NED National Endoscopy Database

Improving quality outcomes: the NED APRIQOT programme

We caught up with Professor Matt Rutter ahead of the next phase of the NED APRIQOT programme to shine a spotlight on the project and find out a little more about what it is, how it works and what's in store next for the programme.

Who are you and what do you do?

I'm Professor Matt Rutter, a consultant gastroenterologist based in the North East of England, and chair of JAG.

What is your relationship with the NED APRIQOT programme?

I am the chief investigator of the NED-APRIQOT programme.

How did the APRIQOT programme come about?

APRIQOT stands for Automated Performance Reports to Improve Quality Outcomes Trial. We set up the NED-APRIQOT programme in 2018, funded by the Health Foundation, aiming to exploit the potential of our National Endoscopy Database to produce automated feedback performance reports for endoscopists. We wanted to determine whether we could create an entirely automated performance feedback loop (reducing the workload for individual endoscopy units) and whether this electronic behaviour change intervention would improve colonoscopy quality.

What have been some major highlights of the APRIQOT programme and the projects developed as a result?

We set up a series of projects, culminating in a randomised controlled trial (RCT). As part of the work, we underwent a consensus process to understand the most impactful potential interventions including the format of the report and the best way to look at colonoscopy performance. We then developed a novel polyp detection metric, adjusted for patient age, sex and procedural indication. We validated that metric against other quality parameters. We then developed the IT system to automate the process, from capture of the procedural data to analysis of

the data to create the performance metric, to communicating that benchmarked result to each endoscopist and endoscopy lead. We then ran the RCT (successfully improving polyp detection) and a parallel health economic evaluation (improving colonoscopy quality saves money). Finally, we performed qualitative analysis using a dark logic model to explore adverse effects in audit and feedback.

Several additional spin-off publications emerged, including an analysis of the quality of colonoscopy at weekends, which showed that it is of lower quality.

Now that the initial phase of the programme has come to an end, can you tell us about the next phase of the programme?
We plan to roll out the NED-APRIQOT automated feedback process across the UK. Because our work to date took place as part of an RCT, we initially plan to pilot the system in a small number of centres to ensure it works in everyday practice and to ensure we can scale it up successfully.

What has inspired you about your work with the APRIQOT programme?
It's been a wonderfully positive experience. Along with the successful completion of the trial and associated projects, I think the greatest joy has come from collaborating with such a wide range of people, including academics, researchers, endoscopists, patients and policy makers to name just some, all of whom shared our enthusiasm and desire to improve endoscopy quality.

What are the challenges you faced with NED APRIQOT?
The main challenge was the pandemic as this made it particularly difficult to run our RCT. Eventually, we had to settle on recruiting fewer centres than we would have liked.

What do you see for the future of the NED APRIQOT?
Once we have established the UK-wide automated infrastructure, I hope that we can exploit its potential by expanding the performance reports to a wider range of endoscopic procedures and quality metrics, supporting endoscopists and endoscopy units in the delivery of high-quality care for our patients. Maybe in the future, we can repurpose the technology to use it beyond endoscopy too!

If you have any questions about the NED APRIQOT programme and wish to get in touch you can contact us at askjag@rcp.ac.uk