

JETS JAG Endoscopy
Training System

JAG endoscopy trainer pathway

How to become and develop as an endoscopy trainer

Part of the JAG programme at the RCP

JAG Joint Advisory Group
on GI Endoscopy



Royal College
of Physicians

Introduction

JAG provides support to UK endoscopists in their development as endoscopy trainers, recognising their vital role in training future generations in high quality GI endoscopy. There is evidence that teaching improves not only the endoscopy skill of the trainee, but also the trainer ¹.

This document lays out the desired characteristics for an endoscopy trainer. It then outlines the opportunities available to develop these characteristics within the JAG curriculum. This creates a pathway for trainer development.

Characteristics of an effective endoscopy trainer

To be an effective trainer, the individual needs to be able to demonstrate the following attributes:

1. **Ensure the centrality of the patient when training in endoscopy.**
2. **Motivation to be an effective endoscopy trainer.**
3. **Ability to Perform Endoscopy** with a conscious competence of how they have this ability – having the knowledge and skills regarding endoscopy that need to be transferred to the trainee.
4. **Ability to Teach** with a conscious competence of how to transfer the knowledge and skills regarding endoscopy to the trainee.
5. **Ability to create an effective learning atmosphere using interpersonal skills** that provides a safe environment for trainees to learn without anxiety.
6. **Promote self-reflective practice** in trainees to enable them to learn and develop outside of a structured teaching setting.
7. Ability to reflect on their teaching and make changes **based on this reflection** allowing development as a trainer.

How to acquire, maintain and then develop the above characteristics

Ensure the centrality of the patient when training in endoscopy:

Endoscopy is an invasive procedure performed in a patient who may be fully conscious or only lightly sedated. All training must take place with this in mind. Patients must be consented to have their procedure performed by a trainee, be respected and kept safe at all times within the training encounter.

Motivation to be an effective endoscopy trainer:

Endoscopists are responsible for providing effective training and should be motivated to develop as individual trainers and to ensure an effective endoscopy training environment in their units.

Ability to perform endoscopy:

This is assessed as part of an endoscopist's training as they work towards certification. The ability of an endoscopist continues to develop after certification (e.g. becoming a bowel cancer screener or

simply continue to monitor and improve personal key performance indicator (KPIs)). All endoscopists should reflect regularly on their practice and make changes to be effective endoscopists.

The DOPS (direct observation of procedural skills) forms provided on the JETS website provide a competency framework, divided into a list of specific items or competencies, required to perform each of the endoscopic skills. These competencies are underpinned by detailed descriptors, which enable objective assessment of an individual performing the procedure. This also allows for a summative assessment of when competence has been achieved in each of the individual elements of the procedure as well as the procedure overall. DOPS are available for a variety of endoscopic procedures and provide a competency framework or 'how to do it' guide for what is needed to perform the endoscopic skill³. When training a trainee in a procedure the trainer should be aware of the contents of the DOPS for that procedure.

Ability to Teach:

Within the JAG curriculum the knowledge framework for teaching is provided in the Key Notes for the Training the Colonoscopy Trainers course⁴. JAG provides training the endoscopy trainers (TET) courses where this knowledge is taught with opportunities to practice teaching skills over live cases.

Trainers may also have teaching skills they have acquired in other areas of practice that can be applied to endoscopy training.

Ability to create an effective learning atmosphere using interpersonal skills:

The knowledge for this is described in the literature^{2,4}. Opportunities to practice this are provided on TET courses. Trainers may apply knowledge and skills within this domain acquired in other areas of practice. Making a trainee relaxed allows them to learn more effectively.

Promote self-reflective practice:

Training provides a platform to consolidate a trainee's knowledge and skills, reinforcing good practice, but more importantly identify areas where improvement will lead to a performance enhancing effect. Trainers should encourage trainees to be pro-active in their approach to endoscopy procedures and develop problem-solving algorithms based on increasing their conscious competence in the skill. The trainer has an important role in encouraging self-reflective practice which helps to develop conscious competence.

Ability to reflect on their teaching and make changes based on this reflection:

The JAG curriculum provides teaching feedback tools that can be used by trainees, by the trainer themselves (self-reflection) or peers to give a framework to aid reflection & feedback for the trainer.

The Direct Observation of Teaching Skills (DOTS) form can be used to provide direct feedback for individual teaching episodes or course.

