedative 186 — **Percentage** 93.0 %

Percentage colonoscopies with a minimal withdrawel time of 6 minutes
Number of examinations — Withdrawel time > 6 min 84.0 %

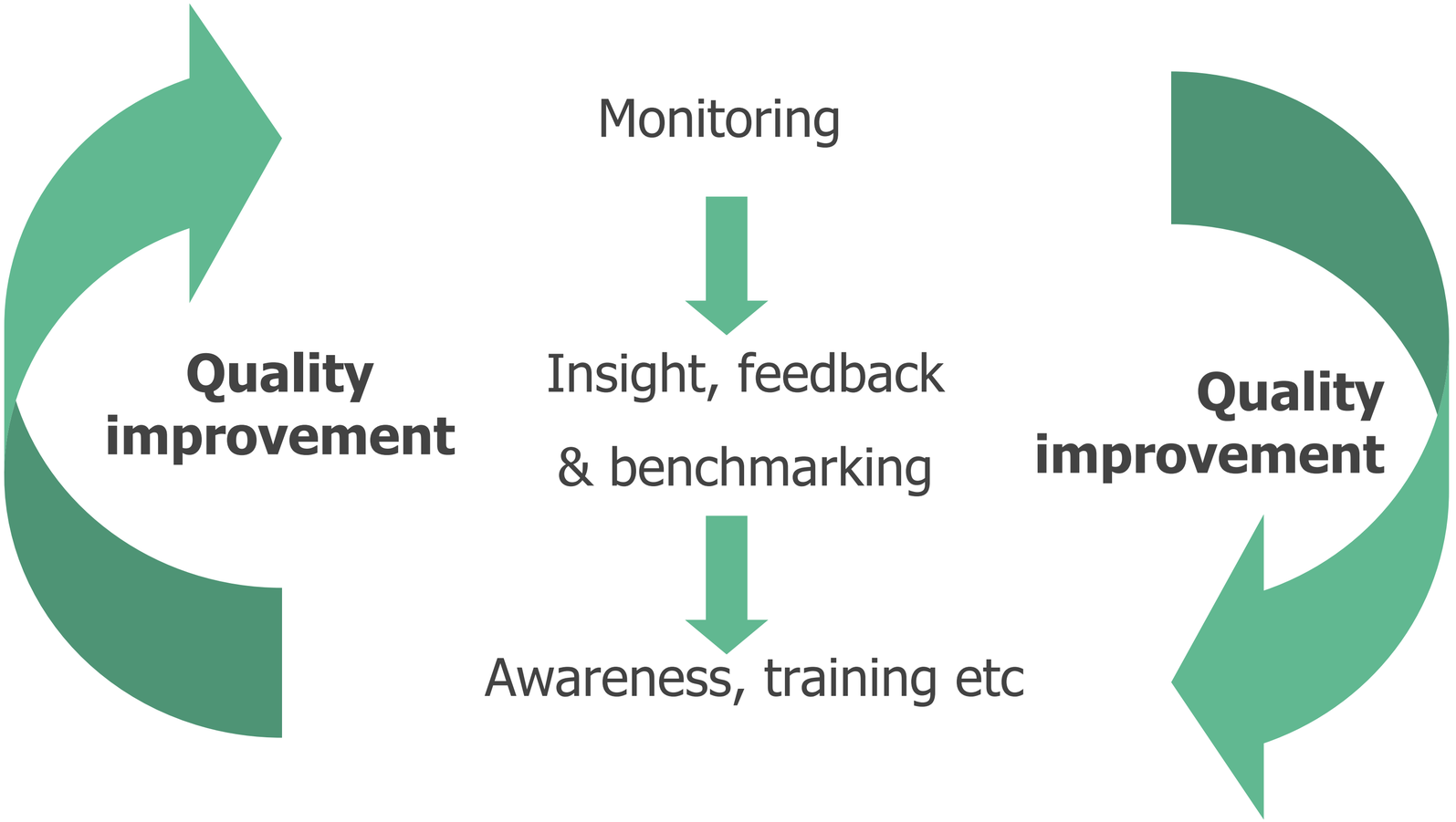
Total number of colonoscopies with Gloucester Comfort Score **196**
Gloucester Comfort Score

