Centre for Perioperative Care

Medical Curriculum in Perioperative Care: Part 1

Public Consultation

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Contents

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PART 1: CURRICULUM SPECIFICATION

This curriculum for a Fellowship qualification in perioperative care was developed by the Centre for Perioperative Care (CPOC) in collaboration with a wealth of subject matter experts and stakeholders. A list of contributors can be found at the end of the document.

1. PURPOSE AND SCOPE OF THE CURRICULUM IN PERIOPERATIVE CARE

Perioperative Care

The purpose of the curriculum is to describe the knowledge, skills and behaviours required for a doctor to manage and lead the multidisciplinary, holistic care of a person as they consider, prepare for and recover from surgery

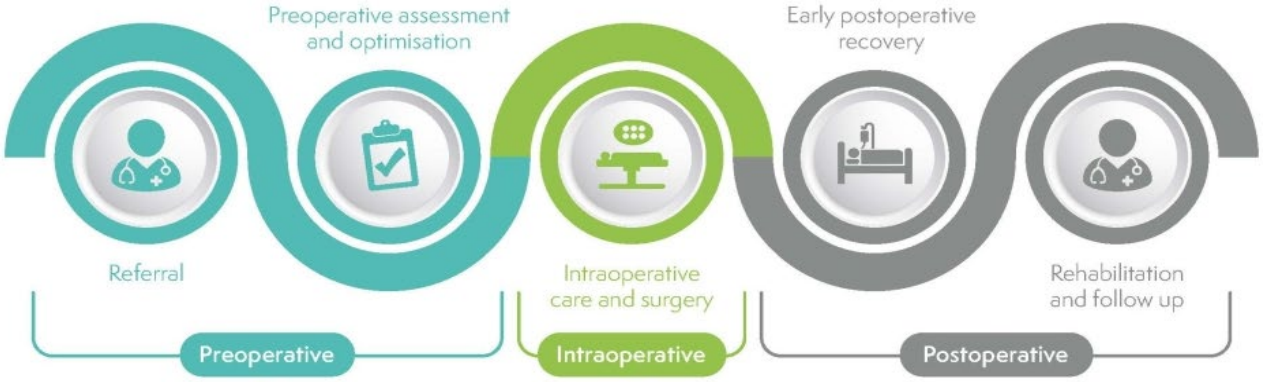

Figure 1: CPOC Infographic: what is perioperative care?

Perioperative care

Perioperative care is the multidisciplinary, individualised, integrated care of patients, from the moment surgery is contemplated through to their optimal outcome. The perioperative care team (POCT) includes doctors, nurses, allied health professionals and non-clinical personnel working with patients, family members or carers from community-based health and social care teams. Led by medically qualified specialists, the perioperative care team performs risk and needs assessment, co-ordinates preoperative optimisation and prehabilitation, helps prevention and management of postoperative medical complications, and supports functional recovery of patients after surgery. The perioperative team facilitates shared decision-making with patients, often supported by people close to them, and forms partnerships with patients and others to improve physical health and psychological

preparedness in anticipation of surgery. The perioperative team provides care in the preoperative, intraoperative and postoperative phases of the patient's journey.

The need for a medical curriculum in perioperative care

At present there is no nationally consistent training pathway for doctors wishing to work as a specialist in perioperative care despite this being a component of surgical, geriatric, anaesthetic, emergency medicine, intensive care and general practice training. For example, the training in perioperative care for anaesthetists includes mandatory training prior to completion of Level 2 training plus an optional Level 3 Special Interest Area (SIA) for a period of 3 to 6 months (Whole Time Equivalent, WTE) prior to a CCT. There are no formal SIA's in other specialties such as surgery and geriatrics, although current training models facilitate doctors to provide specialist perioperative care within their scope of practice. It will be expected that trainers and trainees will use this curriculum (Part 2 sets out the syllabus in detail) to guide Fellowship training in perioperative care which goes beyond the current SIA and training programme competencies, developing perioperative specialists with the skill set to lead and manage perioperative care services across a breadth of complex healthcare systems.

New models of perioperative care led by medical specialists are necessary to meet the significant demands on surgical services managing complex patients across the perioperative journey. Perioperative medical leadership optimises individual outcomes for patients and improves the design, efficiency and governance of perioperative care services. This document represents the development of a clear curriculum of perioperative knowledge, skills and behaviours required to benefit patients, healthcare professionals and the systems in which they work.

