# Core Surgery Curriculum
# Purpose Statment

**Proposal for August 2020**

The purpose statement addresses the requirements of the General Medical Council's Excellence by Design: standards for postgraduate curricula[1] (theme 1) and the Shape of Training Review. It sets out patient and service needs, scope of practice and the level of performance expected of doctors in training. GMC approval of the curriculum pertains to UK training programmes while those in the Republic of Ireland are governed by the Royal College of Surgeons of Ireland (RSCI) and the Medical Council of Ireland.

**Authors**

John Brecknell: SAC Chair

Patrick Lintott, James Gilbert SAC Curriculum Leads

## 1. Purpose statement for Core Surgery

### 1.1 The curriculum scope of practice, service, patient and population needs

The purpose of the curriculum for Core Surgery is to act as a unifying document to govern the first two years of all UK surgical training (with the exception of neurosurgery which combines only the common surgical component of the core curriculum with neurosurgery, neuroradiology, neurology and neuro-intensive care). This is Phase 1 of surgical training. Successful completion of the core training curriculum does not confer certification but means that a candidate will have reached the minimum required level of competence for application into one or more of the higher specialised surgical training programmes. Many trainees who make satisfactory progress in core surgical training may also elect to pursue valuable careers in other branches of medical practice and, in recognition of this, the JCST is committed to working through the Academy of Medical Royal Colleges to identify competencies within this curriculum which are transferable to other postgraduate medical training curricula.

The curriculum provides surgical trainees with the generic professional and specialty-specific capabilities needed to be entrusted to undertake the role of core trainee in surgery whilst following this curriculum and prepare trainees to undertake the role of specialty registrar in their subsequent training. These capabilities will include those required of trainees, working under appropriate levels of supervision, to contribute to keeping patients safe in the emergency department, ward and theatre environment, to perform parts initially and, as specialty training progresses, all of increasingly complex surgical procedures, and to be familiar with the management of acute and elective conditions in the generality of their chosen special interest. Trainees will be qualified after satisfactory completion of the programme to apply for training posts in one or more surgical specialties in the United Kingdom or Republic of Ireland.

Patient safety and competent practice are both essential and the curriculum has been designed so that the learning experience itself should not affect patient safety. Patient safety is the first priority of training demonstrated through safety-critical content, expected levels of performance, critical progression points, required breadth of experience and levels of trainer supervision needed for safe and professional practice. Upon satisfactory completion of training programmes, we expect trainees to be able to work safely and competently in the defined area of practice and to be able to manage or mitigate relevant risks effectively. A feature of the curriculum is that it promotes and encourages excellence through the setting of high-level outcomes, supervision levels for excellence, and tailored assessment and feedback, allowing trainees to progress at their own rate.

**1.2 Shape of training review**

The Shape of Training (SoT) review[2] provides an opportunity to reform postgraduate training to produce a workforce fit for the needs of patients, producing a doctor who is more patient focused, more general and has more flexibility in career structure. The core surgery curriculum meets the main recommendations of SoT as shown below.

1. *Takes account of and describes how the proposal will better support the needs of patients and service providers:*

There is a gap between the product of UK Foundation training and the entry requirements for specialty training in the surgical specialties. It contains much common ground; the basic sciences of anatomy, physiology and pathology, the principles of managing patients affected by trauma, infection and cancer, basic surgical skills and the resuscitation of critically ill patients, all within the generic professional framework of medical practice.

The route across the gap from Foundation to surgical specialty training is diverse including both run-through and uncoupled appointment and generic and themed, academic and clinical programmes, with nine distinct target criteria for appointment or run-through to specialty surgical training. To fulfil this need for diversity, the 2017 core surgery curriculum took a modular approach around a heart of common content and although accepted, concern was generated amongst employer groups regarding mechanisms for matching trainees to specialty according to workforce requirement. In addition, the GMC in their approval letter required the JCST to work towards a ‘more common core curriculum’.