No discomfort (1)	21.4 %
One or two episodes of mild discomfort, well tolerated (2)	51.5 %
More than two episodes of discomfort, adequately tolerated (3)	16,3 %
Significant discomfort, experienced several times during the procedure (4)	7,7 %
Extreme discomfort, experienced frequently during the procedure (5)	3,1 %
Total:	100,0 %

Total number of colonoscopies with complications **5**

van Doorn Endoscopy 2014

Monitoring: PDCA cycle



Awareness of monitoring withdrawal time -> increase in ADR

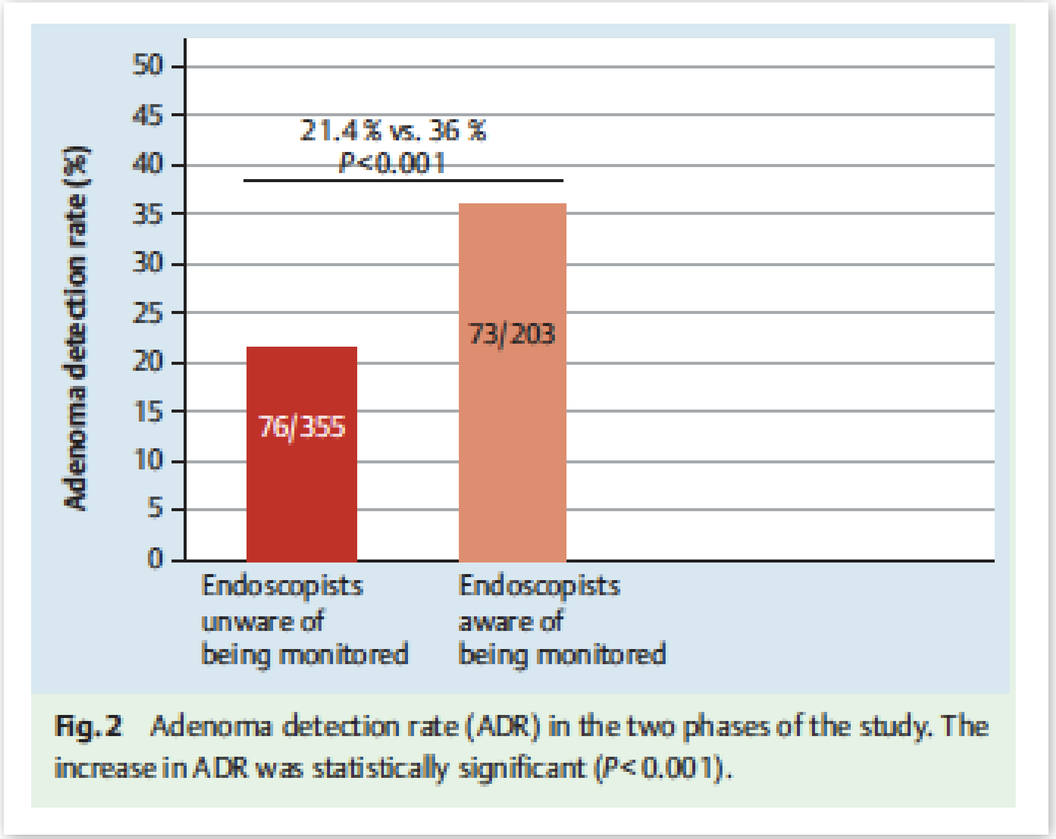
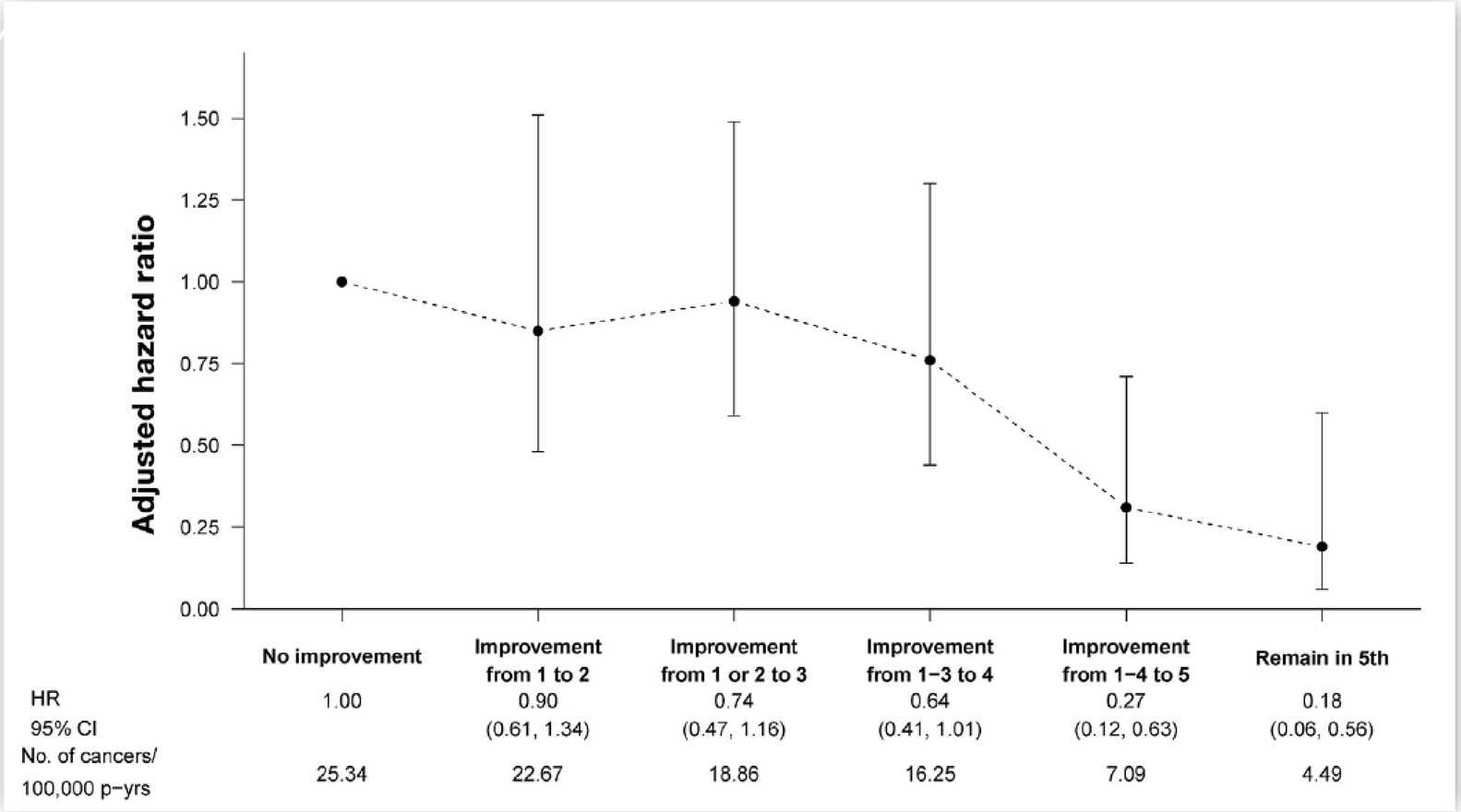


Fig. 2 Adenoma detection rate (ADR) in the two phases of the study. The increase in ADR was statistically significant ($P < 0.001$).

