filing and multidisciplinary team (MDT) meeting preparation.

Use technology. For example, tracking systems and bar coding to ensure 'chain of custody' of the specimen from arrival in the laboratory. Have scanners in consultant offices to scan in the specimen number from the slide – this is quicker than typing and eliminates the risk of transcription error.

Avoid excessive checking and rechecking. Beware of confirmation bias if you recheck. For example, I have seen a system that in certain subspecialties equated to double consultant reporting of resections before authorisation. This resulted in increased reporting load on consultants and increased turnaround times without good evidence of its superior quality to individual reporting and MDT meeting review.

Consider if something is really necessary. Ask yourself if a test or additional tests such as immunohistochemistry are really necessary? Could it confuse further? Is it what the clinician needs to manage the patient?

Ask users to take patients off the cancer pathway at the earliest opportunity, to enable appropriate prioritisation if used. For example, endoscopy patients need to be taken off the pathway at the time of a normal endoscopy and not after the normal biopsy is reported as an urgent case.

Are paper copy reports required? If still required, is it a good use of secretarial time to check the specimen card against the paper report? What is the evidence?

Work to clinical priority and date order. But think about reporting smaller cases first, which is more efficient overall.

Share good ideas. Don't just develop them alone, unless only applicable to the individual. Negotiate with colleagues and share ideas with the team, department or organisation, so a common standardised solution is developed instead of using effort to create multiple individual solutions. By doing this it is possible to use the effort that would have been expended in developing multiple solutions to further improve the shared solution.

Consider reporting clinics, with consultants 'pulling' work rather than it being pre-allocated or having support staff deliver and collect work from consultants' offices.

Finally, **reflect and learn** from what didn't go well, as well as what did.

Dr Cate Wight
Network Clinical Lead for Cellular Pathology
University Hospitals Coventry and Warwickshire

Reflections on the College's CQI mentoring scheme

We hear from Dr Emma Wiley and Dr Frances Davies about their experiences of the scheme as mentee and mentor, respectively.

Dr Emma Wiley

Part one: my experience of being a CQI mentee

Why I participated in the scheme

I was undertaking a year-long Healthcare Infection Society (HIS) fellowship at University College London Hospitals (UCLH). I had already designed a stewardship research project, begun an *Escherichia coli* (*E. coli*) quality improvement (QI) project and was keen to increase my experience of designing and delivering an audit from scratch. UCLH is unusual in that we still use short-course cephalosporins and quinolones on our formulary and in our day-to-day microbiology advice to teams. We decided to audit the prescribing of the 4C antibiotics (cephalosporins, ciprofloxacin, clindamycin and co-amoxiclav) following a positive *Clostridium difficile* (*C. difficile*) result and resulting outcomes, using the Department of Health and Social Care's *How to Deal with the Problem* guidelines as an audit standard.

I already had a fellowship supervisor, who provided global strategic advice and was working in collaboration with our clinical lead for *C. difficile* and our infection control team. However, without the help of a project-specific mentor to nudge things along I was concerned the project might move less quickly. When I saw the email advertising the scheme, I was keen to apply. I wanted to work with someone with expertise in audit and awareness of its pitfalls, in order to ensure high quality methodology and avoid all the classic landmines. The opportunity to be nagged at regular planned intervals was also a plus!

My relationship with my mentor

I was matched with Dr Frances Davies, a consultant microbiologist at Imperial College London. Frances brought with her experience in a range of research, audit and QI projects and a particular interest in healthcare associated infections.

Our first meeting went very well. I sent across our provisional audit plan for Frances to review in advance, which meant we hit the ground running. Frances got straight into an appraisal of the project, asking lots of helpful questions about how our *C. difficile* service operates, providing key questions for us to consider in our data collection, and making suggestions on avenues and improvement ideas to explore. As I had been research focused for the previous few months it was helpful to be reminded of the practical applications of the work we were doing and the changes the work could make to clinical practice.

