

CCT in Anaesthetics

Annex G
Teaching and Training, Academic
and Research (including Audit),
Quality Improvement, and
Management for Anaesthesia,
Critical Care and Pain Medicine

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Academic and research [including Audit]

Basic level

Learning outcomes:

- Understands and commits to the principles of evidence based practice. Is expert at finding evidence, standards and guidelines
- Contributes actively to the local processes of auditing clinical performance against agreed standards
- Commits to the belief that evidence based practice improves patient safety and clinical outcomes
- Commits to openness in audit including inter-professional cooperation and the principle of making outcomes available to patients
- Understands the principles of scientific enquiry in medical practice
- Can read and evaluate a report of medical research in their area of practice including a consideration of the numerical analysis
- Can present a topic at an audit, clinical governance meeting and/or journal club
- Passed Primary FRCA

Assessment

- Has recorded satisfactory attendance at local audit, M & M, MDT and journal club meetings
- Reflective portfolio of attendances
- Has engaged in audit personally
- Passed primary exam

Knowledge		
Competence	Description	GMP
Evidence based practice		
AR_BK_01	Outlines levels of evidence and quality of evidence and explain the implications for practice	1
AR_BK_02	Understands the processes that result in nationally applicable guidelines e.g. NICE and SIGN	1
AR_BK_03	Recognises the common need to practice outside clinical guidelines	1
Monitoring practice		
AR_BK_04	Explains critical incident reporting, including but not exclusively:	1,2

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
	<ul style="list-style-type: none"> • Purpose and value • Local and national methods • Pros and cons of anonymity 	
AR_BK_05	Understands the steps involved in completing the audit cycle	1
AR_BK_06	Understands the different methods of obtaining data for audit including patient feedback questionnaires, hospital sources and national reference data	1
AR_BK_07	Understands the role of audit including but not exclusively improving patient care and services, risk management etc	1
Developing practice		
AR_BK_09	Explains the scientific basis of clinical practice	1
AR_BK_10	Outlines the differences between audit and research	1
AR_BK_11	Understands the use and differences between the basic measures of risk and uncertainty	1,2
AR_BK_12	Knows the basis of the numerical methods commonly used in quantitative research	1
AR_BK_13	Know the advantages and disadvantages of different study methodologies [quantitative and qualitative] for different types of questions	1
AR_BK_14	Explains how to assess the appropriateness of the statistical methods used to analyse research data	1
AR_BK_15	Explains how to interpret clinical data and deal with artefact and error	1
AR_BK_16	Explains how relative and absolute risks are derived and the meaning of the terms predictive value, sensitivity and specificity in relation to diagnostic tests	1,2

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Evidence based practice		
AR_BS_01	Able to search the medical literature including using PubMed, Medline, Cochrane reviews and the internet	1
AR_BS_02	Appraises retrieved evidence to address a clinical question	1
AR_BS_03	Applies conclusions from critical appraisal into clinical care	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
AR_BS_04	Aims for best clinical practice [clinical effectiveness] at all times, as informed by evidence based medicine	1
AR_BS_05	Able to explain the evidence base of clinical care to patients and to other members of the clinical team	1,3
AR_BS_06	Communicates risk information, and risk-benefit trade-offs, in ways appropriate for individual patients	1,2,3,4
AR_BS_07	Keeps up to date with national reviews, key new research, and guidelines of practice e.g. NICE and SIGN	1,2
Monitoring practice		
AR_BS_08	Recognises knowledge gaps, and keeps a logbook of clinical questions Portfolio	1
AR_BS_09	Attends departmental audit meetings	1,2,3
AR_BS_10	Contributes data to a local or national audit	1,3
AR_BS_11	Describes the Plan, Do, Study, Act [PDSA] audit cycle and takes an audit through the first steps	1,2
AR_BS_12	Demonstrate presentation skills to a live audience including the planning and preparation of the presentation	1
AR_BS_13	Regularly attends morbidity and mortality review meetings [See recommendations in 'Assessment' above]	1,2,3
Developing practice		
AR_BS_14	Demonstrates an informed critical approach to scientific literature	1
AR_BS_15	Regularly participates in departmental or other local journal club [See recommendations in 'Assessment' above]	1,2,3
AR_BS_16	Demonstrates an inquisitive and questioning approach to clinical practice	1,2
AR_BS_17	Demonstrates ability to assess the appropriateness of the statistical techniques used to analyse research data	1
AR_BS_18	Demonstrates ability to analyse and structure clinical decisions in terms of risks and benefits	1,2,3,4

Intermediate level

Learning outcomes:

- At the end of this period of training the trainee will have consolidated their understanding of evidence based practice and audit
- They will be able to undertake simple audit projects independently
- They will have extended their critical abilities with regard to clinical science
- They will be assured presenters in clinical audit meetings and journal clubs

Assessment

- Has recorded satisfactory attendance at 15 of local audit, MDT, M & M and journal club meetings
- Reflective portfolio of attendances
- Passed Final FRCA exam
- Has presented at Journal club, Audit and Morbidity and Mortality meeting
- Portfolio shows clinical critical incidents and reports

Knowledge		
Competence	Description	GMP
Evidence based practice		
AR_IK_01	Understands the rationale and methodology of meta-analysis	1
AR_IK_02	Describes how clinical guidelines are produced	1
Monitoring practice		
AR_IK_03	Explains the major national audit processes, including but not exclusively the National Confidential Enquiry into Patient Outcomes and Death [NCEPOD]	1,2
AR_IK_04	Understands the links between audit and quality improvement	1,2
Developing practice		
AR_IK_05	Describes and explains the methodology and processes of clinical research, including but not exclusively: <ul style="list-style-type: none"> • Ethical and approval considerations raised by research • The importance of study design in clinical research 	1,2

	<ul style="list-style-type: none"> The importance of statistical analyses 	
AR_IK_06	Outlines the GMC guidance on good practice in research	1
AR_IK_07	Knows about local and national research guidelines	1,2
AR_IK_08	Demonstrates a knowledge of research principles	1
AR_IK_09	Explains how to test, refine and verify hypotheses	1
AR_IK_10	Explains how reasoning leads to hypothesis within the context of clinical likelihood	1
AR_IK_11	Understands the difference between population-based assessment and unit-based studies and is able to evaluate outcomes for epidemiological work	1
AR_IK_12	Demonstrates the principles of meta-analysis	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Evidence based practice		
AR_IS_01	Critically reviews an article to identify the level of evidence and submits the same for objective review	1
Monitoring practice		
AR_IS_02	Describe the working uses of national and local databases used for audit such as specialty data collection systems, cancer registries, and for reporting and learning from clinical incidents and near misses in the UK	1
AR_IS_03	Supports audit by junior medical trainees and within the multidisciplinary team	1,2,3
AR_IS_04	Suggests ideas for local audit	1,2
AR_IS_05	Attends morbidity and mortality meetings, contributes to discussions and presents cases when required	1,2,3

