

NED: APRIQOT study of performance feedback emailed to endoscopists and endoscopy unit lead clinicians through the National Endoscopy Database (NED) on the endoscopists' detection of polyps

Submission date	Recruitment status	<input checked="" type="checkbox"/> Prospectively registered
09/09/2019	No longer recruiting	<input type="checkbox"/> Protocol
Registration date	Overall study status	<input type="checkbox"/> Statistical analysis plan
27/09/2019	Completed	<input checked="" type="checkbox"/> Results
Last Edited	Condition category	<input type="checkbox"/> Individual participant data
01/10/2025	Digestive System	

Plain English summary of protocol

Background and study aims

Around 41,000 people are diagnosed with bowel cancer each year. Bowel cancer develops from polyps, which grow slowly on the lining of the bowel. Colonoscopy is the best test to find and remove polyps, before they change into cancer. Polyps are missed for many reasons, including how the endoscopist does the test. Patients of endoscopists who find fewer polyps, are more likely to develop bowel cancer after the test. It is not known how often we should find polyps in the UK, or if feedback of performance will improve how many polyps are found. The researchers hope to improve colonoscopies for all patients in the UK by finding more polyps to prevent bowel cancers. The study will use the National Endoscopy Database (NED) to assess how often doctor and nurse endoscopists currently find pre-cancerous growths in the bowel (polyps) when performing camera tests through the bottom (colonoscopies). They will give feedback to endoscopists and the units they work in about how successful they are at finding polyps compared to others nationally. They want to find out if this makes them better at finding polyps.

Who can participate?

Colonoscopists at participating NHS endoscopy units in the UK

What does the study involve?

NED collects data from every colonoscopy in the UK including if polyps were found and removed. The researchers will look at over 100,000 colonoscopies to work out how often polyps should be found by endoscopists. Participating colonoscopy units are randomly allocated to either receive regular feedback on their colonoscopy performance or to not receive feedback. After a year the researchers will see if receiving feedback improved how many polyps they found. Before and after the study they will interview endoscopists to explore what kind of feedback is most likely to help them, how feedback and behaviour are influenced in endoscopy, and how they can improve feedback further.

What are the possible benefits and risks of participating?

The results will help guide the use of performance data from NED, to improve quality of colonoscopy and performance feedback, benefiting all endoscopists. If colonoscopists are allocated to the feedback group they will receive information, educational material and feedback aiming to improve their own practice. The researchers think this will be incentivising and rewarding as an endoscopist. They do not envisage any risks - this study involves providing colonoscopists with performance data, which will only be shared with the colonoscopist and the endoscopy unit lead (the lead already has access to local performance data). This feedback should only be used as a guide by endoscopy leads, and not for formal competency review.

Where is the study run from?

The Newcastle Upon Tyne Hospitals NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for?

April 2019 to November 2022

Who is funding the study?

Health Foundation (UK)

Who is the main contact?

Simon Sinclair

simon.sinclair1@nhs.net

Contact information

Type(s)

Scientific

Contact name

Mr Simon Sinclair

Contact details

Middlefield Building

University Hospital Of North Tees

Hardwick Road

Stockton

United Kingdom

TS19 8PE

+44 (0)1642 624582

simon.sinclair1@nhs.net

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Study information

Scientific Title

Automated Performance Reports to Improve Quality Outcomes Trial (APRIQOT) Using the National Endoscopy Database (NED) to evaluate endoscopy performance and reduce unwarranted variation in quality

Acronym

NED: APRIQOT

Study objectives

To assess, by means on an RCT, whether regular automated feedback of endoscopist- and endoscopy unit-level colonoscopy performance data reduces unwarranted variation in colonoscopy quality.

Ethics approval required

Old ethics approval format

Ethics approval(s)

As per HRA approval; REC approval is not required for this study

Study design

Randomised; Both; Design type: Diagnosis, Process of Care, Psychological & Behavioural, Active Monitoring, Other, Qualitative

Primary study design

Interventional

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Bowel polyps

Interventions

Trial design: Cluster randomised control trial, 1:1 randomisation

Intervention group: monthly automated email including KPI data report to individual endoscopists and to the endoscopy unit leads. The precise content will be determined in the initial stage of the NED-APRIQOT project. Guidance and consensus from the Advisory Group, many members of which have considerable expertise in QA, will be sought regarding content and structure of the KPI reports. In addition, the proposed qualitative work, detailed above, will inform the structure and content of the KPI reports.