2. SPECIFICATION FOR A DOCTOR HOLDING A QUALIFICATION IN PERIOPERATIVE CARE

Specialists in perioperative care are doctors from a variety of medical backgrounds who undertake and support the management of patients preparing for and recovering from surgery using clinical skills, investigations, interventional, and psychological techniques in multidisciplinary and multiprofessional settings: inpatient, out-patient and community.

A Specialist Perioperative Care Curriculum holder:

- has the necessary knowledge and skills to safely manage complex in-patient and out-patient conditions in patients considering, preparing for and recovering from surgery

- has the ability to practise independently and uses skills and understanding of multidisciplinary team roles to lead perioperative services to deliver holistic, evidence-based care

- can assess and discuss risk of surgery and alternatives with patients; helping optimise chronic health conditions and health-related behaviours prior to surgery

- can recognise and manage complications following surgery, referring to other specialists where necessary

- is a leader in perioperative care quality improvement processes

- undertakes lifelong learning to fulfil revalidation in perioperative care

- participates in training and teaching strategies at local and national level

3. INCREASING ACCESS TO TRAINING IN PERIOPERATIVE CARE

This curriculum allows access to training to holders or would-be holders of a CCT, CCST or CESR portfolio pathways in any medical specialty. Cross mapping of the curricula of geriatric medicine, surgery, anaesthesia and intensive care medicine has indicated that doctors in these specialities have much of the core knowledge and clinical skills to allow them to embark on training safely and successfully for a Fellowship qualification in perioperative care. Doctors from other backgrounds including general practice may have developed elements of this core knowledge and all doctors will be required to fulfil or work towards fulfilling pre-set criteria as indicated in this curriculum prior to embarking on training.

4. INTERLINKING WITH NHS ENGLAND AND FOUR NATION BODIES TO UPSKILL THE WORKFORCE IN PERIOPERATIVE CARE

CPOC is committed to working with stakeholders within the four nations, to support the development of a curriculum in perioperative care for doctors working across the NHS. Delivering quality perioperative care requires a workforce equipped to manage patients in different healthcare settings and those undergoing all types of surgery from minor to complex procedures. As part of the strategy, CPOC recognises the need for better use of the entire workforce and is dedicated to educating and developing the wider workforce through broader training, cross-skilling and a flexible approach, recognising the role of the multiprofessional workforce in meeting the challenges faced by Health Services in the NHS

Long Term Workforce Plan (2023). Holders of the Fellowship in perioperative care will be trainers for other doctors working in the field of perioperative care.

5. THE CURRICULUM DEVELOPMENT BODY

CPOC is a cross-organisational, multidisciplinary initiative led by the Royal College of Anaesthetists to facilitate delivery of perioperative care for patient benefit. CPOC is a partnership between patients and other professional stakeholders including Medical Royal Colleges, NHS England and the equivalent bodies responsible for healthcare in the other UK devolved nations, committed to improving the health of people of all ages by promoting the highest standards of perioperative care for all patients at all stages of their surgical journey.

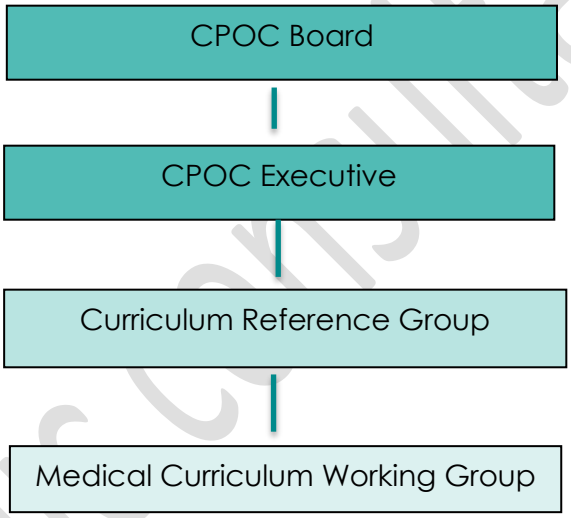

Figure 2: CPOC Governance

The Curriculum Reference Group has oversight of all working groups and the CPOC Board has final approval of the Fellowship curriculum.

Curriculum governance

The General Medical Council (GMC) has designated the Statutory Education Bodies (SEBs) as responsible for governance and delivery of qualifications. The SEBs are:

- National Health Service England (NHSE)
- NHS Education Scotland (NES)

- Health Education and Improvement Wales (HEIW)
- Northern Ireland Medical and Dental Training Agency (NIMDTA)

6. ELIGIBILITY FOR CURRICULUM TRAINING

Any doctor considering joining a CPOC Fellowship programme will have attained capabilities in many aspects of perioperative care prior to joining the programme. These competencies facilitate the delivery of perioperative care within their sphere of practice. Successful completion of the perioperative care curriculum will allow the doctor to receive a Fellowship qualification in perioperative care demonstrating the skill set to lead and manage perioperative care services across a breadth of complex healthcare systems.