Higher level

At the end of this training the learner will be ready for independent clinical practice. Their personal practice will be evidence based and they will understand, discuss and advise in situations where evidence is absent or contradictory. They will commit to the importance of audit, and engage in continuous review of their personal and team performance. They will be able to develop, complete and report audit projects. They will strive to be an opinion leader through a continuous critical approach to the published literature and will undertake personal evaluation and consultation with colleagues regarding the timely introduction of new practices. They will be ever conscious of their responsibility for patient safety and will understand how proper evidence, monitoring outcome and a cautious, critical, scientific approach to reported developments of practice will assist this. They will understand the basic principles of clinical research and will know the ethical and organisational steps needed to initiate a project – under the mentorship of a research experienced colleague.

Assessment

- Has recorded satisfactory attendance at 15 local audit, MDT, M & M and journal club meetings
- Reflective portfolio of attendances
- Undertaken research methods course
- Presented literature review
- Written up case report or evidence-based review (typically a CEACCP article) to a standard suitable for publication OR contribution to a departmental guideline or change in practice to a reasonable standard for implementation

Knowledge		
Competence	Description	GMP
Monitoring practice		
AR_HK_01	Understands their role in supporting quality through participating in and promoting audit of clinical outcomes	1,2,3,4
AR_HK_02	Understands the ethical issues relating to audit	1,2
Developing practice		
AR_HK_03	Know the principles of research governance	1,2

AR_HK_04	Understands the roles of the Royal College of Anaesthetists in postgraduate and continuing education, and in the setting and maintenance of standards	1
AR_HK_05	Knows about the National Institute for Academic Anaesthesia	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Evidence based practice		
AR_HS_01	Leads in a departmental or other local journal club	1,2,3
AR_HS_02	Undertakes a literature review in relation to a clinical problem or topic and presents the same	1
AR_HS_03	Produces a review article on a clinical topic, having reviewed and appraised the relevant literature	1
AR_HS_04	Uses statistical methods to analyse data and estimate probabilities	1
Monitoring practice		
AR_HS_05	Designs, implements and completes audit cycles	1,2,3
AR_HS_06	Collaborates in a systematic review of the medical literature	1,2,3
AR_HS_07	Identifies problems and develops standards for a local audit	1,2,3
AR_HS_08	Proposes and tests ways to improve patient care	1,2,3,4
AR_HS_09	Compares the results of an audit with criteria and standards to reach conclusions	1,2,3
AR_HS_10	Critically reviews an article to identify the level of evidence and submits the same for objective review	1,2
AR_HS_11	Undertakes a literature review in relation to a clinical problem or topic and presents the same	1,2
AR_HS_12	Encourages discussion amongst colleagues on evidence-based practice	1,2,3
AR_HS_13	Uses the findings of an audit to develop and implement change	1,2,3,4
AR_HS_14	Contributes to local and national audit projects as appropriate e.g. NCEPOD and SASM	1,2,3,4
Developing practice		
AR_HS_15	Identifies the ethical issues relating to the organisation of clinical research	1
AR_HS_16	Outlines the principles of formulating a research question and designing a project	1

AR_HS_17	Demonstrates an awareness of and detachment from vested interests or entrenched views	1
AR_HS_18	Demonstrates the use of reference manager software in the production of manuscripts	1
AR_HS_19	Demonstrates ability to analyse research data using advanced statistical software e.g. SPSS	1

Advanced level

The advanced module will be undertaken as an attachment to an individual [not department] who is an experienced clinical investigator. At the end of this training the learner will have participated in the development, data collection, analysis and reporting [by presentation and as a scientific paper] of a study relating to clinical practice. It is understood that all these stages of work may not take place during the learners attachment and where that is the case they should write a report relating to the progress of the aspects of the work in which they were not able to participate directly. The emphasis must be on the potential value of a project rather than on the necessity of getting a project done, however weak the idea.

Their focus will be on clinical research methods. Trainees who undertake this module will be equipped to develop a special interest in research in their subsequent career, ideally working within a local research network. They will teach research methods to junior trainees and represent a knowledgeable, responsible attitude to enquiry and practice development.

Assessment

- Evaluation of their placement by their academic supervisor
- Has prepared a review article to a standard suitable for publication
- Has engaged in a clinical research project and demonstrated understanding of all aspects of the work

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Evidence based practice		
AR_AK_01	Commits to leadership in relation to evidence based practice	1,2,3
AR_AK_02	Understands how to undertake thorough data searches including involving professional literature	1
AR_AK_03	Up to date with current clinical and research literature in their areas of interest	1,2
Monitoring practice		
AR_AK_04	Understands their role as an opinion leader in maintaining standards of practice through audit	1,2,3,4

AR_AK_05	May play organisational role in morbidity and mortality meetings	1,2,3
Developing practice		
AR_AK_06	Presents clinical and academic work at deanery and national scientific meetings where possible submitting reports for presentation or posters	1,3
AR_AK_07	Knows how to produce a poster summarising a project for presentation	1
AR_AK_08	Understands material specifically related to their 'project'	1,2

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Evidence based practice		
AR_AS_01	Contributes to the development of local and national clinical guidelines and protocol	1,2,3
AR_AS_02	Champions practice change supported by audit	1,2,3
Monitoring practice		
AR_AS_03	Organises or leads departmental audit meeting	1,2,3
AR_AS_04	Leads a complete audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess effectiveness of the changes	1,2,3,4
Developing practice		
AR_AS_05	Shows willingness to encourage and take part in research	1,2,3
AR_AS_06	Applies appropriate ethical research approval	1,2,3
AR_AS_07	Follows guidelines on ethical conduct in research and consent for research	1,3,4
AR_AS_08	Demonstrates ability to write a scientific paper	1
AR_AS_09	Acquires skills relating to their project	1
AR_AS_10	Attends relevant national and international meetings	1,2,3

Improvement Science, Safe and Reliable Systems

Basic Level

Learning Outcomes:

- Understands and commits to the principles of Quality Improvement
- Demonstrates knowledge of the fundamental concepts of Improvement Science
- Understands the difference between audit and quality improvement
- Understands and demonstrates importance of safety, team work and human factors in anaesthetic practice