KPI data reports will be provided for endoscopy leads, and formatted using the above qualitative work. This will include pooled data for the unit, from all independent endoscopists. This summary statistic will be calculated may include data from colonoscopists who have not consented to partake in the NED APRIQOT study. The endoscopy lead's report will include

detailed KPI reports for all individual endoscopists who are consented into the study, including any action plans. Unit leads will be given information about dealing with underperformance in endoscopy which is their clinical responsibility, based on international expert guidance (Rees et al., 2018) with a link to further resources.

Provisionally, the KPI data report will report on a rolling monthly period, to balance the reports reflection of contemporary practice with its statistical power.

Recipients will be provided with contact details of their endoscopy lead to flag concerns about their performance, and local investigators and the central research team to flag any perceived discrepancy in the accuracy of the feedback data. Local investigators will have local access to assess potential mismatch between NED data and local ERS data.

This can then be fed-back to problem-solve any IT accuracy issues with the research and Weblogik © team. If accuracy is challenged, local units may be asked to provide numerator and denominator data for the period in question which can be checked and compared centrally.

Comparator group: No KPI report; access to NED website available, but optimal detection KPI not displayed. This is the current feedback available to all endoscopists nationally, and reflects current endoscopic practice.

Intervention Type

Behavioural

Primary outcome(s)

Mean value of optimal detection KPI in the 2 study arms, measured at 12 months

Key secondary outcome(s))

Measured at 9 months in both arms:

1. Percentage of endoscopists above minimum standard for optimal detection KPI
2. Percentage of endoscopists above target standard for optimal detection KPI
3. mean value of optimal proximal detection KPI
4. Percentage of endoscopists above minimum standard for optimal proximal detection KPI
5. Percentage of endoscopists above target standard for optimal proximal detection KPI
6. Change over time in optimal detection KPI during the 9-month trial
7. Change over time in optimal proximal detection KPI during the 9-month trial
8. Subgroup analysis of endoscopists in the intervention group who access learning resource materials on the NED website during the trial
9. Subgroup analysis of endoscopists in the control group who access the basic NED website during the trial
10. Mean value in other colonoscopic KPIs (caecal intubation rate, terminal ileal intubation rate, rectal retroversion rate, colonoscopy withdrawal time, polyp retrieval success, patient comfort, bowel preparation quality)

We shall also perform a nested study to correlate the opadKPI with both adenoma detection rate (ADR) and serrated polyp detection rate (SDR). This will be performed by asked each trial centre to review polyp histology from all independent colonoscopies within a specific 3-day period of the trial. We estimate that this will amount to 20-40 procedures per centre, totaling approximately 1500 procedures.

Completion date

30/11/2022

Eligibility

Key inclusion criteria

1. Endoscopy units: NHS endoscopy units in the UK that perform at least 600 colonoscopies per annum
2. Endoscopists: All consenting independently-practising colonoscopists within a trial endoscopy unit
3. Colonoscopy data): All colonoscopy data from trust-employed independent endoscopists at participating endoscopy units

Participant type(s)

Health professional

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

546

Key exclusion criteria

1. Endoscopy units:
 - 1.1. Independent sector and private sector endoscopy units
 - 1.2. Endoscopy units performing fewer than 600 colonoscopies per annum
 - 1.3. Endoscopy units without express support for the RCT from the endoscopy lead
 - 1.4. Endoscopy units without express support for the RCT from the trust's R&D team
 - 1.5. Those units not participating in valid accurate data-uploading to NED
2. Endoscopists:
 - 2.1. Non-consenting colonoscopists
 - 2.2. Colonoscopists in non-independent (supervised) training (NB – trainees who are performing colonoscopies independently can participate)
3. Colonoscopy data:
 - 3.1. Procedures performed by trainee endoscopists in non-independent (supervised) training
 - 3.2. Procedures where an independent endoscopist was acting as a trainer
 - 3.3. Procedures performed by endoscopists who are not employed by that trust
 - 3.4. Procedures performed by endoscopists who are not anticipated to remain in the trust for the duration of the RCT

Date of first enrolment

21/11/2019

Date of final enrolment

30/11/2020

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Aintree University Hospital

Lower Lane

Liverpool

United Kingdom

L9 7AL

Study participating centre

Airedale NHS Foundation Trust

Airdale Hospital

Skipton Rd

Steeton

Keighley

United Kingdom

Keighley

Study participating centre

Ashford & St Peter's NHS Trust

Ashford Hospital

London Road

Ashford

Surrey

Ashford

United Kingdom

TW15 3AA

Study participating centre

Barts Health

The Royal London Hospital

Whitechapel Rd

Whitechapel

London

United Kingdom

E1 1BB

Study participating centre

Basildon & Thurrock University Hospitals NHS Foundation Trust

Basildon University Hospital
Nethermayne
Basildon
United Kingdom
SS16 5NL

Study participating centre

Bedford Hospital NHS Trust
Bedford Hospital
Kemston Rd
Bedford
United Kingdom
MK42 9DJ