Eligibility

Entry onto a CPOC approved perioperative Fellowship programme allows access to training to holders or would-be holders of a CCT, CCST or CESR / portfolio pathway in medical specialties involving perioperative care. Cross-mapping of the learner's existing capabilities using the criteria in the table below will be required to assess pre-training competencies and to ensure that the training programme fulfils the requirements of the curriculum. This will also apply to SAS Doctors who wish to embark on training leading to a qualification in perioperative care.

Experience required before embarking on the curriculum

The following is a guide for doctors and their trainers regarding equivalent experience and / or training doctors will need to demonstrate before embarking on the qualification. It is anticipated that for many doctors, small gaps in pre-existing capabilities described in the eligibility criteria can be accounted for when designing the content of their Fellowship programme.

The eligibility criteria for entry onto the curriculum programme are evidence of completion of the capabilities in practice for example, described by Core Surgical Training Curriculum of the Intercollegiate Surgical Curriculum Programme; Stages 1,2 and 3 FRCA Perioperative Medicine of the Royal College of Anaesthetists curriculum or equivalent in another medical discipline.

It is likely that doctors who have completed Stage 2 of the Fellowship of the Royal College of Anaesthetists will be eligible to commence a 12-month WTE training programme in

perioperative care without a requirement to demonstrate additional competencies prior to commencement of the programme.

Capability-based Eligibility Criteria for entry onto curriculum programme

Applies basic sciences to perioperative care. This will include the physiology of specific organ systems relevant to surgical care including the cardiovascular, respiratory, gastrointestinal, urinary, endocrine, musculoskeletal and neurological systems. General physiological principles including: • Thermoregulation • Metabolic, ionic and acid/base homeostasis • Cardiorespiratory function • Haemostasis • Acid base balance • Pain and nociception
Liaises appropriately with other healthcare professionals to optimise patient care. Engages constructively with all members of the multi-disciplinary team to develop clinical management options, taking co-morbidities into account, recognising when uncertainty exists, and being able to manage this. Develops a clear management plan and communicates this by appropriate means to the patient, Primary Care, multidisciplinary team and administrative staff as appropriate
Describes the use and limitations of common risk-scoring systems including general risk stratification tools e.g. SORT and specific risk assessment e.g. VTE risk
Makes and implements plans to mitigate co-morbidities and their treatment in the perioperative period, with particular reference to less common cardiovascular, neurological, respiratory, endocrine, haematological and rheumatological diseases
Delivers individualised perioperative care to patients presenting for elective surgery and ASA 1-3 emergency patients, focusing on optimising patient experience and outcome
Applies adjustments required that co-existing disease and surgical complexity have on the conduct of perioperative care, including frailty, cognitive impairment, substance abuse (including prescription opioids and other analgesics), physical inactivity or obesity on perioperative outcomes
Applies physical, psychological and social considerations to facilitate shared decision making, to support person-centred care, modifying discussions to match the intellectual, social and cultural background of individual patients whilst applying ethical principles of, and legislative framework for, capacity and consent
Applies the principles of public health interventions such as smoking cessation, reducing obesity and alcohol intake. Regards all patient interactions as opportunities for health promotion with particular reference to long-term conditions and the promotion of healthy eating and physical activity modified to the individual needs of patients
Explains and acts on the importance of perioperative management of haematological conditions including anaemia and coagulopathy

Recognises the factors associated with abnormal perioperative nutritional status and applies strategies to mitigate risks when planning perioperative nutrition in partnership with dieticians, nutrition teams and patients
Describes the needs and roles of carers and those providing support in the perioperative period and applies this to practice
Recognises the potential harms of health care interventions and performs assessment of the postoperative patient to manage: • Delivery of effective analgesia and opioid stewardship • Diagnosis and treatment of VTE • Post-operative monitoring and optimisation of fluid & electrolyte balance • Diagnosis and treatment of post-operative infection and sepsis • Diagnosis and treatment of transfusion reactions • Assessment and management of cognitive impairment and delirium
Describes the requirement for postoperative organ support and its limitations
Provides medical support during end-of-life care as part of a multidisciplinary team, utilising the knowledge and clinical skills necessary to manage the transition from life to death including palliation of symptoms, certification of death and the discussion of resuscitation status and treatment escalation planning

Table 1: Capability based eligibility criteria

The experience of each individual doctor will be taken into account, alongside evidence of capabilities and completed training within the curriculum for CCT in their base specialty. This evidence will be used to cross-map against eligibility descriptors and design their educational programme, identifying areas where learners already fulfil the criteria and recognising that doctors from different specialty backgrounds will have different capability gaps.