Assessment

- Evidence of participation in critical incident reporting
- Evidence of active participation in a Quality Improvement project

Intermediate Level

Learning Outcomes:

- Consolidates understanding of Quality Improvement principles
- Demonstrates enhanced knowledge and skills of Improvement Science
- Can present evidence of quality improvement outcome and impact of change implemented
- Can demonstrate quality improvement benefit to patient, staff and organisation

Assessment

- Has personally led a Quality Improvement project
- Presentation of a Quality Improvement project (case study, oral or poster presentation)
- Participates in learning sets (face to face or web based)

Higher / Advanced Level

Learning Outcomes:

- Can participate in peer support for Quality Improvement trainees at basic level
- Can lead teams to introduce a clinical quality improvement
- Can assess evidence for quality improvement and develop into evidence based practice
- Can lead teams to introduce a clinical quality improvement
- Can mentor Quality Improvement trainees at basic / intermediate level

Assessment

- Presentation of a Quality Improvement project through poster, case study or oral presentation ideally at a regional, national or international quality forum
- Supervises a Quality Improvement project involving trainees at basic / intermediate level
- Leads in learning sets (face to face or web based)
- Completion of an extended essay on a quality improvement topic
- Authorship of a peer-reviewed quality improvement research paper

Knowledge		
Competence	Description	GMP
Profound knowledge and Systems Appreciation		
IS_K_01	Appreciation of a System; Understanding Variation; Human Side of Change (Psychology);	1,2
IS_K_02	Recognises that real improvements come from changing systems not changing within systems.	1,2
IS_K_03	Demonstrates root cause and systems analysis.	1,2
IS_K_04	Building Knowledge and Deming's Profound Knowledge.	1,2
Clinical human factors		
IS_K_05	Explains that Enhanced Clinical Performance is achieved through an understanding of the effects of teamwork, tasks, equipment, workspace, culture, organisation on human behaviour and abilities, and application of that knowledge in clinical settings.	1,2
IS_K_06	Explains the importance of human factors when designing or evaluating system safety or reliability	1,2
IS_K_07	Systems design to make it easy to do the right thing.	1,2
Process		
IS_K_08	Explains the definition of processes, process mapping and assessment of process value	1,2

IS_K_09	Recognises that process drives outcome and quality improvement as the science of process management.	1,2
IS_K_10	Recognises how system processes set up healthcare workers to make errors.	1,2
IS_K_11	Understands reliable process delivery	1,2
CMO evaluation		
IS_K_12	Explains CMO evaluation (context+mechanism = outcomes)	1,2
IS_K_13	Explains the importance of CMO evaluation to improve local health care systems	1,2
IS_K_14	Understands the difference between CMO (context+mechanism = outcomes) evaluations and OXO evaluation (observe a system, introduce perturbation X, observe again)	1,2
The Model for Improvement		
IS_K_15	Explains the Model for Improvement and is able to describe the key components of the MFI.	1,2
Goal setting		
IS_K_16	Explains Goal and aim setting: setting an improvement aims statement including how much by when.	1,2
IS_K_17	Explains creation of an operational definition	1,2
The different types of measurement		
IS_K_18	Describes measurement for improvement, versus measurement for research or measurement for accountability/judgement.	1,2
Variation in measurement		
IS_K_19	Understands variation, time series analysis of events; ability to create a simple run chart, ability to understand fundamentals of statistical process control charts, methods to separate random from assignable variation.	1,2
Measurement 1		
IS_K_20	Explains Tally charts, Pareto charts, Run Charts, SPC Charts	1,2
Measurement 2		
IS_K_21	Explains fundamentals of SPC charts (Statistical Process Control Charts)	1,2
PDSA testing		
IS_K_22	Explains Shewart's PDSA Plan Do Study Act cycle.	1,2
IS_K_23	Explains importance of predicting outcomes before the test	1,2
Reliability		

IS_K_24	Describes 4 levels of system reliability and how this is calculated.	1,2
IS_K_25	Describes one simple way to evaluate local system reliability	1,2
Structure plus process leads to outcome [S+P=O]		
IS_K_26	Explains how to define outcomes and link how improving outcomes is linked to improving processes. Recognises that structure plus process leads to outcome.	1,2
Reliable implementation		
IS_K_27	Explains implementing a change.	1,2
Spread		
IS_K_28	Explains spreading improvement.	1,2
Sustainability		
IS_K_29	Explains sustaining improvement.	1,2
Influencing skills		
IS_K_30	Explains ways to influence	1,2
Teams and communication		
IS_K_31	Explains the features of effective teams and communication, (safe, inclusive, open, consensus seeking).	1,2
IS_K_32	Explains reasons for good communicating with patients after adverse events.	1,2
IS_K_33	Explains how pre-operating list safety briefings drive communication and safety climate	1,2
SKILLS		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
Plot and evaluate run chart		
IS_S_01	Demonstrates creation of a simple run chart, and is able to describe 4 ways to separate random from assignable variation	1,2
PDSA test of change		
IS_S_02	At your place of clinical work, perform at least two tests of change as a PDSA (Plan (and predict outcome) Do Study Act) cycle.	1,2
IS_S_03	Demonstrate the learning from the experience. Specify the learning and action generated from PDSA 1 and record what happens when they do it in PDSA 2	1,2
Structure + process = outcome [S+P=O]		

IS_S_04	Demonstrates ability to draw a simple process map	1,2
IS_S_05	Demonstrates ability to develop a driver diagram of processes that will lead to an improved outcome.	1,2
Participate and contribute to a very small improvement project		
IS_S_06	Demonstrates involvement with a local improvement initiative	1,2
Reliability		
IS_S_07	Describes a change concept used to improve reliability.	1,2
IS_S_08	Describes a design /change concept used to improve reliability in the workplace	1,2
Clinical human factors		
IS_S_09	Demonstrates ability to analyse a real critical incident from a human factors perspective.	1,2
IS_S_10	Performs one observation of where environment, equipment and other factors make it difficult to do the right thing.	1,2
IS_S_11	Describes common systems designs used in healthcare to improve reliability.	
IS_S_12	Demonstrates improvement planning using a real critical incident	

Teaching and learning

Basic Level

The basic level competencies are aimed at developing the core educational capabilities of the trainee and to develop them professionally as an effective learner. On completion of the Basic level competencies the trainee will have insight into their own educational responsibilities as a Core Trainee in anaesthetics, critical care and pain medicine. They will have developed an awareness of the College curriculum and engaged with the assessment framework. They will understand the importance of patient safety in relation to clinical practice and clinical supervision. They will be able to describe the nature of their accountability and responsibility to their clinical and educational supervisors. They will specifically understand the importance of workplace-based assessments, keeping a reflective portfolio, the role of developmental feedback in promoting professional learning and the need to engage effectively in multi-source feedback.