Study participating centre

Bradford Teaching Hospitals NHS Foundation Trust
Bradford Royal Infirmary
Duckworth Lane
Bradford
United Kingdom
BD9 6RJ

Study participating centre

Brighton & Sussex University Hospitals NHS Trust
The Royal Sussex County Hospital
Barry Building
Eastern Rd
Brighton
United Kingdom
BN2 5BE

Study participating centre

Cambridge University Hospitals
Addenbrooke's Hospital
Hills Rd
Cambridge
United Kingdom
CB2 0QQ

Study participating centre

County Durham & Darlington Hospitals

Bishop Auckland Hospital
Cockton Hill Rd
Bishop Auckland
United Kingdom
DL14 6AD

Study participating centre

Dorset County Foundation

Dorset County Hospital
Williams Ave
Dorchester
United Kingdom
DT1 2JY

Study participating centre

East & North Herts NHS Trust

Lister Hospital
Coreys Mill Lane
Stevenage
United Kingdom
SG1 4AB

Study participating centre

East Kent University Hospitals Trust

Queen Elizabeth the Queen Mother Hospital
St Peter's Rd
Margate
United Kingdom
CT9 4AN

Study participating centre

East Sussex Healthcare NHS Trust

Eastbourne District General Hospital
Kings Dr
Eastbourne
United Kingdom
BN21 2UD

Study participating centre

Frimley Park Hospital

Portsmouth Rd

Frimley

United Kingdom

GU16 7UJ

Study participating centre

Gloucestershire Hospitals NHS Foundation Trust

Cheltenham General Hospital

Sandford Rd

Cheltenham

United Kingdom

GL53 7AN

Study participating centre

Guy's and St Thomas' NHS Foundation Trust

St Thomas' Hospital

Westminster Bridge Rd

London

United Kingdom

SE1 7EH

Study participating centre

University Hospitals Birmingham NHS Foundation Trust

Good Hope Hospital

Rectory Rd

Sutton Coldfield,

United Kingdom

B75 7RS

Study participating centre

Hampshire Hospitals NHS Foundation Trust

Royal South Hants Hospital

Brintons Terr

Southampton

United Kingdom

SO14 0YG

Study participating centre

Isle of Wight NHS Primary Care Trust

St Mary's Hospital

Parkhurst Rd
Newport
United Kingdom
PO30 5TG

Study participating centre
James Paget University Hospital
Lowestoft Rd
Gorleston
Great Yarmouth
United Kingdom
NR31 6LA

Study participating centre
Oxford University Hospitals NHS Foundation Trust
John Radcliffe Hospital
Headley Way
Headington
Oxford
United Kingdom
OX3 9DU

Study participating centre
Lancashire Teaching Hospitals NHS Trust
Royal Blackburn Teaching Hospital
Haslingden Rd
Blackburn
United Kingdom
BB2 3HH

Study participating centre
London North West / St Mark's
St Mark's Hospital
Watford Rd
Harrow
United Kingdom
HA1 3UJ

Study participating centre
Maidstone Hospital & Tunbridge Wells Hospital
Maidstone Hospital

Hermitage Lane
Maidstone
United Kingdom
ME16 9QQ

Study participating centre

North Bristol NHS Trust
Southmead Hospital
Southmead Rd
Westbury-on-Trym
Bristol
United Kingdom
BS10 5NB

Study participating centre

North Cumbria NHS Foundation Trust
Cumberland Infirmary
Newton Rd
Carlisle
United Kingdom
CA2 7HY

Study participating centre

North Tees & Hartlepool NHS Trust
University Hospital of North Tees
Hardwick
Stockton on Tees
United Kingdom
TS19 8PE

Study participating centre

Sheffield Teaching Hospital NHS Foundation Trust
Northern General Hospital
Herries Rd
Sheffield
United Kingdom
S5 7AU

Study participating centre

Northumbria Healthcare NHS Foundation Trust
North Tyneside General Hospital

Rake Ln
North Shields
United Kingdom
NE29 8NH

Study participating centre
Nottingham University Hospitals NHS Trust
Queen's Medical Centre
Derby Rd
Nottingham
United Kingdom
NG7 2UH

Study participating centre
Pennine Acute Hospitals NHS Trust
The Royal Oldham Hospital
Rochdale Rd
Oldham
United Kingdom
OL1 2JH

Study participating centre
Royal Berkshire NHS Foundation Trust
Royal Berkshire Hospital
London Rd
Reading
United Kingdom
RG1 5AN

