

Curriculum for Advanced Colonoscopy Advanced Training Skills Module (ATSM)

Curriculum objectives:

To address critical workforce shortages and capacity constraints in colonoscopy services for the national Bowel Cancer Screening Programme (BCSP). These challenges are expected to escalate due to increased demand arising from age extension, inclusion of Lynch syndrome patients, and lowering of the FIT (faecal immunochemical test) positivity threshold. Workforce projections indicate imminent retirements of a significant number of screeners within the BCSP, creating a shortfall in skilled practitioners.

Key Challenges:

1. **Training Bottlenecks:** In the current working climate, most colonoscopists require a number of years of post CCT (Certificate of Completion Training) practice, to achieve the competency and experience level required by the BCSP accreditation process. This reflects the broader challenges of access to sufficient training opportunities, and the demands of other job planned activities.
2. **Regional Disparities:** There are significant geographic inequalities in the availability of skilled and accredited screening colonoscopists, with rural areas facing severe capacity constraints that can delay diagnosis and treatment.
3. **The changing demographic of higher specialist trainees** and increasing numbers training less than full time (LTFT) will impact on future workforce issues. Enabling and attracting more women, and those who choose to work LTFT to train as bowel cancer screeners will be important to diversify the workforce and ensure equality, diversity, and inclusion (ED&I) issues are addressed.
4. **Technically Demanding Procedure:** Bowel cancer screening and polypectomy are highly technical procedures with inherent risks, such as perforation and bleeding, particularly post-polypectomy. Maintaining high-quality standards is crucial for a successful screening programme.

Fellowship Solution:

- **Bridge Workforce Gaps:** Train more colonoscopists at an earlier stage of their careers, particularly targeting a broader demographic to increase the pool of potential screeners and address the workforce gap in underserved regions and those facing retirements.
- **Rapid Skill Acquisition:** Focus on immersive, hands-on training under the mentorship of skilled practitioners to expedite competency development and deliver BCSP colonoscopists at an earlier stage of their career.

Eligibility and Structure:

- **Target Group:**
 - Post-ST5/6 Gastroenterology trainees with JAG (Joint Advisory Group) accreditation in basic colonoscopy (or nearing certification) and who have had standard annual review of competency progression (ARCP) outcomes at ARCP with satisfactory progression in curriculum competencies.

- Suitably motivated colorectal surgical trainees (post ST6) who have an intention to dedicate time to bowel cancer screening and who have achieved JAG accreditation in basic colonoscopy (or nearing certification).
- Whilst this is primarily open to higher specialist trainees, non-training grades, and post CCT applicants will also be considered.
- A broader demographic of applicants will be promoted aiming to tackle current gender disparities in bowel cancer screeners.
- **Duration:** This will generally be for 12 months (or proportionately longer for LTFT trainees).
- **Procedure Numbers:** Fellows will aim for 800–1,000 lifetime procedures and achieving Key Performance Indicators (KPIs) set by the BCSP. Job plans will facilitate achieving this through a minimum of 4-5 colonoscopy lists per week with a mix of training and independent lists. (*Approval for training on BCSP lists is currently being sought to avoid disadvantaging other colonoscopy trainees*).
- **The fellowship may be designed to** include activity in two BCSP centres within the region, to allow BCSP fellows (and their future colleagues) to get to know each other and improve prospects for longer term workforce solutions. To optimise training opportunities and increase exposure to other centres the fellowship may be designed to include activity in more than one centre.
- **Upon return to training programmes** Training Programme Directors (TPDs) will be expected to provide opportunities to maintain and develop additional colonoscopy competencies relevant to the trainee.
- **For higher specialist trainees the ATSM will be undertaken as Out of Programme Experience (OOPE):** Documentation of competency progression with appropriate e-portfolio evidence will allow ARCP panels to consider the evidence and adjust the final CCT date if appropriate to reflect the skills gained.

Curriculum Components:

1. **Theoretical Knowledge:** E-learning modules on anatomy, pathology, patient management, and complication management in addition to principles and public health approach to screening.
2. **Procedural Training:** Participation in JAG-approved courses, supervised endoscopic practice with regular formative assessments, progressing to independent procedures with mentorship.
3. **Endoscopic non-technical skills:** Room leadership, team working and communication skills.
4. **Polyp Detection and Characterization:** Training in techniques for detecting and classifying polyps using high-definition imaging, narrow-band imaging (NBI), and AI-based tools.
5. **Advanced Imaging Techniques:** Use of White Light Endoscopy (WLE), NBI, chromoendoscopy, and virtual chromoendoscopy to recognise polyp features and categorise them using NICE (National Institute for Health and Care Excellence), Kudo, and other classification systems to achieve an optical diagnosis.
6. **Practical Training:** Real-time, supervised polyp detection and categorisation, followed by image review sessions.
7. **Advanced Techniques and Polypectomy:** The fellowship objective is for competence in Level 1- 3 polypectomy using Endoscopic Mucosal Resection (EMR).

Trainees wishing to undertake training in level 4 polypectomy and Endoscopic Submucosal Dissection (ESD) will need to consider undertaking a post CCT fellowship or being supported by their host trust to undertake this training as a new consultant.

8. **Decision-Making in Complex Cases:** Multidisciplinary team (MDT) collaboration and shared decision-making with patients in challenging polyp cases.
9. **Post-Procedural Care:** This includes training in complication management such as bleeding or perforation, and determining follow-up based on risk and patient co-morbidities.
10. **Research and Continuous Improvement:** Involvement in research and quality improvement projects to align practices with evolving clinical guidelines. Involvement in regional and screening centre activity to develop a good understanding of how screening is delivered and quality assured.

Assessment and Competency Evaluation:

- Continuous assessment throughout the fellowship, with a focus on endoscopic non-technical skills, and competency in both practical and theoretical aspects of colonoscopy and bowel cancer screening.
- Monitoring of KPIs as defined by the national BCSP and evidenced by DOPS (Direct Observation of Procedural Skills) on JETS (JAG Endoscopy Training System) e-portfolio.
- Adherence to established guidelines from the BSG (British Society of Gastroenterology), JAG, and ESGE (European Society of Gastrointestinal Endoscopy) for evaluating competency and professional development.

Objectives of Post

The training centre/hosting organisation will support the BCSP fellow in achieving national BCSP endoscopist accreditation criteria and where these have been achieved, they will support the fellow to apply for BCSP accreditation during their fellowship.

It is recognised that one year may be insufficient in all cases to achieve the lifetime procedure numbers required by BCSP accreditation. It is also unlikely that training in advanced EMR and ESD techniques can be delivered within a 12-month period. A post CCT fellowship may be appropriate for trainees who wish to develop these skills.

Mentorship and Networking

Ongoing mentorship and encouragement to participate in endoscopy societies (e.g. BSG, JAG and ESGE) to foster professional growth and networking opportunities.

This fellowship, through its comprehensive and targeted training approach, is designed to create a robust pipeline of highly skilled BCSP colonoscopists, thereby addressing both immediate and long-term workforce needs.

Endorsement

This curriculum has been written in collaboration with the following stakeholders.



References

1. [200131- Bowel Cancer Screener Accreditation Guidelines - Colonoscopists V1.6.pdf](#)
2. UK Key Performance Indicators and Quality Assurance Standards for Colonoscopy; GUT 2016;65:1923-1929. Colin J Rees, Siwan Thomas Gibson, Matt Rutter, Phil Baragwanath, Ruper Pullan, Mark Feeney, Neil Haslam on behalf of the British Society of Gastroenterology, The Joint Advisory Group on GI Endoscopy, the Association of Coloproctology.