

Plastic Surgery Curriculum Purpose Statement

Proposal for August 2019

The purpose statement addresses the requirements of the General Medical Council's Excellence by Design: standards for postgraduate curricula¹ (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.

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1. Purpose statement for Plastic Surgery

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

The purpose of the curriculum for Plastic Surgery is to produce, at certification, competent doctors, able to deliver excellent outcomes for patients as consultant surgeons in the UK. The curriculum will provide consultant surgeons with the generic professional and specialty-specific capabilities needed to manage patients presenting with the full range of acute Plastic Surgery conditions up to the point of operation and to manage the full range of acute and elective conditions in the generality of plastic surgery, including the operation and post-operative care. Trainees will be entrusted to undertake the role of the general Plastic Surgery Registrar during training and will be qualified at certification to apply for consultant posts in Plastic Surgery in the United Kingdom and the 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) review² 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 Plastic Surgery curriculum meets the main recommendations of SoT as shown below.

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

Discussion regarding the modernisation of the Plastic Surgery curriculum has been going on within the specialty, and particularly the SAC, since the publication of Shape of Training: Report from the UK Shape of Training Steering Group² in early 2017. The curriculum will produce surgeons who are competent in elective and emergency General Plastic Surgery. This will provide clarity to employers / patients regarding the skills a surgeon will have at the time of appointment as a consultant. Plastic Surgery is the general surgery of soft tissue, cancers of the soft tissues and reconstruction. The advanced technical skills required to perform this surgery safely can be acquired through exposure to any of the broad areas of clinical application of these techniques (e.g. Cleft Lip & Palate Surgery, Hand and Upper Limb Surgery, Burns Surgery, Sarcoma Surgery and Head & Neck Surgery) and are transferable between areas of clinical application rather than being specific to an anatomical region. This ensures that the output of the Plastic Surgery curriculum will be general, transferable and flexible; trainees will be appointable to any Plastic Surgery post advertised, with the ability to focus their scope of practice if required by local services after appointment.

The curriculum has been developed in consultation with stakeholders, including trainees, trainers, employers, lay representatives and other groups, ensuring the development of a curriculum that is fair, flexible, non-discriminatory, fit for purpose today with the capacity to evolve in future iterations in response to changing needs of patients.

- *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:*

All trainees develop a full range of emergency skills by Certification in order to participate in the unselected adult and paediatric Plastic Surgery emergency take and provide continuity of care to this group of patients. They will be entrusted to undertake the role of the general Plastic Surgery Registrar throughout their training, and as part of that will be expected to look after patients in the pre-, peri-, and post-op environments during training.

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

The nature of Plastic Surgery is such that many surgical components are delivered in tertiary centres (hubs). Outpatient clinics, multi-disciplinary teams (MDTs), minor day-case surgical procedures and simple trauma surgery services can be, and are, delivered closer to the patient at referring district general hospitals, community hospitals or treatment centres (spokes). In addition, virtual clinics have been developed over the last ten years to manage skin cancer, hand trauma and minor burn injuries for example.

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

The curriculum allows ease of transfer into other surgical specialties following core training and beyond. Plastic Surgery develops transferable technical skills to a high level: a trainee moving from Plastic Surgery to another specialty will have acquired many technical skills that are of value in any craft specialty destination.

The curriculum describes clinical Capabilities in Practice (CiPs) shared with other specialties in surgery supporting flexibility for trainees to move between the specialties in line with the recommendations set out in the GMC's report to the four UK governments³. 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 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.

This flexible approach with acquisition of transferable capabilities will allow training in Plastic 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.

1.3 The high-level outcomes of Plastic 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. The high level outcomes are described in section 1.4.1.

1.3.1 Capabilities in Practice

The high-level outcomes of the curriculum are expressed as Capabilities in Practice (CiPs). The 5 shared plus one specialty-specific CiP describe the professional tasks or work within the scope of Plastic 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

In addition to these, the specialty-specific Plastic Surgical CiP is:

- 6) Ability to safely assimilate new technologies and advancing techniques in the field of Plastic Surgery into practice

By the completion of training and certification, the trainee must demonstrate that they are capable of practice at the level of a day 1 consultant in all CiPs.

1.3.2 Generic Professional Capabilities

Embedded within each CiP are the full range 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:

- Professional knowledge
- Professional skills
- Professional values and behaviours
- Health promotion and illness prevention
- Leadership and team-working
- Patient safety and quality improvement
- Safeguarding vulnerable groups
- Education and training
- 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. The supervision levels are:

Level I	Able to observe only
Level II	Able to act with direct supervision: a) supervisor present throughout b) supervisor present for part
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

Phase 2 of training will be completed when the appropriate level of competency (as defined in 1.4 below) has been achieved in each CiP, and a trainee will be eligible for certification when level IV has been achieved. Level V indicates excellence.