In rising to the challenge of producing a new curriculum to meet the requirements of *Excellence by Design*, the Core Surgical Training Advisory Committee have taken a blank canvas and considered a wide range of options to fill this training gap including a move towards exclusive run-though training, a single year of common content and a three or four year programme to generate a generic surgical practitioner. Ideas developed internally have been discussed within the Improving Surgical Training project, the Confederation of Postgraduate Schools of Surgery, the wider JCST and its curriculum development days in October 2017 and June 2018, and at the General Surgery in Scotland workshop in May 2018. An options appraisal, fully exploring the benefits, necessary mitigations and risks of five identified options is included in section 2 of this document. Following discussion of these options with the Curriculum Oversight Group (COG) there was agreement that there remains some common ground to surgical training within the non-neurosurgical specialties. This is represented in the common content module of the 2017 curriculum and specifies material for learning sufficient to fill an indicative year of training. There were felt to be major logistic difficulties with recruitment to specialty training after just a single year of core surgical training and logistical concerns about a more generalised training that would mean less experienced trainees entering their specialty training without skills at the level required to participate in the middle grade rota. With the footprint of surgery in both undergraduate medical curricula and the Foundation curriculum reduced over the last 10 years, and the existence of undecided surgeons (early years trainees with a career interest in surgery in general, with specialty undecided), it was felt there is still a need for generic core surgical training as a space for career exploration within training. This would exist alongside specialty specific run-through and themed uncoupled training in what has been referred to as a 'mixed economy'.

There remains therefore a need for a core surgery curriculum, lasting an indicative 2 years, as a bridge from completion of Foundation training to appointment to, or run-through into, surgical specialty training. Post specific themed appointments in core surgery national recruitment and competitive regional processes in generic programmes, both matched to specialty volume, assure mechanisms for fairly matching trainees to specialty specific content according to workforce requirements. This curriculum, adopting the five Capabilities in Practice (CiPs) common to all ten surgical specialty curricula, allows a new unifying structure to generate a more common core curriculum, underpinned by a modular syllabus to reflect the ongoing need for subject specific diversity.

This core surgery curriculum will facilitate as described the requirements for entry to, or run-through into, the specialty programmes in the nine surgical specialties excluding neurosurgery at ST3 level, which in turn support the needs of patients and service providers. Within core surgical training itself, and with Generic Professional Capabilities at its heart, it provides the blueprint for surgical trainees to develop the patterns of professional behaviour which will contribute to functional surgical teams and the deliver high quality, safe care.

2. *Ensures that the proposed curriculum to CCT equips doctors with the generic skills to participate in the acute unselected take and to provide continuity of care thereafter:*

The curriculum will begin to develop the generic professional and specialty-specific capabilities needed by surgeons of any specialty, and by completion of the curriculum trainees will be capable of being entrusted to undertake the role of the general specialty registrar during their subsequent

training. These capabilities will include those required of trainees, working under appropriate levels of supervision, to contribute to keeping patients safe in the emergency department, ward and theatre environment, to perform parts initially and as specialty training progresses, all of increasingly complex surgical procedures, and to be familiar with the management of acute and elective conditions in the generality of their chosen special interest. At its heart, therefore, this curriculum serves as a springboard, from which the specialty curricula will facilitate the development in subsequent training, of the generic skills to participate in the acute unselected take and to provide continuity of care thereafter.

3. *Where appropriate describes how the proposal would better support the delivery of care in the community:*

The majority of the practical part of surgical practice is limited to working in hospital settings. However, newer models of working include greater patient care in a community setting. Outpatient clinics and multi-disciplinary team meetings (MDTs) can be delivered closer to the patient at treatment centres and other community settings, and this already takes place.