It was helpful being matched with a clinical microbiologist as a mentor. It kept the audit clinically and contextually relevant and her recommendations were practical and appropriate. Frances asked me questions about how we phone out *C. difficile* results, follow up and document our rounds, and about our existing antibiotic policy. Being asked questions focused my mind on what I already knew and areas I needed to clarify to move the audit on.

It was also helpful to have a mentor based at a different hospital. This provided space to appraise our practice in a constructively critical way to an impartial colleague. It also brought in experience of how other trusts approach the same challenges, such as the use of fidaxomicin and the role of antibiotic policy in the prevention of *C. difficile*.

Having someone dedicated to this specific project enabled us to map out some of the detail together. I also benefitted from receiving thorough commentary on the audit plan and proforma. Frances was also easy to contact and very responsive.

We spoke twice in the first quarter to scope and define the project, then at project-specific milestones. The first meeting focused on the audit plan and its timelines, the second on our data collection sheet and next steps. Once data collection was underway we met again to discuss progress and address barriers.

The planning process helped us avoid key pitfalls; for example, we recruited a larger team in order to plough through all 72 proformas, limit data collection to electronic systems rather than medical notes that were complicated to source, and establish clear, practical outcome measures. Having Frances as project mentor gave me the space to plan and avert problems before they arose.

Challenges we faced during the audit

The first obstacle was deciding whether to apply at all. Would the mentor be helpful and was it worth the time? If there is one thing that this fellowship year has taught me, it is to recognise and mould great opportunities when I find them, even if they don't seem a perfect fit at first sight. I liked the assurance that it was an RCPath-accredited scheme and that my mentor would be a pathologist and so I bit the bullet, emailed to enquire and am glad I did.

Having more than one supervisor and separate meetings also brought its challenges. While it was stimulating to hear a breadth of views, making, communicating and justifying a final decision was up to me as project lead. Which methodology to adopt and why, who would be involved and at what level of authorship? My supervisors were entirely magnanimous but I developed communication skills in keeping them up to date with changes, as well as critical thinking skills. These will stand me in good stead for the future.

Time and motivation to persist with large-volume data collection was also an issue, as this was the fourth and smallest project in the fellowship. The audit team also brought in busy care of the older junior doctors to speed up data collection, but they struggled with availability around shift work, which meant that coordinating and communicating with the team took up time and energy. Frances supported us with the tough decision to recruit new team members and say goodbye to those no longer able to contribute.

Other challenges included the limitations of medical student clinical knowledge, poor documentation without clear rationale and the requirement to log in to multiple software programs for completeness of data. There was also some important data we did not have access rights to. Frances prompted us to simplify the process and collect what was feasible rather than idealistic – this helped to maintain forward motion.

Encouraging others to participate in the scheme

The RCPath scheme is totally free and there is potential for publication in the College *Bulletin*. The College provides a template and structure for the project to assist you.

It was a straightforward application process – just a single form. As busy clinicians, it's incredibly helpful to have someone there to nudge and 'unstick' you on a regular basis, providing direction and support.

Overall, it's a great scheme and works well. Not only has it enhanced the quality of my audit and provided the whole team with support through the process, but it's also been an incentive for students and ward clinicians to join the team as they enjoy the supervision too.

I would thoroughly recommend the scheme to anyone considering doing it. Don't think twice: go ahead and apply.

Dr Emma Wiley
Microbiology Registrar and Ayliffe Infection Control Fellow

Dr Frances Davies

Part two: my experience of being a CQI mentor

Why I participated in the scheme

Over the last 20 years, I have participated in numerous audit and quality improvement (QI) projects – some successful, others not so – and benefitted from some good training along the way. I have come to understand that, when done well, an audit can really grab the attention of NHS leaders and managers, and can be a powerful driver for change. Who can afford to ignore it when someone is bold enough to stand up and say 'national guidelines say we should be achieving this target in 98% of cases. We are managing it in 48%. The impact this is having on patients is X, and some of the ways we could improve are...'?

