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Wide variation in adenoma detection rates at screening flexible sigmoidoscopy.

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BACKGROUND & AIMS: Wide between-center variation in adenoma detection rates (ADRs) was observed in the U.K. Flexible Sigmoidoscopy Screening Trial (overall, 12.1%; range, 8.6%-15.9%; $P < 0.0001$). The aim of this study was to determine whether the observed differences could be attributed to varying performance by endoscopists, to examine the effect of experience on performance, and to identify an attainable, standard ADR to which endoscopists could aspire. **METHODS:** Thirteen medical endoscopists, one per trial center, each performed about 3000 examinations (200 per month) using the same equipment and protocol. Overall and monthly ADRs were compared using multivariable logistic regression. **RESULTS:** Differences in ADRs were not explained by patient characteristics, incidence of colorectal cancer in the local population, or the endoscopists' medical specialty or previous experience. Average ADRs increased significantly with screening experience (up to 400 examinations). Endoscopists were classified as higher, intermediate, or lower adenoma detectors, and performance levels were maintained over time. Higher detectors had ADRs of 15% overall (men, 20%; women, 10%) and also detected more adenomas per case (higher/lower detectors, 21.7/10.4 adenomas per 100 examinations). **CONCLUSIONS:** The differences in ADRs were due to variation in performance of the endoscopists. Long-term follow-up will determine whether this variation is clinically important. We suggest that the standards in higher detecting centers should be achievable by all endoscopists screening unscreened populations aged older than 55 years. Endoscopists should aim to stay above the lower 95% confidence interval band for 200 examinations (10% overall; 5% in women, 15% in men).