The JETS website provides a summary function that allows an endoscopist to create a summary of the endoscopy training they have delivered over a period of time. This includes a summary of the teaching feedback received. This data can be used for annual appraisals and contribute to re-validation.

Resources available through the JAG training curriculum to support endoscopy trainer development

Endoscopy trainers should be familiar with the following endoscopy training tools and processes.

JETS website – JAG endoscopy training system

JAG provides a training website called JETS. All trainers and trainees must be registered with JETS. The website provides access to resources that can be used for teaching – e-portfolio, access to DOPS/DOTS, booking of courses etc. All formal endoscopy training is managed through the JETS website.

DOPS forms

Formative DOPS are used to assess trainees and provide a basis for where training should be directed. Formative DOPS forms are available for the following procedures:

1. Colonoscopy and Flexible sigmoidoscopy
2. Upper GI endoscopy
3. Polypectomy (DOPyS – direct observation of polypectomy skills)
4. Upper GI bleeds
5. ERCP
6. EUS
7. Dilatation and Stent insertion
8. PEG
9. Capsule endoscopy
10. Paediatric upper GI endoscopy
11. Paediatric Colonoscopy

These DOPS are available in pdf form via the JAG download centre ³. They are also available electronically through the JETS website ⁵.

Trainers should be familiar with the contents of the DOPS for the procedures they teach. These formative forms are used in the process of training a trainee in an endoscopic procedure. A trainer should complete at least one DOPS for every training list they teach.

Summative DOPS are available for upper GI endoscopy and colonoscopy. These forms are used to assess that a trainee has achieved a level of performance that demonstrates competence in performing that procedure independently. They are used as part of the certification process.

Appraisal form

JETS provides an appraisal form that should be used when a trainee starts in a unit. This is completed by the trainer with the trainee at the start of their rotation and at regular intervals throughout the placement (recommended every 6 months). The form looks at: Knowledge, Skills, Attitude and Judgement related to endoscopy performance. Appraisals provide an opportunity to direct learning objectives over set periods of the trainee's training.

These forms can also be used as a tool to develop independent endoscopists.

Certification Process

JAG provides a certification process for trainees to achieve competence in endoscopic procedures. To date certification is available for Upper GI endoscopy, flexible sigmoidoscopy and colonoscopy. The certification process will soon be available for ERCP, capsule endoscopy, EUS and Upper GI bleeding.

The process is slightly different for each procedure but consist of:

1. Structured training lists at trainee's base hospital
2. Recording of development using sequential DOPS (at least one per 10 procedures)

3. Attendance at basic skills course for the relevant endoscopic procedure
4. Achievement of a set of “key performance indicators”
5. Assessment with summative DOPS
6. Sign off by Trust training lead
7. Sign off by external assessor through JAG

An endoscopy trainer should be aware of the certification process for the procedures which they train trainees.

Training the Endoscopy Trainers Courses

Every endoscopist who delivers endoscopy training should attend a training the endoscopy trainers course. This is a requirement for the GRS (global rating scale) training domain. These courses provide structured teaching of adult learning and teaching of adults. These skills are adapted to the teaching of endoscopy. The courses also provide the trainee trainers with an opportunity to deliver training with detailed feedback. The courses are based on the contents of the Key Notes in endoscopy training ⁴. An endoscopy trainer should have attended one of these courses.

Endoscopy Training Centres

There are 30 centres in the UK providing endoscopy training courses. Each centre must provide basic skills in upper GI endoscopy courses, basic skills in lower GI endoscopy courses and a training the endoscopy trainers courses. Other courses are available. The suite of courses on offer at each centre is accessible through JETS ⁵. A trainer should be aware of the available courses for both their own development as an endoscopist and trainer, but also to direct their trainees to available learning.

The training centres are spread throughout the UK and there will be a training centre local to the unit that the trainer works.

The training centres have a national lead and meet as a group twice per year. This ensures national conformity of teaching and practice.

Basic Skills in GI endoscopy courses

The fundamental courses in the endoscopy training curriculum are the basic skills in upper GI endoscopy and the basic skills in lower GI endoscopy courses. These are held frequently in all training centres. An endoscopy trainer should attend one of these courses as a trainer, trainee trainer or observer in every revalidation cycle. Endoscopy Training Leads in each endoscopy unit should attend a course every year. This assures that training is delivered consistently throughout the endoscopy curriculum.