Trainees work in a clinical team within which, from an early stage, they will engage in appropriate teaching and supervision of less experienced members of the team (medical students, foundation trainees).

Minimum Learning Outcomes:

- Manages their own programme of learning derived from the RCoA curriculum
- Become an experienced in the use of e-learning systems and understands the place they have in their individual learning style
- Contributes to institutional educational programmes by attending teaching, and engaging as teacher/presenter when appropriate
- Delivers a lecture or audio-visual presentation using appropriate multimedia devices and techniques, reflecting on feedback
- Always ensures that their own level of supervision is appropriate to their capabilities
- Engages properly with the process of personal educational supervision
- Engages in the assessment process by appropriately managing their own portfolio of assessments

Assessment

There are no specific assessments relating to education and training at this stage. Evidence of satisfactory performance comes mostly from the learner's engagement with the processes of their own learning. This is revealed in by their reflective portfolio, reports of educational supervisors and supervising consultants. In addition there should be records of attendance and participation at departmental teaching and clinical meetings

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_BK_01	Knows that patient safety is paramount in all aspects of medical education	1,2
TM_BK_02	Knows their roles and responsibilities as a trainee in the context of clinical governance and patient safety	1,2,3,4
TM_BK_03	Knows how to use the RCoA curriculum to find the objectives, outcomes and assessments relating to their training programme	1
TM_BK_04	Knows the process and purpose of workplace-based assessment	1
TM_BK_05	Understands their preferred approach to their own learning	1
TM_BK_06	Knows the roles and responsibilities of their clinical and educational supervisors and understands who to approach locally regarding training issues and concerns	1,2,3
TM_BK_07	Describes the difference between learning objectives and outcomes	1
TM_BK_08	Knows how to engage in e-learning	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_BS_01	Uses the RCoA curriculum to determine the learning outcomes and workplace assessments relating to their stage of training	1
TM_BS_02	Seeks appropriate levels of supervision for themselves when undertaking activities in which they are not fully competent	1,2,3
TM_BS_03	Demonstrates safe practice in patient management when teaching and supervising others	1,2,3
TM_BS_04	Demonstrates self-critical review of their own clinical practice in the context of workplace-based assessments such as multi-source feedback	1
TM_BS_05	<p>Demonstrates general computing skills, including but not exclusively, by:</p> <ul style="list-style-type: none"> • Managing files/folders in a Windows environment • Document creation using a word processor • Spreadsheet creation using spreadsheet software • Presentation creating using presentation software • Basic functions of databases • The use of online browsers • Communication by email software 	1,2,3

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_BS_06	Delivers a lecture or audio-visual presentation using appropriate multimedia devices & techniques	1
TM_BS_07	Obtains feedback on presentations and tutorials they have delivered [in written format]	1,3
TM_BS_08	Delivers informal teaching in the workplace	1,3
TM_BS_09	Keeps a reflective portfolio of learning and clinical practice	1
TM_BS_10	Appropriately solicits and receives feedback from others regarding their own clinical knowledge, skills and behaviour	1,3,4
TM_BS_11	Demonstrates an ability to reflect and analyse constructive feedback from others regarding their own clinical knowledge, skills and behaviour	1,3
TM_BS_12	Engages in opportunistic workplace-based learning and teaching	1,3
TM_BS_13	In discharging educational duties acts to maintain the dignity and safety of patients at all times	1,2,4
TM_BS_14	Demonstrates how to use information technology to keep up-to-date	1
TM_BS_15	Becomes experienced in the use of e-learning systems incorporating, as appropriate, into their own learning style	1
TM_BS_16	Uses on line e-assessment tools	1

Intermediate Level

On completion of the Intermediate level competencies the trainee will have enhanced insight into their own educational responsibilities as a Specialty Trainee. They will understand the importance of patient safety in relation to clinical supervision as they will now be directly supervising other trainees. By developing an understanding of the importance of team-based or inter-professional education they will also have developed increased awareness of their role in training others. In support of developing these capabilities trainees will have developed the necessary skills to receive and give effective developmental feedback to others. The intermediate level sees the trainee develop the necessary skills and insight to develop personally as an educator but also to contribute effectively to team-based, inter-professional education. In addition they will participate more actively in departmental teaching and must be able to plan and deliver effective presentations showing evidence of satisfactory preparation. Their progress should be recorded in their portfolio and where they have presented formal sessions they should obtain written feedback from the audience.

Core learning outcomes:

- ***These outcomes build upon those from basic level training***
- ***Continues to participate appropriately in the management of their own teaching, learning and assessment***
- ***Contributes to institutional educational programmes as participant and presenter developing upon the learning gained in CT 1/2 and now actively seeking feedback on their performance***
- ***Undertakes appropriate supervision and practical teaching within the clinical team***
- ***Gives appropriate feedback when they have taught and supervised***
- ***Undertakes opportunistic teaching and in less structured, informal, educational contexts***

Assessment

Evidence for ARCP:

- Appropriate reports from educational supervisor and consultant/SAS trainers
- Portfolio recording their engagement in teaching and learning; including reflections
- Record of participation in their institutions formal educational meetings and teaching
- Feedback on teaching delivered, including own reflections
- A-CEX relating to their own teaching and supervision of a more inexperienced trainee
- CBD on selected education topics

