Oral and Maxillofacial Surgery Curriculum

Proposal for August 2019

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.

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1. Purpose statement for Oral and Maxillofacial Surgery

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

Oral and Maxillofacial Surgery (OMFS) is the surgical specialty concerned with the diagnosis and treatment of diseases affecting the mouth, jaws, face and neck. It is often seen as the bridge between medicine and dentistry and OMFS consultants must possess both medical and dental qualifications. OMFS surgeons therefore manage patients presenting with the following:

- trauma to the face, jaws, mouth and neck
- cancers of the head and neck
- conditions of the salivary glands
- congenital and developmental facial deformity including that involving the skull (craniofacial deformity)
- cleft lip and palate
- concerns with aesthetic appearance
- facial and jaw (TMJ) pain
- conditions of the teeth, mouth and jaws
- infections of the head and neck including life-threatening fascial space infection
- conditions of the oral mucosa

- benign and malignant lesions of the skin of the head and neck region.

The face and associated structures are crucial to the functional and psychosocial well-being of patients. Facial injuries and diseases can compromise speech, swallowing, eating, taste, sight and facial appearance which can be deeply personal and openly public. The specialty of OMFS is centred on seeking the best functional and psychosocial outcomes for these patients.

Many systemic diseases can affect the mouth, jaws and surrounding structures. In addition, patients with unrelated, but serious, systemic diseases can present with injury and conditions of the face, mouth, jaws and neck

Advances in surgical expertise, multi-disciplinary team working, procedures and materials available to patients with congenital and acquired OMFS disorders has led to substantial improvements in objective and patient reported outcomes. OMFS specialists with training in surgery, medicine and dentistry are therefore able to manage the whole patient and link into other medical and dental specialties and allied professions.

OMFS units provide care for patients of all ages. OMFS services are arranged in networks, usually in a hub and spoke model, with centralisation for the treatment of many conditions requiring complex care.

Some conditions of the mouth, jaws, face and neck are treated in primary care or delivered by oral surgery practitioners working alongside OMFS surgeons in secondary care. However the ageing population with increasing comorbidity, increasing incidence of cancers of the head and neck and the advances in surgical techniques means the number and complexity of patients requiring OMFS treatment in secondary care is increasing.

The purpose of the curriculum for Oral and Maxillofacial Surgery (OMFS) is to develop, by 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 OMFS conditions up to the point of operation and to manage the full range of acute and elective conditions in the generality of their chosen area of interest, including the operation. OMFS surgeons tend to focus their training and subsequent practice in one or more areas allowing flexibility to meet patient and service demands. Trainees will be entrusted to undertake the role of the general OMFS Registrar during training and will be qualified at certification to apply for consultant posts in OMFS 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 OMFS 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:*

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. There was agreement that the curriculum will develop surgeons who possess the broad-based knowledge and skills to manage unselected emergency and elective patients referred to secondary care, providing general treatment plans and recognising the need for referral to sub-specialist care where appropriate. OMFS consultants on completion of training will be able to demonstrate competence across the breadth of the specialty to the levels defined in the specialty specific curriculum.

The curriculum specifically develops OMFS surgeons who are 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 and primary care settings. The management of some clinical conditions requires interactions across certain surgical specialties e.g. ENT, Neurosurgery, Plastic Surgery and the OMFS curriculum aims to improve patient care by enhancing understanding and skills across traditional specialty boundaries.

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:*

At certification, an OMFS surgeon will be able to demonstrate the capability to manage an unselected acute emergency adult and paediatric take. The necessary applied clinical knowledge and skills are described in the OMFS specialty-specific syllabus modules.

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

The curriculum will allow trainees to train in a variety of community settings where the necessary facilities and governance arrangements are in place, and after certification, specialists in OMFS will have the necessary capability to work in community settings subject to the availability of equipment and safe governance. However the need for specialised equipment and x-ray facilities limits the ability to undertake work in individual primary care facilities and smaller community hospitals. The curriculum will develop OMFS surgeons that can work in a hub and spoke model,

where patients are treated centrally for complex elements of their care but managed more locally to their communities for initial assessment and follow up.