Doctors who are post-CCT holders will collaboratively cross map the eligibility criteria regarding Capabilities in Practice in Perioperative Care with their Fellowship lead trainer (training structure to be confirmed). For post-CCT holders, practical experience gleaned post-CCT will also need to be taken into consideration by the Fellowship lead trainer (training structure to be confirmed), when planning with the doctor the content of the training programme. Therefore, meeting with the Fellowship lead trainer is mandatory prior to embarking on training.

SAS doctors are key providers of patient care in the NHS and CPOC hopes these doctors will take on important, senior clinical and leadership roles in perioperative care. CPOC wishes to welcome SAS doctors' involvement in perioperative care through participation in the Fellowship curriculum programme. Prior to direct entry into a Fellowship training programme, SAS doctors and their Fellowship lead trainer would plan a bespoke training programme which considers previous experience in the fields of perioperative care (including geriatrics and critical care), surgery or anaesthesia. These doctors would usually demonstrate at least one

year of working within a multidisciplinary perioperative care service prior to entering a Fellowship programme.

Transferable skills amongst medical specialists working in Perioperative Care

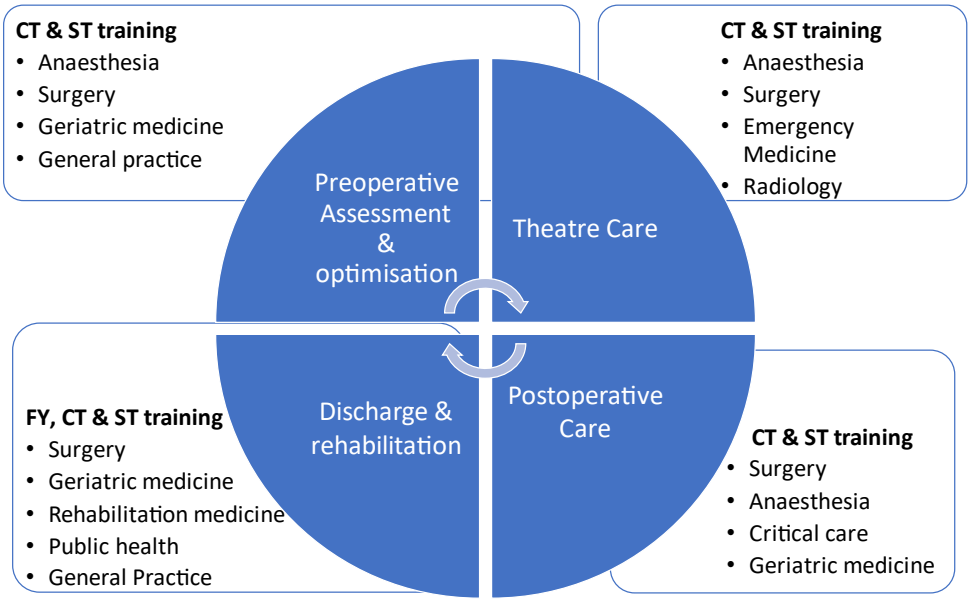

Figure 3: Potential transferrable skills in Perioperative Care

It is anticipated that once the qualification is rolled out, should there be doctors from other specialties including general practitioners that would wish to be considered for training for the qualification, further cross-mapping exercises of relevant curricula would be required.

The curriculum pre-CCT

The Fellowship could be taken in either ST6 or ST7 of a CCT training programme taking an indicative period of 12 months' WTE training for the average specialist trainee. Cross-mapping of individual experience and the curricula for CCT will be required to ensure that all eligibility criteria can be evidenced prior to commencing training for a Fellowship and any gaps identified. It is expected that doctors undertaking a perioperative care qualification will need to complete 12 months WTE training leading to a qualification.

Alternatively, an indicative 12-month period of perioperative care training for the curriculum can be undertaken as an Out of Programme Experience (OOPE) or Out of Programme Training (OOPT) by any doctor (subject to the above eligibility criteria) prior to being awarded the CCT

in their base specialty. This will require approval of the Training Programme Director and Head of School supported by their CPOC Fellowship lead trainer (training structure to be confirmed).

The curriculum post-CCT

An indicative period of training of 12 months WTE for the average doctor to be undertaken after CCT. The Fellowship lead trainer (training structure to be confirmed) will review the evidenced competencies, training and prior experiential learning should be taken into account when identifying capabilities in perioperative care that have already been demonstrated alongside gaps in knowledge and skills which will need to be addressed during the programme. Training in perioperative care for the curriculum will build on this pre-existing training over a 12 month WTE period.