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 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 CiPs 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 enter Plastic Surgery training via a national selection process at ST3, or run through training at ST1 after selection into Academic Training in Plastic Surgery. 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.

Plastic Surgery training is outcome-based rather than time-based. However, it will normally be completed in an indicative time of 6 years (4 years phase 2 and 2 years phase 3) for those entering training at ST3 and an indicative 8 years for those entering via the ST1 Academic Programme (2 years in phase 1 following the Core Surgical Training Curriculum, on successful completion of which they will enter phase 2).

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. There may also be a small number of trainees who develop more slowly and will require an extension of training in line with the Reference Guide for Postgraduate Specialty Training in the UK (the Gold Guide⁴).

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.

The programme will be divided into 3 phases -

Phase 1:

Academic run though trainees will spend an indicative initial 2 years of Phase 1 following the core surgical curriculum, with a minimum of a year spent in Plastic Surgery posts. There will then be a critical progression point, at which run through trainees will have to demonstrate that they have satisfied the requirements of the core surgical curriculum, passed the MRCS examination and been awarded an Outcome 1 at the Annual Review of Competence Progression (ARCP) at the end of the second year of training.

Phase 2:

Most trainees will enter training in Plastic Surgery in Phase 2 following successful completion of core surgical training or equivalent via a national selection process. Trainees will gain knowledge, clinical, professional and technical skills across the generality of Plastic Surgery. At the end of Phase 2 there is a critical progression point at which trainees must be able to demonstrate competencies in knowledge, clinical skills and professional behaviours of a day 1 consultant in the specialty and become eligible to sit the Intercollegiate Specialty Board Examination in Plastic Surgery. Technical skills, whilst well developed by the end of Phase 2, will not have developed to the level expected for certification in the emergency and general elective competencies of the curriculum until the end of phase 3.

Phase 3:

Trainees will continue to develop technical skills in the elective and emergency aspects of Plastic Surgery to the level of a day 1 consultant in the specialty. During Phase 3 trainees will continue to be on the general plastic surgery on call rota, and will maintain responsibility for inpatients across the breadth of the specialty whilst on call.

During phase 3 it is expected that all of the trainee's time will be spent developing generic technical skills that are transferrable between special interest areas. Within this, the proportion of time spent within individual areas of special interest will vary according to local requirements of the service, opportunities within the training programme, and interests of the trainee. The Training Programme Director (TPD) would usually determine specialty interest allocations within any given region.

In this outcomes-based curriculum, some trainees may reach the end of Phase 3 in less than the indicative time. On completion of Phase 3, trainees will be eligible for certification and for recommendation to enter the specialist register. Trainees who do not meet the requirements of Phase 3 within the indicative 2 years may require an extension of training time in accordance with the Gold Guide.

Special Interest Areas in Phase 3

After CCT elective plastic surgical practice in the UK is arranged into the following special interest areas:

- Breast
- Burns
- Chest wall
- Cleft lip & palate
- Complex wound
- Craniofacial
- Ear reconstruction
- Genito-urinary and perineal reconstruction
- Hands & upper limb
- Head & neck
- Hypospadias
- Lower Limb
- Sarcoma
- Skin
- Vascular anomalies

However, despite the focus on a particular area of the body, techniques used in these areas are generic and transferable (e.g. formation of a variety of flaps). Exposure to any of the above listed areas will develop the skills in the generality of plastic surgery required for CCT. Through Phase 2 and Phase 3 trainees will be rotated through a range of these areas to experience the application of generic techniques in several areas of the body. This allows trainees to be able to develop a special interest area according to local service needs after appointment to a consultant post, and to equip them with the skills to manage an unselected emergency take.

We expect Plastic Surgeons at CCT to be able to “*manage the full range of acute and elective conditions in the generality of plastic surgery, including the operation.*”

Most emergency presentations and complications of elective plastic surgery involve generic problems such as tissue loss and flap ischaemia. The day 1 consultant in plastic surgery will have the skills to manage the majority of these presentations including operation. However, some components of Plastic Surgery practice are very specialised, and in these circumstances we would expect the day 1 consultant to provide initial management including investigations, and arrange for urgent referral as appropriate.

The curriculum will therefore produce surgeons who can manage the unselected take and be able to recognise and provide initial management of patients with post operative complications which may include operative intervention, or referral to a person with the necessary skills in a minority of occasions.

1.4.1 Critical Progression points

Indicative levels of supervision are indicated for the end of phase 2. At the end of phase 3 trainees are required to reach level IV in both the shared and specialty-specific Capabilities in Practice.