Further down the line, reassurance that a change you have made has been effective and the results have shown real improvement is satisfying for everyone. However, training in how to conduct a good audit or QI project is not always well delivered. Too many good ideas are not followed through, or the results presented badly and ignored. Common pitfalls include being over ambitious and not finishing a project, or being too vague and not being able to draw concrete conclusions.

I was exploring how I could become more involved in the College, when an email was sent out asking for fellows to volunteer with the audit and QI team. I initially signed up to be an audit evaluator as this was an area I am interested in, and when they asked if I would be willing to act as a mentor too I thought I'd give it a try. I asked only to be matched with someone from the same specialty, as I thought that would probably be of more benefit to the mentee. I hoped that by participating in the scheme I could help provide support and encouragement to an interested party, to help see a project through to completion.

My relationship with my mentee

I was matched with Dr Emma Wiley, a microbiology registrar from UCLH. I was sent a brief outline of her project of antibiotic prescribing in *C. difficile* cases and thought that sounded like a subject I knew enough about to be useful to her, so agreed to take on the project.

Our first meeting was really interesting – I hadn't realised before we spoke that Emma was already doing an HIS fellowship and that this was one of several projects she was taking on. It became clear to me early on that she had some very good ideas and good background knowledge both of the specific subject for this project and audit and QI in general. Although this project was an audit, it fitted with her overall QI fellowship objectives. She had clearly put a lot of effort into her preparation for the project and was up to date with all the latest guidelines, both local and national. We were able to refine the project proposal quite easily and I felt that Emma left the meeting with some clear thoughts about where she wanted the project to go next.

Emma was clear and focused on what she wanted to do. I felt that mainly she just needed reassurance that she was taking the project in the right direction. All the ideas for the project were her own and she was really well prepared for each meeting we had. We had some email exchanges in between telephone meetings to check things like the audit collection tool, and she was really good at communicating the ideas back to her own team to make sure they were in line with their own objectives.

It was really interesting talking through some of the problems of how best to collect data for her project and make it achievable. Each hospital I have worked at has different IT systems, medical records systems, lab methods, antibiotic policies and patient groups, so each faces different challenges. Those where Emma worked were all unique to that trust; for data collection in particular, we rejected as many ideas as we accepted before we came up with a good way for her to conduct the audit. Taking on an audit mentorship in my own specialty was also a good prompt to me to review the guidelines and to reflect on whether we needed to do a similar audit in my own trust.

Challenges we faced during the audit

Emma and I finally met in person (briefly) at a conference eight months after the start of the project. In retrospect, as we were living and working in the same city I think we should have tried to meet in person earlier in the project. For a future project, I would definitely try to meet in person at an earlier stage if at all possible or, failing that, by video conferencing.

I was very wary of not interfering – or being seen to interfere – with a project taking place at another hospital. My role in the project was not there to judge any of the results Emma found, but to provide impartial, constructive advice about how she might be able to best plan, investigate and present her findings. I was rather reluctant to be considered an author on the audit, as all the work was being done at a different institution and I did not want to offend any of the people she was working with in her own department – particularly not her fellowship supervisor.

When I am supervising or participating in audits at my own institution, it is often tempting to try to help out with data collection and analysis when the deadline is being reached. This is clearly not possible when the main investigator and all the records are at a different trust entirely. I helped Emma try to work through how much patient data were really needed and if the data set

needed to be as large as she initially wanted. Emma showed great persistence in seeing the data collection through to the end.

Encouraging others to participate in the scheme

Overall, I really enjoyed participating in the scheme and would recommend it to other College members and fellows who are looking to get more involved in College activities and are interested in this area. I think there is a benefit to matching someone within the same specialty – I may not have been so helpful if I was mentoring someone in a different pathology branch.

I have recommended submitting an audit for evaluation to several of my colleagues, and I think the feedback has always been constructive and helpful. If I had a colleague who was interested in applying to this mentorship scheme as a mentee, I would definitely encourage them.

Dr Frances Davies
Consultant Microbiologist, Imperial Healthcare NHS trust