Endoscopy Training Lead

Every unit that delivers endoscopy training has an endoscopy training lead. The training lead is responsible for delivery of the endoscopy training curriculum at their endoscopy unit. They have a good knowledge of JETS and can be a resource for the local support of trainer development. They are encouraged to provide their endoscopy trainers with feedback on their endoscopy training.

DOTS (direct observation of teaching skills) forms

DOTS forms are available after every endoscopy teaching encounter. They can be filled in by the trainee and also self-completed by the trainer. They can also be completed by a peer. They provide a framework for feedback and reflection to allow ongoing trainer development. Endoscopy trainers should be familiar with the contents of the DOTS as this can guide where ongoing development is needed. A summary of DOTS feedback is available on the JETS e-portfolio for each trainer.

LETS (longer term evaluation of teaching skills) forms

These forms are available when an endoscopy appraisal takes place. Appraisals should take place at the start and end of placements at each endoscopy placement. The LETS form will be available on JETS to the trainee and the trainer after an appraisal is completed. Endoscopy trainers should be familiar with the contents of the LETS to aid the support of long term endoscopy development in their trainees.

JAG- QA of training subcommittee

JAG have a quality assurance working group that formulates and develops the endoscopy training curriculum. The group are also responsible for overseeing the quality assurance of the delivery of the curriculum. The group meets twice per year.

Endoscopy trainer development pathway

There is not a formal process to become an endoscopy trainer. The table below is a suggested framework to guide an endoscopist who would like to develop their endoscopy teaching ability. Opportunities vary throughout the UK but the overall framework is similar.

Steps 1-4 are a basic level of expectation for all endoscopists. Steps 5-8 are available to all and are encouraged in those who have an interest in developing their training skills.

Each trust should put forward trainers to be regular faculty at endoscopy training centres. Individuals can become training faculty without working at a JAG approved training centre.

Trainer development pathway - all endoscopists

Step	Competence	Measure	Timeframe
1. Attain competence in the endoscopic procedure to be taught	Train to become independently working endoscopist	Achieve certification in relevant endoscopy procedure	OGD 12-18, Colonoscopy 18-36 and ERCP 24-36 months
	Independent practice at base unit	Maintain KPIs in endoscopic procedure using endoscopy performance audit	6-12 months after certification
	Reflect on practice and develop conscious competence on how to perform the procedure	Reflect after each procedure Peer review DOPS completion	Throughout training and practice
2. Attain teaching knowledge and skills	Attend training the endoscopy trainers course	Course certificate	6-12 months into independent practice
	Observe others teaching & learning	Observe training lists performed by experienced endoscopy trainers – use DOTS to understand process	After attaining certification for independent practice
3. Start Training others in endoscopy	Manage a training list as the trainer	Record on JETS	6-12 months after attaining independent practice
		Complete DOPS for every list	
		Encourage trainee to complete feedback DOTS	
		Complete self reflection DOTS	
4. Maintain endoscopy training skills	Contact endoscopy training centre and attend basic skills in endoscopy course as observer, trainer or trainee	Feedback from course – includes course feedback and individual feedback with comments also peer DOTS	At least every revalidation cycle for non-training leads
	DOPS per list	Annual training summary PDF – discuss at appraisal	Annual appraisal
	DOTS per list	Encourage trainees to provide feedback on training – using DOTS as framework	
	Attend JAG training meeting	Invitation	2 per year
	Involvement in work streams related to these bodies	Reports, research etc	As needed

Trainer development pathway – other opportunities for further development

Step	Competence	How measured	Timeframe
5. Become trust endoscopy training lead	Appointment as training lead	Produce annual endoscopy training report	Depending on local need and individual interest and competence
		Provide training feedback for trainers within unit DOTS, Appraisal	Ongoing – part of annual training report
		Attend at least one basic skills course per year	Every year
6. Become regular faculty at basic skills courses	Contact local training centre lead Attend courses Take lead in course	Feedback Trainee DOTS Peer DOTS Annual training summary PDF	Depending on individual interest and competence
7. Become course lead/training centre lead or co-lead	Manage program of endoscopy training within JAG framework	Feedback – training centre annual report	Depending on local need and individual interest and competence
	Develop specific skills course	Course feedback	Depending on local need
8. Become involved with QA of training and development of endoscopy training curriculum	Attend Training Centre Leads meeting	On minutes	Occur twice or year

References

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