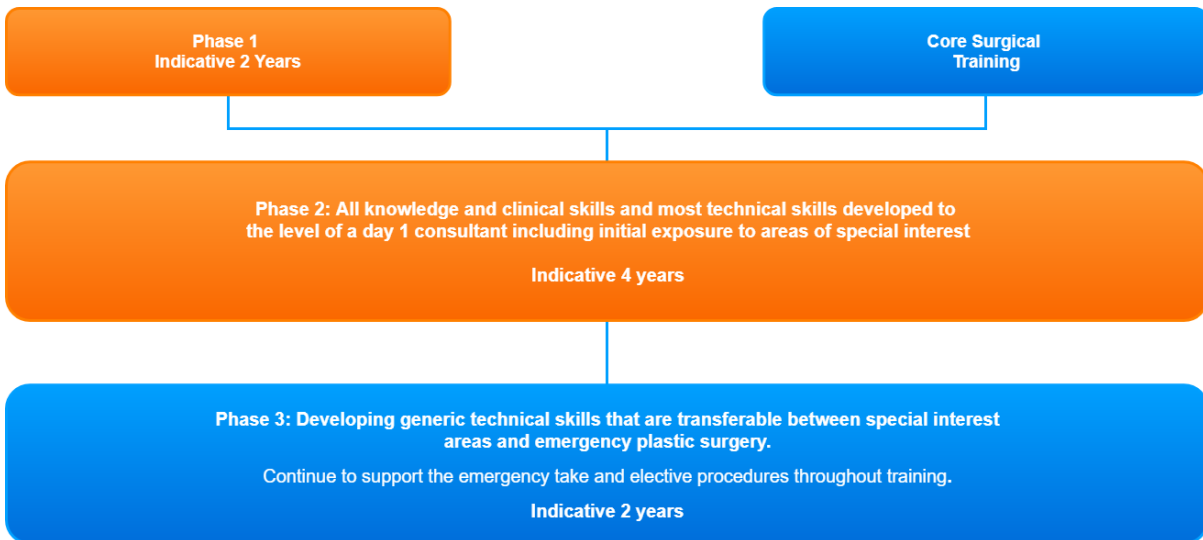
Excellence will be recognised by:

- achievement of Level V in any of the Capabilities in Practice
- exceeding the supervision level expected for the end of Phase 2
- achievement of a supervision level at an earlier stage than would normally be expected
- recognition of particularly good performance in any of the descriptors within a Capability in Practice

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

Capability in practice (specialty-specific)	Supervision level (end of phase 1)	Supervision level (end of phase 2)
Ability to safely assimilate new technologies and advancing techniques in the field of Plastic Surgery into practice	Level III	Level IV

1.4.2 Training Pathway



Through all phases of the pathway, trainees will be exposed to broad areas of clinical focus where generic and transferable clinical and technical skills are acquired. Trainees will gain experience in some but not all of these areas, but acquisition of generic skills in soft tissue surgery, cancer of the soft tissues and reconstruction are transferable between these areas, producing a General Plastic Surgeon, appointable to any advertised Consultant Plastic Surgery post in the UK.

There are many areas of specialist interest within Plastic Surgery, and it is within these areas that generic skills are learned. These generic skills are transferrable between special interest areas, and every trainee will develop these transferable skills through exposure to a wide range of areas of plastic surgery. Generic technical skills required for safe practice in plastic surgery will be developed to the level of a day 1 consultant by certification. The curriculum will therefore produce surgeons who can manage the unselected take, the generality of elective plastic surgery, and be able to recognise and provide initial management of patients with post operative complications which may include operative intervention or referral to a person with the necessary skills in a minority of occasions.

Training Interface Groups (TIGs):

TIGs have been optional syllabus modules in surgical curricula since 2002 and provide advanced training before certification which combines curricular elements of at least two

specialties in important areas of patient care. Plastic Surgery is one of the parent specialties in all of the following TIGs:

Training Interface Group	Parent Specialties
Cleft Lip & Palate Surgery	Plastic Surgery, Oral & Maxillofacial Surgery and Otolaryngology
Hand Surgery	Plastic Surgery and Trauma & Orthopaedic Surgery
Head & Neck Surgical Oncology	Plastic Surgery, Oral & Maxillofacial Surgery and Otolaryngology
Oncoplastic Breast Surgery	Plastic Surgery and General Surgery
Reconstructive & Aesthetic Surgery	Plastic Surgery, Oral & Maxillofacial Surgery, Otolaryngology, General Surgery (Breast) and Ocular-Plastic Surgery (Ophthalmology)
Trauma Surgery	Plastic Surgery, General Surgery, Emergency Medicine, Anaesthesia, Trauma & Orthopaedics, Vascular Surgery, Cardiothoracic Surgery

Within Plastic Surgery there is a growing service need for integrated care to best meet the needs of the patient. The curriculum specifically develops surgeons to be able to lead and work in multi-disciplinary teams (MDTs) and with colleagues from a wide range of professional groups in a variety of hospital settings. The composition of these teams will vary according to the needs of the patient but will include other surgical and medical specialties as well as diagnostic services.

Plastic Surgery, especially through the central role of reconstruction in its syllabus, has interdependencies with all other surgical specialties as evidenced by its role in all TIGs. It also has an interdependency, through the treatment of skin cancer, with dermatology.

References

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