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_IK_01	Knows how to design and implement a personal learning plan for an educational activity related to their own learning	1
TM_IK_02	Understands the importance of demonstrating respect for learners	1,3
TM_IK_03	Knows how to create a framework in which to teach a practical skill safely	1,2
TM_IK_04	Knows that personal and team performance is affected by non-technical skills and knowledge	1,2,3
TM_IK_05	Understands which teaching method to select for effective learning in a variety of situations	1
TM_IK_06	Knows how to give and receive effective feedback	1,3
TM_IK_07	Knows how to perform WBA for foundation and less experienced anaesthetic trainees	1,3
TM_IK_08	Knows the value of inter-professional learning in their own development and in the development other professional roles	1
TM_IK_09	Explains the roles and responsibilities of educational agencies involved in postgraduate medical education	1
TM_IK_10	Lists the basic concepts and role of human factors and team-based training including crisis resource management in ensuring patient safety	1,2,3
TM_IK_11	Knows the value of inter-professional learning	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_IS_01	Participates actively in departmental education and learning and records their participation in their reflective portfolio	1,3
TM_IS_02	Creates good opportunistic clinical learning opportunities for others	1,3
TM_IS_03	Plans and conducts a teaching session e.g. lectures workshop, tutorial, and seeks written feedback on their performance from participants	1,3
TM_IS_04	Provides appropriate clinical supervision to less experienced colleagues	1,2,3
TM_IS_05	Appropriately performs workplace-based assessments for foundation trainees	1
TM_IS_06	Engages with and contribute to inter-professional learning opportunities	1,3
TM_IS_07	Gives and receives effective feedback	1,3
TM_IS_08	Performs self-critical review of their own educational practice (workplace based teaching, tutorials, simulation training or lectures)	1
TM_IS_09	Participates in human factors and patient safety training	1,2,3,4

Higher/Advanced Level [For all trainees]

Upon completion of the higher-level competencies in medical education the senior trainee will be prepared for their role as an effective clinical educator. They must be ready to take on the responsibility of clinical teaching, supervision and assessment in a career grade post in anaesthesia. Learning in this area continues throughout ST years 5, 6 and 7.

It is essential that trainees at this level be allocated as teacher on teaching lists with more junior colleagues in order to get experience of clinical supervision. They should keep a log of the lists on which they provide clinical supervision, including feedback from the trainees supervised.

All trainees must teach in a variety of settings that must include opportunistic clinical teaching, tutorial/seminars and formal lectures. Their portfolio must include their reflections and the audience feedback relating to several such episodes. They will have trainee insight into generic professional capabilities and skills in important areas such as human factors and crisis resource management. Simulation techniques will be important in providing safe learning opportunities for individuals and teams and they will be able to participate in simulator based training sessions.

They will be able to perform workplace-based assessments reliably and understand their responsibilities in terms of patient safety in the context of clinical and educational supervision. They will have knowledge of the many diverse roles and responsibilities of clinical educators and the educational governance framework within which they work, explicitly the role of the GMC, NHS employing organisations, the Deaneries and the role of the College. They will have a commitment to ensuring their ongoing continuing professional development in the field of medical education.

Every trainee must provide the ARCP with evidence of training in education in line with the minimum learning outcomes. This will often include attendance at suitable 'How To Teach' events. Attendance at external courses is not necessary where suitable local teaching is available and has been approved by the School of Anaesthesia.

Learning Outcomes:

- Is prepared for the consultant role of clinical teacher and assessor in the workplace
- Is a valued member of the departmental educational team as participant and teacher
- Delivers excellent theatre teaching in the course of clinical supervision
- Uses an appropriate range of educational knowledge and skills in delivering a variety of presentations
- Prepares and delivers excellent teaching on a variety of topics

- Performs workplace-based assessments reliably
- Exercises leadership in terms of patient safety in the context of clinical supervision
- Understands the many diverse roles and responsibilities of clinical educators
- Has a broad knowledge of the educational governance framework within which they work; explicitly the role of the GMC, NHS employing organisations, the Deaneries and the role of the College
- Demonstrates a commitment to ensuring their ongoing continuing professional development in the field of medical education
- Keeps a comprehensive reflective portfolio of learning and of their engagement with ongoing professional development

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_HK_01	Understands the formal responsibilities of clinical trainers	3
TM_HK_02	Knows the importance of always ensuring safe supervision of learners and takes wide responsibility for this including checking the safety of any teaching being undertaken by trainee anaesthetists within their clinical arena	2,3
TM_HK_03	Knows how to plan a 'teaching list' for a more junior trainee	1,3
TM_HK_04	Understands how to use a wide range of educational methods to provide a effective clinical learning opportunities, such as: opportunistic workplace-based training, lectures, part- and whole-task simulator training, full immersion high fidelity simulation, audio-visual feedback and behavioural debriefing	1
TM_HK_05	Understands the educational principles underlying the preparation of effective lessons and presentations	1
TM_HK_06	Describes the assessment strategy employed by the RCoA in the context of their own learning and the learning of others	1
TM_HK_07	Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers	1,3
TM_HK_08	Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment	1
TM_HK_09	Understands the role of, and the appropriate conduct of, the workplace-based assessments	1,3
TM_HK_10	Understands the importance of providing timely, specific, non-judgemental and developmental feedback	1,3
TM_HK_11	Explains the importance of their own behaviour as a role model for more junior trainees	1,2,3
TM_HK_12	Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour	1
TM_HK_13	Explains the roles and responsibilities of educational agencies involved in educational commissioning and governance including, but not exclusively: the GMC, the DoH, Deaneries, Colleges and NHS Education Commissioners	1

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_HK_14	Knows how to provide a level of clinical supervision appropriate to the competence and experience of the trainee	1,2,3
TM_HK_15	Outlines the structure of the effective appraisal review	1
TM_HK_16	Knows how to raise concerns about a poorly performing trainee	1,2,3
TM_HK_17	Describes the appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme	1,3

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_HS_01	Teaches trainees and others in a variety of settings to maximise knowledge, effective communication and practical skills; and to improve patient care	1,2,3,4
TM_HS_02	Creates good learning opportunities to deliver the curriculum	1,3
TM_HS_03	Shows consideration for learners including their emotional, physical and psychological well being with their development needs; acts to ensure equality of opportunity for students, trainees, staff and professional colleagues	1,3
TM_HS_04	Identifies the learning needs of trainees	1
TM_HS_05	Demonstrate effective lecture, presentation, small group and bed-side teaching sessions	1
TM_HS_06	Makes appropriate use of teaching aids and visuals to enhance formal teaching	1
TM_HS_07	Engages in opportunistic teaching of more junior trainees in clinical settings	1,3
TM_HS_08	Engages in simulator-based learning	1
TM_HS_09	Assists in simulator-based teaching	1,3
TM_HS_10	Supervises junior trainees in the course of routine and emergency anaesthesia	1,3
TM_HS_11	Is able to lead departmental teaching programmes including journal clubs	1,3
TM_HS_12	Encourages discussions with colleagues in clinical settings to share knowledge and understanding	1,3
TM_HS_13	Accurately and reliably uses the workplace-based assessment tools	1
TM_HS_14	Show willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_HS_15	Gives appropriate feedback for the purpose of training clinical professionals	1,3
TM_HS_16	Receives feedback appropriately for the purpose of self-improvement	1,3
TM_HS_17	Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio	1,3
TM_HS_18	Conduct developmental conversations as appropriate e.g.: appraisal, supervision, mentoring	1,3
TM_HS_19	Maintains honesty and objectivity during appraisal and assessment	1,3
TM_HS_20	Provide appropriate career support, or refers trainee to an alternative effective source of career information	3
TM_HS_21	Recognise the trainee in difficulty and take appropriate action including, where relevant, referral to other services	1,2,3
TM_HS_22	Participate in strategies aimed at improving patient education e.g. talking at support group meetings	1,2,4
TM_HS_23	Show willingness to take up formal training as a trainer and respond to feedback obtained after teaching sessions	1,3
TM_HS_24	Demonstrates a willingness to advance own educational capability through continuous learning	1
TM_HS_25	Acts to enhance and improve educational provision through evaluation of own practice	1
TM_HS_26	Balances the needs of service delivery with education	1