Vavricka Endoscopy 2016

Feeback -> improved ADR -> reduced PCCRC



Kaminski Gastro 2017

Interventions to improve ADR

Audit & Feedback	↑Bowel cleansing	↑Bowel distension	Withdrawal time
Additional training	Advanced imaging	Add on devices	Artificial intelligence

Improved ADR by QI program -> reduced PCCRC

ORIGINAL ARTICLE: Clinical Endoscopy

Association between improved adenoma detection rates and interval colorectal cancer rates after a quality improvement program (CME)

Angela Y. Lam, MD,[1] Yan Li, MPH, MS,[2] Dyanna L. Gregory, BS,[2] Joanne Prinz, RN, BSN,[3] Jacqueline O'Reilly, RN, BSN, MBA,[3] Michael Manka, MBA,[2] John E. Pandolfino, MD, MSCI,[2] Rajesh N. Keswani, MD, MS[2]

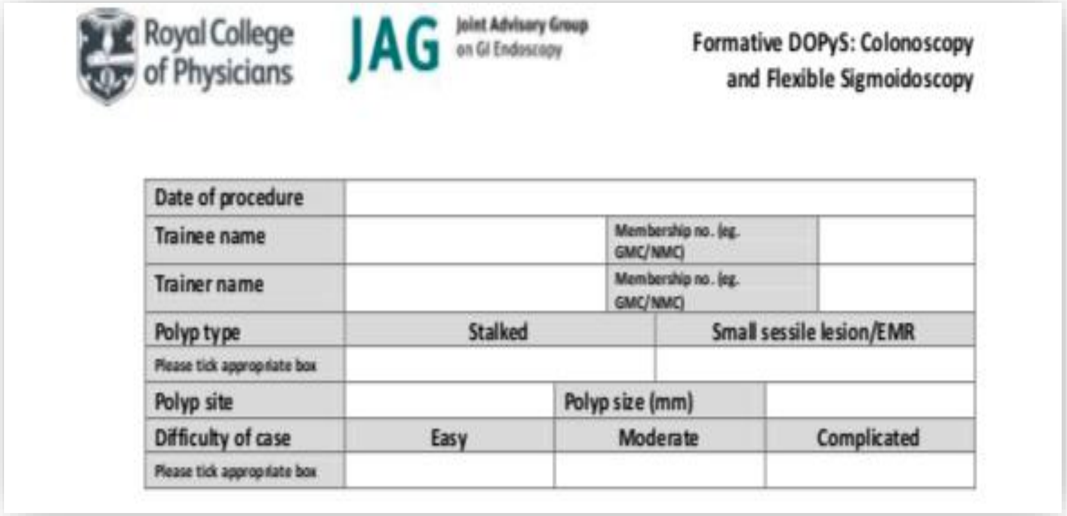
San Francisco, California; Chicago, Illinois, USA

Conclusions: We confirmed that iCRC rate is inversely correlated with provider ADR. ADRs increased and iCRC rates decreased over time, concomitant with a QI program focused on split-dose bowel preparation, quality metric measurement, provider education, and feedback. iCRC rate measurement should be considered a feasible, outcomes-driven institutional metric of colonoscopy quality. (Gastrointest Endosc 2020;92:355-64.)

Lam GIE 2020

Training & accreditation?