Study participating centre
Royal Devon and Exeter Hospital - Tiverton and Axminster Hospitals
Wondford Hospital
Barrack Rd
Exeter
United Kingdom
EX2 5DW

Study participating centre
Royal United Hospital Bath
Combe Park
Bath

United Kingdom
BA1 3NG

Study participating centre
Salford Royal NHS Foundation Trust
Salford Royal Hospital
Stott Ln
Salford
United Kingdom
M6 8HD

Study participating centre
Sherwood Forest Hospitals NHS Foundation Trust
King's Mill Hospital
Mansfield Rd
Sutton-in-Ashfield
United Kingdom
NG17 4JL

Study participating centre
Shrewsbury & Telford Hospital NHS Trust
Royal Shrewsbury Hospital
Mytton Oak Rd
Shrewsbury
United Kingdom
SY3 8XQ

Study participating centre
South Devon Healthcare NHS Foundation Trust
Torbay Hospital
Newton Rd
Torquay
United Kingdom
TQ2 7AA

Study participating centre
South Warwickshire General Hospitals NHS Trust
Warwick Hospital
Lakin Rd

Warwick
United Kingdom
CV34 5BW

Study participating centre

St George's University Hospitals NHS Foundation Trust
St Georges Hospital
Blackshaw Rd
Tooting
London
United Kingdom
SW17 0QT

Study participating centre

St Helens & Knowsley Teaching Hospitals
St Helen's Hospital
Marshalls Cross Road
St. Helens
United Kingdom
WA9 3DA

Study participating centre

Taunton and Somerset NHS Trust
Musgrove Park Hospital, , Somerset, TA1 5DA
Taunton
United Kingdom
TA1 5DA

Study participating centre

The Dudley NHS Foundation Trust
Russells Hall Hospital
Pensnett Rd
Dudley
United Kingdom
DY1 2HQ

Study participating centre

The Princess Alexandra Hospital
Hamstel Rd

Harlow
United Kingdom
CM20 1QX

Study participating centre

The Rotherham NHS Foundation Trust
Rotherham General Hospital
Moorgate Road
Rotherham
United Kingdom
S60 2UD

Study participating centre

The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
Royal Bournemouth Hospital
Castle Lane East, ,
Bournemouth
United Kingdom
BH7 7DW

Study participating centre

The Royal Liverpool & Broadgreen Trust
The Royal Liverpool Hospital
Prescot St
Liverpool
United Kingdom
L7 8XP

Study participating centre

The Royal Wolverhampton NHS Trust
New Cross Hospital
Wolverhampton Rd
Heath Town
Wolverhampton
United Kingdom
WV10 0QP

Study participating centre

University Hospitals Birmingham NHS Foundation Trust
Queen Elizabeth Hospital Birmingham
Mindelsohn Way

Edgbaston
Birmingham
United Kingdom
B15 2GW

Study participating centre
University Hospitals Coventry & Warwickshire
University Hospital Coventry
Clifford Bridge Road
Coventry
United Kingdom
CV2 2DX

Study participating centre
West Herts Hospital NHS Trust
Watford General Hospital
Vicarage Rd
Watford
United Kingdom
WD18 0HB

Study participating centre
West Sussex Hospital
Spitalfield Lane
Chichester
United Kingdom
PO19 6SE

Study participating centre
Wye Valley Trust - Hereford and Ross
Hereford County Hospital
Union Walk
Hereford
United Kingdom
HR1 2ER

Study participating centre
Yeovil District Hospital NHS Foundation Trust
Yeovil District Hospital
Higher Kingston
Yeovil

United Kingdom
BA21 4AT

Study participating centre

York Teaching Hospital

The York Hospital
Wigginton Road
York
United Kingdom
YO31 8HE

Sponsor information

Organisation

Newcastle upon Tyne Hospitals NHS Foundation Trust

ROR

<https://ror.org/05p40t847>

Funder(s)

Funder type

Charity

Funder Name

Health Foundation; Grant Codes: 695428

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository. The study utilises the National Endoscopy Database [NED] data set which is overseen by JAG/RCP London (<https://www.thejag.org.uk/> or <https://www.rcplondon.ac.uk>). This dataset does not contain any patient identifiable data. For the NED: APRIQOT trial; a data download from NED is being provided to the research team lead by Newcastle University (the sponsor) as per data sharing agreement. The participants (endoscopists and clinical endoscopy leads) are consenting to the data sharing as part of the informed consent process.

IPD sharing plan summary

Stored in non-publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		15/05/2024	20/05/2024	Yes	No
Other publications		10/12/2021	01/10/2025	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes