

the 'best' response). No questions had floor effects. For three questions, more than 5% of respondents failed to answer. The highest was 8.6%. The mean number of questions missed was 1.2; this was higher in older patients. Eight questions correlated poorly with others ($\rho < 0.3$) and were excluded from EFA. EFA showed seven factors, explaining 61.5% of the variance. All factors had Cronbach's $\alpha > 0.6$, indicating good reliability.³

Conclusions The Newcastle ENDOPREM™ has good psychometric properties. This analysis has enabled refinement of some questions and item reduction, resulting in a PREM, derived from patients' reports, which comprehensively assesses patient experience across GI investigative modalities.

REFERENCES

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P53

DOES POLYP DETECTION RATE ACCURATELY REFLECT ADENOMA DETECTION RATE?

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Introduction Thorough mucosal examination at colonoscopy is essential to detect pathology and ensure high quality procedures. Adenoma detection rate (ADR), defined as the number of colonoscopies where at least one adenoma is detected, is the most important marker of colonic mucosal visualisation and therefore of colonoscopy quality. Histology results are required, making the use of ADR challenging. Polyp detection rate (PDR) is more readily available as it can be collected directly on endoscopy reporting systems. The use of PDR as a substitute for ADR has been deemed acceptable providing it accurately reflects ADR.¹ We aim to investigate whether PDR can be reliably used as an alternative to ADR and therefore as a marker of colonoscopy quality.

Methods Data were collected from independent endoscopists in eight hospitals in England over a six-month period, including; ADR, PDR, PDR excluding rectal hyperplastic polyps (RHP), mean patient age. The ADR:PDR ratio (APDRQ) per endoscopist and Pearson correlation between ADR and PDR were computed, including and excluding rectal hyperplastic polyps. Multiple linear regression analysis was used to develop a model to predict an endoscopist's ADR from their PDR.

Results 9265 colonoscopies performed by 118 endoscopists were included. Mean ADR and PDR per endoscopist were 17% (range 0–36.3, sd 7.37) and 27.2% (range 0–57.5, sd 9.3), respectively. The mean APDRQ was 0.60 (range 0–1.00, sd 0.21); this was 0.64 (range 0–1.17, sd 0.21) when RHPs were excluded. ADR and PDR were strongly correlated ($\rho = 0.75$, $p < 0.001$; $\rho = 0.80$, $p < 0.001$ after excluding RHP). Colonoscopists who scoped patients with mean age ≥ 60 years had higher mean ADRs (≥ 60 years: 17.4%, sd 7.4; < 60 years: 26.5%, sd 8.9). A similar pattern was seen for PDR (mean patient age < 60 years: 26.5%, sd 8.9; ≥ 60 years:

27.7%, sd 9.5). ADR was more accurately predicted by a combination of PDR and mean age of patients ($ADR = 0.54 * PDR + 0.26 * \text{mean patient age}$).

Conclusions This study demonstrates that PDR can accurately be used as a marker of ADR as long as age is also considered.

REFERENCE

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P54

LOW COLONOSCOPY NUMBERS CORRELATE WITH POOR QUALITY COLONOSCOPY: TIME TO IMPLEMENT NATIONAL STANDARDS

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Introduction UK key performance indicators (KPI) and quality assurance standards for colonoscopy have been established in order to ensure minimal standards and reduce unacceptable variation in quality.¹ Included within these standards is the requirement for a minimum of 200 colonoscopies to achieve competence and 100 per annum to maintain competence. We investigated the link between number of procedures and the minimal standards for two other KPIs- caecal intubation rate (CIR) and adenoma detection rate (ADR).

Methods Data were collected from independent endoscopists in eight hospitals in England over a six-month period. Gastroenterologists, surgeons and nurse endoscopists were included. The link between three KPIs was investigated; ≥ 100 colonoscopies in 12 months (as six-month data was collected, ≥ 50 procedures in this timeframe were used); CIR $\geq 90\%$ and ADR $\geq 15\%$. Associations between pairs of KPIs were tested. Multiple logistic regression was used to investigate inter-relationships between KPIs and additional factors (including endoscopist grade, mean patient age, patient sex, hyoscine butylbromide use), with low ADR as the outcome variable.

Results 118 endoscopists undertook 9,265 colonoscopies in six months. The mean number of colonoscopies conducted in six months was 78.5 (range 4–334, standard deviation (sd) 61). The mean ADR and CIR were 17% (range 0–36.6, sd 7.37) and 91.2% (range 55.5–100, sd 6.6), respectively.

61% of endoscopists achieved ADR $\geq 15\%$, 65% had CIR $\geq 90\%$ and 64% performed ≥ 50 colonoscopies in six months. Of those who performed ≥ 50 colonoscopies in six months, 68% met ADR and 69% met CIR performance metrics. 29% of colonoscopists met all three KPIs.

36% of colonoscopists performed < 50 colonoscopies in six months (mean 27.6 procedures, sd 12.5). In this group, mean ADR was 13.2% (sd 8.1) and mean CIR was 89% (sd 9.6). 49% had ADR $\geq 15\%$ and 58% had CIR $\geq 90\%$. 33% met both KPIs for ADR and CIR.

Total number of colonoscopies and ADR were significantly associated ($p = 0.04$), but total colonoscopies and CIR were not. In multiple regression analyses, undertaking fewer colonoscopies and using hyoscine butylbromide less frequently was significantly associated with ADR $< 15\%$. CIR, endoscopist grade, % male patients, mean patient age and CIR were not significantly related to ADR $< 15\%$.