4. *Describes how the proposal will support a more flexible approach to training:*

The curriculum describes five CiPs shared with all the specialties in surgery, supporting flexibility for trainees to move between those specialties in line with the recommendations set out in the GMC's report to the four UK governments[3]. The CiPs include the Generic Professional Capabilities (GPCs) common to all medical specialties, facilitating transferability of learning outcomes across other related specialties and disciplines. It will, therefore, be possible for trainees to transfer generic knowledge, clinical and surgical skills to another surgical specialty without restarting at CT1/ST1 level. As an example, prior learning of history-taking, physical examination, health promotion, medical record keeping and technical skills in one specialty may allow accelerated learning in the clinical areas of another specialty with identical requirements for communication skills, team-working and empathy, compassion and respect for patients. Consequently, trainees will acquire generic skills in the CiPs which can be transferred to other surgical specialties, or to other non-surgical specialties. Trainees who choose a different career route may be able to have a shorter than usual training pathway in their new training programme, in recognition of learning already gained. Many trainees who make satisfactory progress in core surgical training may also elect to pursue valuable careers in other branches of medical practice and in recognition of this, the JCST is committed to working through the Academy of Medical Royal Colleges to identify competencies within this curriculum which are transferable to other post graduate medical training curricula.

This flexible approach with acquisition of transferable capabilities will allow training in core surgery to adapt to current and future patient and workforce needs as well as to changes in surgery with the advent of new treatments and technologies.

5. *Describes the role that credentialing will play in delivering the specialist and sub-specialist components of the curriculum:*

Although the JCST is enthusiastic about working with the GMC to introduce a process of credentialing to enhance medical regulation and patient protection, this curriculum for core surgery, lying in the early years of surgical training, will not engage directly with this area of training.

**1.3 The high-level outcomes of core surgery**

The curriculum is outcomes-based, specifying the high-level generic, shared and specialty-specific capabilities that must be demonstrated to complete training. There is a greater focus on the generic professional capabilities common to all doctors.

*1.3.1 Capabilities in Practice*

The high-level outcomes of the curriculum are expressed as CiPs. The five shared CiPs describe the professional tasks or work within the scope of all aspects of surgery. These are:

1) Manages an out-patient clinic

2) Manages the unselected emergency take

3) Manages ward rounds and the ongoing care of inpatients

4) Manages an operating list

5) Manages a multi-disciplinary meeting

By the completion of surgical training and certification, the trainee must demonstrate that they are capable of unsupervised practice in all CiPs, but to successfully complete the core surgery curriculum (Phase 1), trainees must demonstrate that the supervision they still require to practice these professional tasks meets a threshold specified in 1.4 below.

*1.3.2 Generic Professional Capabilities*

Embedded within each CiP are the full range of Generic Professional Capabilities (GPCs) which describe the professional responsibilities of all doctors in keeping with Good Medical Practice.

These attributes are common, minimum and generic standards expected of all medical practitioners achieving certification or its equivalent. The GPCs have equal weight in the training and assessment of clinical capabilities and responsibilities in the training programme. The nine domains of the GPC framework are:

1. Professional knowledge
2. Professional skills
3. Professional values and behaviours
4. Health promotion and illness prevention
5. Leadership and team-working
6. Patient safety and quality improvement
7. Safeguarding vulnerable groups
8. Education and training

9. Research and scholarship

*1.3.3 Supervision levels*

The assessment of CiPs draws on the holistic judgement of Clinical Supervisors by ascribing the supervision level required by the trainee to undertake each CiP to the standard of certification. The level of supervision will change in line with the trainee's progression, consistent with safe and effective care for the patient. Typically, there should be a gradual reduction in the level of supervision required and an increase in the complexity of cases managed until the level of competence for independent practice is acquired.

Core surgical trainees are unlikely to gain true independence in any CiP and at completion of core surgery it is not expected that trainees will have attained higher than a level III in any of the CiPs. To aid description of trainee progression within core surgery we describe below a subdivision of supervision levels I and II.

The supervision levels are:

| | |
|---|---|
| **Level I** | Able to observe only<br><br>a) passive observation only<br><br>b) observes whilst actively assisting with task |
| **Level II** | Able to act with direct supervision:<br><br>a) supervisor present throughout<br><br>i) trainee guided through individual components of the task<br><br>ii) trainee able to combine some components of the task under direct guidance<br><br>iii) trainee able to carry out all components of the task under direct guidance<br><br>b) supervisor present in part<br><br>i) trainee able to carry out some components of the task without direct guidance<br><br>ii) trainee able to carry out most components of the task without direct guidance; supervisor presence still required to assure patient safety |
| **Level III** | Able to act with indirect supervision |

| | |
|---|---|
| **Level IV** | Able to act unsupervised |
| **Level V** | Demonstrates performance to a level well beyond that expected of a day one consultant |