The curriculum for SAS Doctors

The training programme for SAS doctors undertaking the qualification will mirror that of doctors in training posts or those who have completed their CCT. SAS doctors can provide evidence of previous experience and training in perioperative care to their Fellowship lead trainer (training structure to be confirmed) and amendments to the curriculum training programme can be adapted to address any gaps in knowledge prior to embarking on training. Pre-qualification training and experience in perioperative care should be similar to that required of other doctors in pre and post CCT training programs. Historic time spent in practising aspects of perioperative care within various specialities, e.g. working within a postoperative critical care role; surgery; acute pain or as an SAS doctor in anaesthesia, should be considered when assessing pre-training experience. It is anticipated that SAS grade doctors will require an indicative minimum period of 12 months WTE of training for the curriculum in most circumstances.

For SAS Doctors, a Fellowship in perioperative care would lead to independent practice and leadership roles in the field of perioperative care, but this would not necessarily translate to being added to the Specialist Register of the GMC in an additional area of practice.

Training pathway

Doctors may apply to a CPOC approved Fellowship post leading to a Fellowship qualification in perioperative care. (CPOC training structure to be confirmed).

Completion of curriculum training

The Fellowship lead trainer will sign-off summative milestones of progress and will identify when successful completion of training has occurred at which point a recommendation can be made to a national sign- off panel (CPOC training structure to be confirmed) for the award of the Fellowship qualification.

Remote and rural considerations

Where a doctor is based in a remote or rural part of the UK, and wishes to undertake the Fellowship, CPOC will work with the doctor and potential trainers in perioperative care in local and secondary sites to balance the learning needs of the curriculum partially delivered at secondary site locations alongside remote sites (training structure to be confirmed).

There are existing models for this process, for example within general surgical training. Option modules are available in rural and remote surgery which allow surgeons to gain exposure in areas which may be pursued further by developing competencies in interdisciplinary rural and remote surgery. In this setting, general surgery competencies only partially cover the scope of the role; and a deeper understanding and skill set in perioperative care in the remote setting is required. Similarly, training opportunities are available in recognised centres for specialist anaesthesia training in rural parts of Scotland, England and Wales. With the enhanced delivery of virtual consultations, and huge leaps in the availability of video conferencing it will be possible for consultation and multidisciplinary team (MDT) work to be undertaken remotely. A bespoke approach will be taken to coordinate learning opportunities centrally and remotely whilst minimising travel.

7. PROGRAMME OF LEARNING

The focus of the qualification is the attainment of high-level outcomes across all perioperative domains, with descriptors of specialist capabilities in practice outlined in Part 2. The duration of the perioperative care Fellowship is typically expected to be an indicative 12 months' WTE training. Evidence of prior generic and speciality capabilities in perioperative care will be considered by the Fellowship lead trainer when planning the training programme with the doctor. This will allow for any gaps in eligibility experience or training to be identified at the start, whilst identifying areas where the doctor is already able to practice competently at consultant level. For example, a doctor from geriatric medicine background may require more focused training in anaesthetic and surgical techniques; whilst an anaesthetic doctor may require more training in public health and wound care; whilst surgical doctors may focus more on assessment of functional status and how this relates to postoperative complications and organ support.

All doctors will be expected to work in preoperative assessment (outpatient/bedside) and day-surgery environments and gain competencies in assessing and stratifying risk for a wide range of surgery; optimising medical comorbidities; promoting health-related behaviour change and prehabilitation.

All doctors will be expected to work in postoperative care environments including theatre recovery, day-surgery environments, general surgical wards, critical care and enhanced care units where they will gain competencies in advanced patient monitoring, managing acute pain, recognising and managing postoperative complications and contributing to complex discharge planning.

All doctors will be expected to work with the administrative, booking and managerial teams, to understand how processes, staffing, equipment, information technology and communication affect the patient experience and value-based care. The perioperative specialist should apply leadership skills by recognising and co-ordinating the roles of individual team members to optimise patient outcomes.

All doctors will be expected to gain an understanding of perioperative care for children; dynamic functional testing (cardiopulmonary exercise testing); point-of-care imaging; public and global health to a level which would allow them to assess, manage and suitably signpost if more specialist intervention would be required.

This guidance is reflected in the Higher Learning Outcomes in Part 2

8. LIST OF CONTRIBUTORS

CPOC would like to thank everyone who has contributed to this project to date.

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Jason Cross	POPs Service
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