Optional additional Advanced Level unit of training for an 'In' or 'Out' of programme Fellowship placement

This optional advanced training is intended for trainees who are considering developing a special interest in medical education in their consultant career and might include a certificate in medical education. To undertake this training the learner must be supervised by an individual recognised as an expert in *anaesthetic* medical education by the School of Anaesthesia. The availability of proper teaching and supervision must be ensured before a trainee is allowed to embark on this module.

The objective is to provide familiarity with the principles and practice of education such that the learner can plan to develop a special interest in some aspect of education in their subsequent career. The College makes the following recommendations for this placement:

Trainees must have at least 2.5 days a week of protected time for their education learning during their module that can be up to 12 months long

They should undertake frequent teaching sessions in a variety of settings ranging from formal lecturing to opportunistic teaching in clinical situations

They should be formally allocated to supervise and teach more junior colleagues in clinical situations including the operating theatre

They should conduct practical skills training using both part-task trainers and intermediate fidelity simulators

In the course of their module they should undertake the organisation of an educational meeting and should keep a written account of the process in their portfolio

They should organise an education project or development and should keep a written account of the process in their portfolio

Core learning objectives:

- Teaches in a variety of ways using a variety of teaching aids in order to deliver interesting sessions
- Teaches a wide variety of learners in a wide variety of settings
- Engages with inter-professional learning
- Receives good feedback on teaching
- Is familiar with relevant educational theory e.g. principles of adult learning, learning styles etc relevant to medical education
- To be able to plan and prepare a course; including designing the curriculum, planning appropriate teaching to cover the curriculum, organising a timetable and

- planning any assessment
- Understands relevant theory relating to planning assessments such as understanding validity and reliability
- Is able to review, understand and explain to others the significance of developments in education and medical research
- Is expert in the use of teaching aids
- Teaches using intermediate-fidelity simulation
- Is able to act as an advocate for education in departmental planning

Assessment

- Presents a portfolio of their achievements as a higher trainee which should include engagement with and completion of significant projects in teaching, in the organisation of teaching and in developing an understanding of educational theory.

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_AK_01	Describes relevant educational theories and principles	1
TM_AK_02	Outlines adult learning principles relevant to medical education	1
TM_AK_03	Understands the concept of preferred learning styles	1
TM_AK_04	Understands how to choose appropriate learning methods for developing specific learning outcomes	1
TM_AK_05	Understands the processes leading to the acquisition of practical skills	1
TM_AK_06	Lists the features influencing the efficacy of an assessment methodology [validity, reliability, feasibility etc]	1
TM_AK_07	Knows what is meant by reliability and discusses its importance and the factors that influence it	1
TM_AK_08	Knows what is meant by validity and discusses the different types of validity that have been described	1
TM_AK_09	Understands how to plan small-group teaching	1
TM_AK_10	Knows how to facilitate small-group discussions	1
TM_AK_11	Understands how the participants personality influences their performance in small-group teaching	1
TM_AK_12	Understand how to develop a curriculum for a teaching/learning task	1
TM_AK_13	Discusses the process of developing lessons/learning sessions from curriculum	1

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_AK_14	Knows the importance of preparing hand-outs for formal teaching sessions	1
TM_AK_15	Understand the various factors that contribute to the under-performance of learners	1,3
TM_AK_16	Understands the use of e-learning in the overall context of teaching	1
TM_AK_17	Describes the role of non-technical skills in the practice of anaesthesia	1
TM_AK_18	Lists the uses of simulation and discusses its appropriate use in medical education	1
TM_AK_19	Understands the variety of simulator methods available [actors, standardised patients, part-task trainers, high and intermediate fidelity]	1
TM_AK_20	Describes appropriate ways to use simulation in training	1
TM_AK_21	Discusses how mistakes are made and errors occur in practice and how simulator training can help clinicians to be aware of problems and improve safety	1,2
TM_AK_22	Describes the use of simulators for team and communication skill training	1,3
TM_AK_23	Describes the principles of crisis resource management in anaesthesia	1,2
TM_AK_24	Knows how to use part-task trainers and intermediate fidelity simulators in small-group teaching	1
TM_AK_25	<p>Knows how to organise an educational event [meeting]</p> <ul style="list-style-type: none"> • Discusses the choice of sessions, speakers etc • Discusses timing of sessions, breaks etc • Discusses the organisation of facilities – including meals etc • Discusses the arrangements for organising registration etc on the day • Understands the need for appropriate feedback and discusses how to feed this back to the participants 	1
TM_AK_26	Differentiate between formative and summative assessment and define their role in medical education	1
TM_AK_27	Outlines the role of workplace-based assessments, the assessment tools in use, their relationship to course learning outcomes, the factors that influence their selection and the need for monitoring evaluation	1
TM_AK_28	Understands the importance of research in the development of education practice and achieves competence in understanding the methodology and statistics involved	1
TM_AK_29	Recognise the importance of the role of the physician as an educator within the multi-professional healthcare team and uses medical education to enhance the care of patients	1,2

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
TM_AK_30	Demonstrates a willingness to become involved in the wider medical education activities and fosters an enthusiasm for medical education activity in others	1,3
TM_AK_31	Contributes to educational policy and development at local or national levels	1,3
TM_AK_32	Demonstrate knowledge of relevant literature relevant to developments and challenges in medical education and other sectors	1
TM_AK_33	Accepts the need to participate in national and international practice through membership of specialist societies the reading of relevant specialist journals and participation in education meetings	1
TM_AK_34	Accepts the responsibilities inherent in the role of advocate and arbiter within the field of medical education	1
TM_AK_35	Accepts that their special training in this area places a responsibility upon them to understand that others will necessarily be less expert than they are and thus to behave sensitively when asked for advice	1,3
TM_AK_36	Describes how their special training in education will contribute to their further career development	1
TM_AK_37	Accepts that experts in a field have a particular responsibility for the safety and quality of their service over and above their personal clinical contribution	1,2
TM_AK_38	Accepts that their special knowledge and experience of education places a responsibility upon them to teach and lead within the area	1,2,3
TM_AK_39	Describes the general and specific criteria for the proper development of education within the clinical and management contexts of a department of anaesthesia	1,3
TM_AK_40	Accepts the responsibility of informing managers of any developments in this field of practice that is likely to have impact on the safety, quality and cost of services	1,2,3
TM_AK_41	Participates in departmental management discussions surrounding this area of practice	1,3
TM_AK_42	Be able to critically evaluate relevant educational literature	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>

TM_AS_01	Has undertaken a variety of teaching – including planning the sessions and delivering education using several methods	1
TM_AS_02	Has taught at a variety of levels such as medical students, foundation trainees, CT and ST trainees in anaesthesia and in other specialties	1,3
TM_AS_03	Has undertaken teaching in inter-professional events	1,3
TM_AS_04	Has presented at formal meetings	1,3
TM_AS_05	Has produced an appropriate hand-out to accompany presentation[s]	1
TM_AS_06	Has produced feed-back form for teaching	1
TM_AS_07	Uses part-task trainer and intermediate-fidelity simulator for clinical teaching	1
TM_AS_08	Has led small-group seminars; acting as facilitator	1,3
TM_AS_09	Produces excellent visual-aids using Powerpoint© or similar programme	1
TM_AS_10	Experienced Powerpoint© user; able to incorporate sound and video in presentations	1
TM_AS_11	Teaches others how to develop effective presentations using Powerpoint©	1,3
TM_AS_12	Contributes to educational research or projects e.g.: through the development of research ideas of data/information gathering	1,3
TM_AS_13	Engages in activities to help others develop their medical education capabilities	1,3
TM_AS_14	Be able to manage personal time and resources effectively to the benefit of the educational faculty and the need of the learners behaviour	1
TM_AS_15	May engage in education research including the acquisition of associated research methodologies and statistical techniques	1
TM_AS_16	Teaches 'education' at intermediate and higher level	1
TM_AS_17	Has recorded experiences of advanced training module in a comprehensive education portfolio	1
TM_AS_18	Has attended a national or international medical education meeting	1
TM_AS_19	Able to engage in the introduction of a new educational development [course, meeting, assessment etc]	1
TM_AS_20	Has organised an educational meeting	1

Management

At all stages of training the doctor is expected to develop an understanding of the management systems within which they work, at the local level of the trust and at the national level. In this field no distinction is made between the capabilities of basic and intermediate training and no assessment is required beyond the reports of supervising consultants and MSF.

The higher training must equip the trainee with a full understanding of the consultant's role in departmental management and furnish them with the knowledge necessary to embark upon minor departmental management roles as they begin their consultant career. It is acknowledged that opportunities for trainees to undertake tasks within the departmental management are few compared with the number of higher trainees and that many will not have an opportunity to demonstrate their skills in practice.

In the absence of in-service opportunities to learn and practice management it is suggested that most trainees will be required to attend formal teaching events organised around the higher curriculum.

Advanced training requires that the trainee undertakes a placement to work with a manager on secondment. Where such placements do not involve clinical work only six months credit will be allowed against the CCT programme. Though longer placements are permitted these will require adjustment of the CCT date.

Basic/intermediate level

Learning outcomes:

- Understands the structure of local management
- Engages with departmental organisational processes
- Observes local and national systems for clinical governance

Knowledge

<i>Competence</i>	<i>Description</i>	<i>GMP</i>
MN_BK_01	Describes the guidance given by the GMC regarding doctors in management	1
MN_BK_02	Describes the local management structures facilitating clinical governance	1
MN_BK_03	Describes the role of the clinical director and medical director	1
MN_BK_04	Understand how working practices are affected by national and European legislation on hours of work and rest periods	1
MN_BK_05	Describes the purpose of mandatory training	1
MN_BK_06	Understands the processes of trust indemnity for errors in patient management	1
MN_BK_07	Understands the areas of liability that may not be covered by trust indemnity	1
MN_BK_08	Understands the principles of recognising equality and diversity in the workplace	1,3,4
MN_BK_09	Describes the management framework of medical education, including the role of the RCoA, Postgraduate Dean, and the General Medical Council.	1
MN_BK_10	Understands local processes for scheduling work and organising supervision	1
MN_BK_11	Understands the need for inter-professional understanding, cooperation and learning	1
MN_BK_12	Understands the key role IT plays in the modern NHS	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
MN_BS_01	Commits to the principles of clinical governance	2
MN_BS_02	Complies with local mandatory training	1
MN_BS_03	Complies with local practices for health and safety, control of infection etc	1,2,3,4
MN_BS_04	Cooperates with local systems for the allocation of work, teaching and supervision	1,3
MN_BS_05	Organises their personal anaesthetic service effectively when responsible for an operating list, emergency theatre, obstetric analgesia, preoperative assessment clinic etc	1
MN_BS_06	Demonstrates the use of, including but not exclusively: <ul style="list-style-type: none"> • Patient Administration Systems [PAS] • Electronic Patient Records [EPR] 	1

	<ul style="list-style-type: none">• Laboratory and radiology order communication systems• Anaesthetic and ICU Information Management Systems• Laboratory Information Management Systems [LIMS]• Theatre management systems• Picture Archiving and Communication Systems [PACS]• Radiology Information Systems [RIS]• Maternity systems	
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Higher level

Learning outcomes:

- Understands the structure of relevant national management and how this integrates with local management
- Able to organise their own contractual, job planning, and quality review processes
- Ready to undertake departmental administrative and Managerial roles with appropriate guidance and support

Knowledge		
Competence	Description	GMP
MN_HK_01	Knows how funding is provided for medical services within the trust	1
MN_HK_02	Knows how care trusts commission services	1
MN_HK_03	Understands how patients are referred for hospital treatment	1,3,4
MN_HK_04	Describes the local structure of NHS management in their locality and knows that the structures vary between commissioning bodies and between the countries of the UK	1
MN_HK_05	Describes the ways that services for anaesthesia, pain medicine and critical care are structured including an appreciation of local differences	1
MN_HK_06	Understand that healthcare is always subject to change and debate as a result of political, social, technical, economic, organisational and professional factors that impact on provision of service <ul style="list-style-type: none"> • Recognises their role as an advocate for quality and consistency in patient care in the face of such debates • Accepts that compromise in such debates may have impact on medical care 	1
MN_HK_07	Understand the principles of: <ul style="list-style-type: none"> • Clinical coding • National Service Frameworks • Health regulatory agencies [e.g., NICE, Scottish Government] • NHS Structure and relationships • NHS finance and budgeting • Consultant contract and the contracting process 	1

	<ul style="list-style-type: none"> • Resource allocation • The role of the Independent sector as providers of healthcare • Patient and public involvement processes and role 	
MN_HK_08	Knows the process for completion of training and admission to the specialist register	1
MN_HK_09	Understands the process for appointment to a substantive post	1
MN_HK_10	Understands the processes of annual appraisal, re-certification and revalidation in substantive posts	1,3
MN_HK_11	Understands the systems for job planning and annual review	1
MN_HK_12	Understands the working of the local and national ACEA process	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
MN_HS_01	Undertakes simple local, department based organisational activities, if called upon, such as <ul style="list-style-type: none"> • Assisting with organising trainee service and educational placements • Organisation of departmental meetings (Audit, Journal Club, Teaching etc) • Organisation of an 'event' e.g. ALS, ATLS, Management course 	1,3
MN_HS_02	Completes training documentation correctly	1
MN_HS_03	Able to organise job application	1
MN_HS_04	Able to negotiate job-plan	1
MN_HS_05	Attends department management meetings and contributes to discussion (if allocated this responsibility)	1,3
MN_HS_06	Promotes, and is receptive to, inter-professional cooperation and working	3
MN_HS_07	Ready to take an active role in promoting the best use of healthcare resources	1,3
MN_HS_08	Ready to work with stakeholders to create and sustain a patient-centred service	3,4
MN_HS_09	Ready to employ new technologies appropriately, including information technology	1
MN_HS_10	Able to conduct an assessment of the community needs for specific health improvement measures	1

Advanced level

Trainees may undertake an advanced module of management training. For this to be effective it needs to be at least six months long and it is recommended that placements of a year be considered. Such placements may include a day per week of general duties in anaesthesia but the shift pattern must be adjusted to allow the trainee to participate fully in trust management activities. The trainee must work under the supervision of a senior manager (who need not be a doctor). The trainee must work closely on a day to day basis with their supervisor, and should be delegate tasks within their supervisors management responsibility. The placement may be to any sector of NHS management not necessarily one directly concerned with anaesthesia.

The learner must participate in the development of a management response to introduce a new or changed practice. They should be involved with every stage of the project which should include preparation of the proposal, development of an action plan, promoting the proposal to stakeholders, carrying through the proposal and monitoring the effects of implementation. This project should be recorded in a reflective diary which will form the basis of their assessment. The capacity to offer participation in a project is a sine qua non of allowing a trainee to undertake advanced training.

Where trainees are undertaking this module in association with a formal university based qualification in management at the advanced diploma or masters level then the requirements of this module can be varied to reconcile them with the work and assessment tasks required for that qualification. This MUST be agreed by the RCoA and the GMC in advance.

Learning outcomes:

- Understands the management process and structures at Trust level. Knows the functions of the various management and administrative departments and how they communicate and cooperate.
- Understands the national processes by which health policy is developed, promoted, disseminated, introduced and monitored
- Able to plan a project involving change and characterise the steps in its development
- Has a deep understanding of the role of the different professionals in the organisation of the health service and knows the importance of encouraging inter-professional understanding and working

Assessment

- Maintains reflective portfolio of secondment including detailed report of a 'project'
- Presents a synopsis of their experiences as an advanced management trainee in a local educational forum and obtains formal feedback which is kept in their portfolio

- Teaches one or more management seminars for trainee anaesthetists
- Researches and prepares an article on an aspect of the role of doctors in management to a standard suitable for publication
- Attends national course on management for doctors or local multi-specialty or inter-professional learning events

Knowledge		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
LOCAL		
MN_AK_01	Has a sound understanding of the important roles in trust management including clinical director, medical director, finance director and chief executive	1
MN_AK_02	Understands the divisions of management, responsibility and lines of accountability within their organisation	1
MN_AK_03	Understands the process of commissioning and the systems in place locally for agreeing contracts with commissioners	1
MN_AK_04	Understands the role of commissioning trusts	1
MN_AK_05	Understands how secondary services such as anaesthesia are accounted for in developing contracts	1
MN_AK_06	Knows how the hospitals budget is calculated	1
MN_AK_07	Knows how to develop a proposal for a management innovation (new service, expanded service, educational development etc)	1
MN_AK_08	Understands their special role in explaining and promoting the management process within their clinical specialty	1
MN_AK_09	Understands the importance of reading journals to keep abreast of trends in management	1
NATIONAL		
MN_AK_10	Understands the role of the commissioning bodies, its responsibilities and how the commissioning groups and providers cooperate and communicate	1
MN_AK_11	Understands the role of the commissioning bodies in workforce development and planning	1
MN_AK_12	Understands how national service and quality targets are set and is familiar with the organisations and processes used to monitor those targets	1
MN_AK_13	Understands the structure of the Department Of Health and its departments	1
MN_AK_14	Understands the role of Royal Colleges in health policy and management and the role of the Academy of Royal Colleges	1
MN_AK_15	Understands how health policy is developed including the role of public consultation	1
MN_AK_16	Understands the role of the public and patient representatives in determining health policy	1,3,4

MN_AK_17	Understands the impact of ethical issues on health policy and the development of new treatments	1
MN_AK_18	Knows about recent trends in management (current examples are: The productive series, lean methodologies etc)	1

Skills		
<i>Competence</i>	<i>Description</i>	<i>GMP</i>
MN_AS_01	Undertakes management tasks on behalf of their supervisor including: <ul style="list-style-type: none"> • Preparing papers to present at meetings • Researching issues to brief relevant members of the team • Preparing presentations • Delivering presentations • Developing option appraisals in relation to impending decisions 	1,3
MN_AS_02	Attends management meetings and where appropriate contributes to debate and discussion	1,3
MN_AS_03	Undertakes a project to develop a proposal involving a change of practice. (This is an essential element of a secondment to management)	1
MN_AS_04	Attends national or international meetings relating to service organisation – preferably in the role of official trust representative – and reports relevant outcomes to local management	1,3
MN_AS_05	Is a champion for efficient effective management process	1
MN_AS_06	Is a champion of inter-professional cooperation and learning	1,3