*1.3.4 Descriptors*

Each CiP contains key descriptors associated with the clinical activity or task and all the GPC descriptors. The descriptors are intended to help trainees and trainers recognise the level of knowledge, skills and professional behaviours which must be demonstrated for independent practice. All descriptors will be taken in to account when carrying out assessment using the MCR tool, and they will be used by Clinical Supervisors to highlight where trainees achieve excellence at a faster rate and when targeted training is necessary in the manner of an exception report. They, therefore, provide the basis for specific, constructive feedback to the trainee. The MCR will also provide trainees with a self-assessment, providing an opportunity to show insight and actively engage in the feedback discussion.

**1.4. Progression through training**

Trainees will follow the core surgical curriculum after entering core surgery via a national selection process at CT1 or after entering an ST1 run-through programme, or by local selection as an academic clinical fellow. Trainees will learn in a variety of settings using a range of methods, including workplace-based experiential learning in a variety of environments, formal postgraduate teaching, simulation-based education and through self-directed learning.

The core surgery curriculum is outcome-based rather than time-based. However, it will normally be completed in an indicative time of two years.

There will be options for those trainees who demonstrate exceptionally rapid development and acquisition of capabilities to complete training more rapidly than the current indicative time of two years. There may also be a small number of trainees who develop more slowly and will require an extension of training in line the Reference Guide for Postgraduate Specialty Training in the UK (the Gold Guide[4]).

Trainees who choose less than full time training (LTFT) will have the indicative training time extended pro-rata in accordance with the Gold Guide. LTFT trainees will perform both elective and out of hours duties pro rata throughout the time of LTFT.

Completing core surgery training satisfactorily as laid out in this curriculum will not lead on directly to certification, but an ARCP outcome 6 at the end of the CT2 year will allow a successful applicant from an uncoupled core programme to a higher surgical training programme to take up their ST3 post. An ARCP outcome 1 at the end of ST2 in a run-through programme will allow a trainee to progress to the next phase of their specialty training[9].

*1.4.1 Critical Progression points*

Indicative levels of supervision are indicated only for the end of core training. At the end of specialty training trainees will be required to reach level IV in both the shared and specialty-specific CiPs of their chosen specialty. However, to complete core surgery training (Phase 1) only attainment of the indicated supervision levels of the shared CiPs is required.

Excellence will be recognised by:

a. achievement of Level III in any of the CiPs
b. exceeding the supervision level expected for the end of core surgery training
c. achievement of a supervision level at an earlier stage than would normally be expected
d. recognition of particularly good performance in any of the descriptors within a CiP

| **Capability in practice (shared)** | **Supervision level** |
|---|---|
| 1. Manages an out-patient clinic | Level IIaiii |
| 2. Manages the unselected emergency take | Level IIaiii |
| 3. Manages ward rounds and the ongoing care of inpatients | Level IIbi |
| 4. Manages an operating list | Level IIaii |
| 5. Manages a multi-disciplinary meeting | Level IIaii |

*1.4.2 Training Pathway*

Trainees in core surgery rotate through a number of specialty posts, typically of between four and twelve months each. Trainees may be appointed to generic or themed training rotations and have the opportunity to rank their preferences during the selection process. Generic programmes provide the opportunity to complete the core surgery curriculum in a rotation through a wide variety of surgical specialties and may be ideal for a trainee who, although committed to surgery has yet to decide in which of the nine specialties they wish to undertake higher surgical training. Some of these programmes specify posts for just the first year and allow competition for specialty specific posts in the interface between the first and second year of the programme. Themed programmes provide a rotation through posts specifically chosen to suit the development of an individual who already knows in which surgical specialty they wish to train.

There are no critical progression points, other than the requirements of completion of the Phase 1 curriculum, as the programme only runs for an indicative two years.

**References**

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5. GMC website: Credentialing: https://www.gmc-uk.org/education/standards-guidance-and-curricula/projects/credentialing