Semi-objective tools to measure competence: DOPS, DOPyS

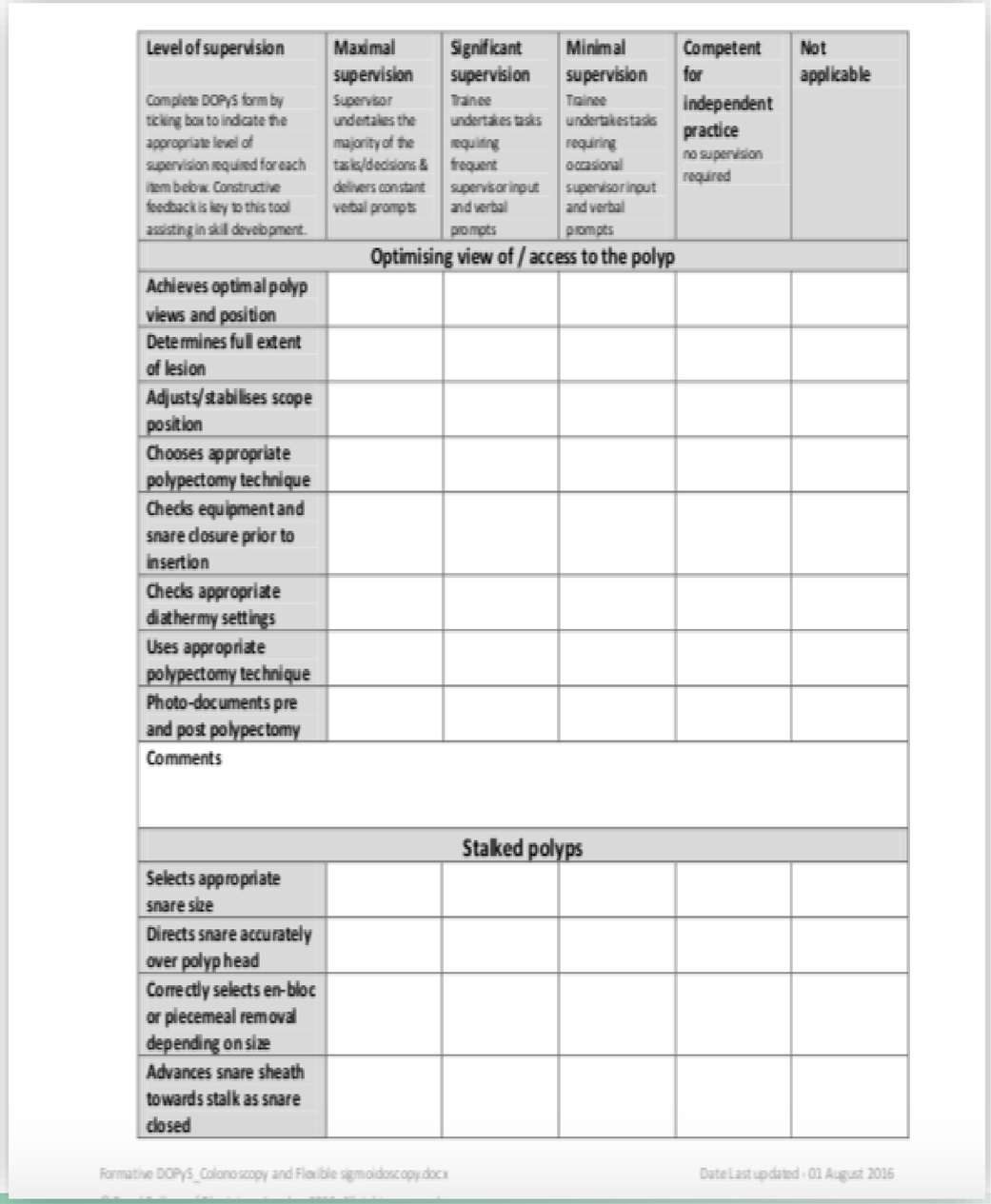


Royal College of Physicians

JAG Joint Advisory Group on GI Endoscopy

Formative DOPyS: Colonoscopy and Flexible Sigmoidoscopy

Date of procedure			
Trainee name		Membership no. (eg. GMC/NMC)	
Trainer name		Membership no. (eg. GMC/NMC)	
Polyp type	Stalked	Small sessile lesion/EMR	
Please tick appropriate box			
Polyp site		Polyp size (mm)	
Difficulty of case	Easy	Moderate	Complicated
Please tick appropriate box			



Level of supervision Complete DOPyS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice no supervision required	Not applicable
Optimising view of / access to the polyp					
Achieves optimal polyp views and position					
Determines full extent of lesion					
Adjusts/stabilises scope position					
Chooses appropriate polypectomy technique					
Checks equipment and snare closure prior to insertion					
Checks appropriate diathermy settings					
Uses appropriate polypectomy technique					
Photo-documents pre and post polypectomy					
Comments					
Stalked polyps					
Selects appropriate snare size					
Directs snare accurately over polyp head					
Correctly selects en-bloc or piecemeal removal depending on size					
Advances snare sheath towards stalk as snare closed					

Formative DOPyS_Colonoscopy and Flexible sigmoidoscopy.docx Date Last updated - 01 August 2016

Gupta GIE 2011, www.thejag.org.uk

DOPyS: Direct Observation of Polypectomy Skills

Get to, and identify a lesion

Skills

Recognise what it is: Kudo, Paris

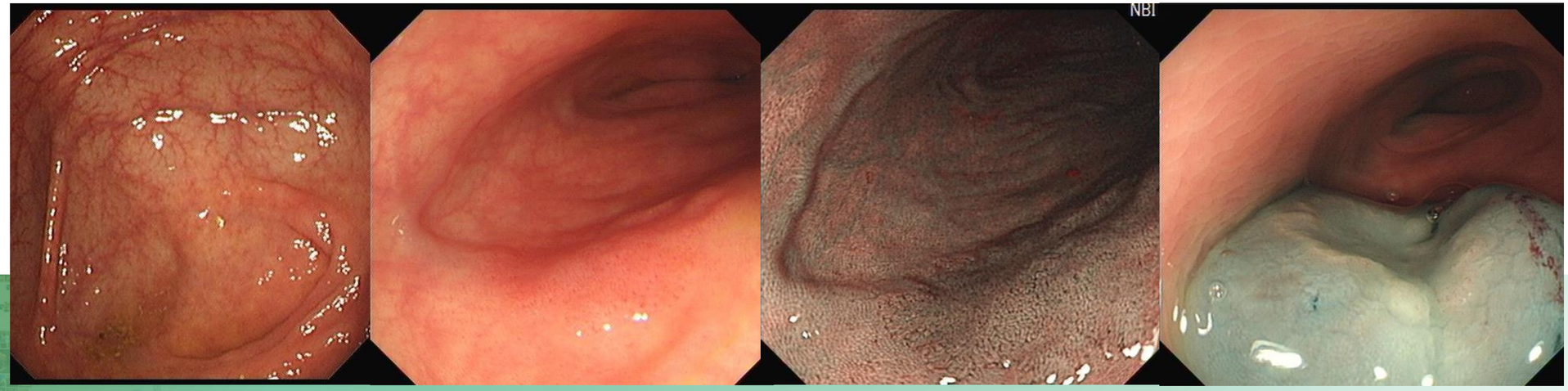
Knowledge

Make a decision about what to do

Judgement

Remove the lesion safely and completely & retrieve it

Skills



Basic curriculum UK

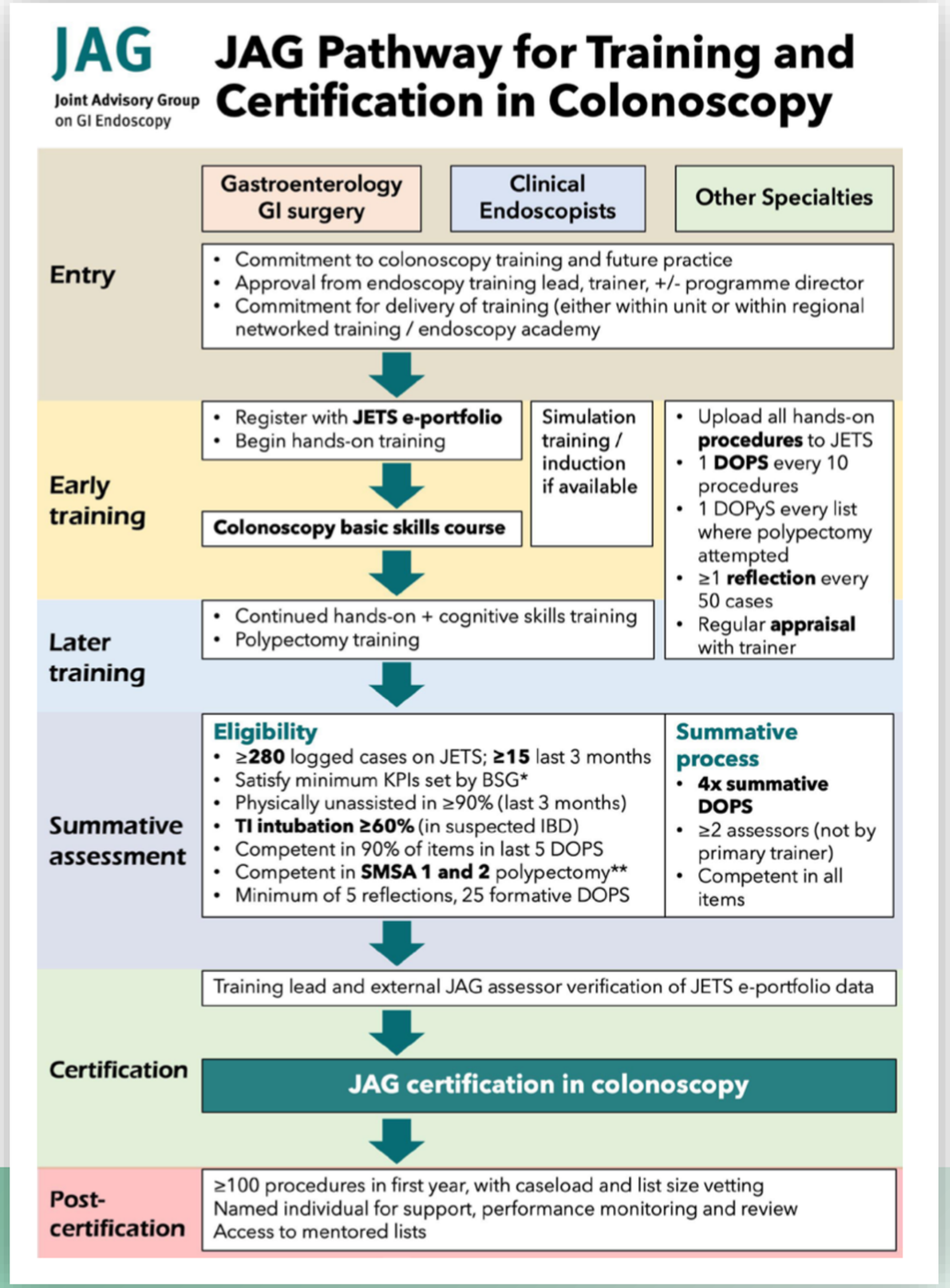


Figure 1 Pathway for JAG training and certification in colonoscopy. * ≥90% unassisted caecal intubation rate, rectal retroflexion and polyp retrieval, ≤10% moderate/severe pain; ** Minimum of two direct observation of polypectomy skills (DOPyS) demonstrating competency for each of: cold snare polypectomy, diathermy-assisted resection of stalked polyps and diathermy-assisted endoscopic mucosal resection for both Size, Morphology, Site, Access (SMSA) Level 1 and Level 2 polyps. JETS, JAG Endoscopy Training System.

Accreditation of endoscopists for FIT-program

- Endoscopists must be medical specialists
- Perform ≥200 colonoscopies/year, life-time 500
  - Quality-parameters 100 consecutive colonoscopies in own practice
  - E-learning plus exam
  - Hands-on exam of 2 colonoscopies & videos of 2 polypectomies, evaluated by DOPS and DOPyS
- Yearly monitoring of endoscopists and centers

Quality in colonoscopy

- Crucial for optimal benefit and cost-effectiveness in CRC screening
- Many tools available to support training and measure competence: semi-objective for guidance, objective quality indicators
- Worldwide implementation is challenging
- And not a one-size-fits-all..

New: WEO CRC SC Taskforce on Colonoscopy quality assurance in screening and surveillance

- Taskforce: group of experts in field of colonoscopy quality from around the world
- Led by Uri Ladabaum, Han-Mo Chiu and Evelien Dekker
- Aim: dissemination of best-practices worldwide to support regional/national screening (and surveillance) programs to achieve high-quality colonoscopy services

First ideas – open for suggestions!

- Inventorize what is already being done and possibly available around the world on
  - monitoring
  - auditing
  - training & accreditation
- Which minimal dataset and which quality parameter for colonoscopy?
- How to implement standard reporting, monitoring & auditing, set minimal standards, provide feedback, implement quality improvement programs etc etc

We look forward to your ideas and suggestions – feel free!

WEO

World Endoscopy Organization