The need to work with colleagues in all settings, including primary care, is embedded within the OMFS curriculum. The OMFS curriculum will develop surgeons who work with and value the wider multidisciplinary team including general practitioners, general dental practitioners, physiotherapists, specialist nurses, social workers and psychologists. This, together with advances in telemedicine and digital imaging, will facilitate and enhance the quality of care for patients in the community setting.

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

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 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. Although much of the syllabus is specific to the treatment of conditions within the scope of an OMFS surgeon, generic technical skills and knowledge and skills in the management of specific conditions treated by other specialities, such as airway management, are transferable. 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. As training in OMFS requires a dental qualification, transfer into OMFS from other medical specialties is less likely.

This flexible approach with acquisition of transferable capabilities, will allow training in OMFS 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:*

   Post-certification credentialing will be considered for super-specialist areas of work to meet service and patient needs, these areas are detailed in 1.4.3. (*Please see Reference Section for GMC definition of 'Credentialing')* The OMFS curriculum allows trainees to develop an area of practice during training in addition to acquiring generic skills to meet the needs of the local community and OMFS service. Some low volume but highly specialised areas of OMFS practice have been identified where credentialing may play a role in meeting the needs of tertiary care departments and employers. These are outlined in 1.4.3

1.3 The high-level outcomes of Oral and Maxillofacial 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 Capabilities in Practice (CiPs). The 5 shared CiPs describe the professional tasks or work within the scope of OMFS. 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

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:

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. The supervision levels are:

Level I	Able to observe only
Level II	Able and trusted to act with direct supervision: a) supervisor present throughout b) supervisor present for part
Level III	Able and trusted to act with indirect supervision
Level IV	Able and trusted to act at the level expected of a day one consultant
Level V	Able and trusted to act at a level beyond that expected of a day one consultant

Phase 1 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 OMFS training via a national selection process at either ST3, or through the ST1 run-through programme. 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.

OMFS training is outcome-based rather than time-based. However, it will normally be completed in an indicative time of 5 years for uncoupled trainees entering at ST3 and 6 years for those entering run-through programmes at ST1.

In run-through programmes, it is expected that most trainees will undertake posts in specialties other than OMFS in the first year of training which offer the most beneficial experience for sitting the MRCS examination. It is desirable that trainees are supported to sit and pass the MRCS examination in this first year (Phase 1). Success at MRCS, attainment of core curriculum competence by the end of ST1 and an ARCP outcome 1 enable the trainee to progress directly to Phase 2 of training. Run-through trainees who do not achieve these outcomes by the end of ST1 will not progress to Phase 2 of training and will have training extended through the ARCP process as defined in the Reference Guide for Postgraduate Specialty Training in the UK (the Gold Guide[4])

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 5 (uncoupled) or 6 (run-through) 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.

The programme be divided into 3 phases -

- Phase 1 will be completed by those entering run through training via national selection at ST1. It will take an indicative year to complete and will involve placement in surgical specialties to provide optimal training for the MRCS examination, taken towards the end of ST1. It is most likely that trainees will be exposed to General Surgery, Trauma and Orthopaedics and Plastic Surgery through this year. There will be a critical progression point at the end of phase 1, requiring development of CiPs to a level equivalent to the end of core training, a pass in the MRCS examination and an Outcome 1 at ST1 Annual Review of Competence Progression (ARCP) in order to progress to Phase 2.
- Phase 2 will take an indicative time of 3 years, during which trainees will achieve the GPCs and the OMFS specialty-specific applied knowledge and clinical skills, as defined in the CiPs and syllabus across the generality of the specialty dealing with both elective and unselected emergency presentations. At the end of Phase 2 there is a critical progression point (1.4.1) for entry into Phase 3. At this point trainees will be required to demonstrate the professional conduct, judgement and values to be able to assess, investigate, diagnose and manage patients in the outpatient, multi-disciplinary, emergency and operating theatre settings commensurate with the CiPs and defined syllabus. This will be assessed at ARCP and the trainee considered to have met the criteria to sit the Intercollegiate Specialty Board Examination.

- Phase 3 will take an indicative time of 2 years and trainees will continue to develop and achieve the GPCs and technical skills in the generality of elective presentations and to

operatively manage an unselected take to the level described for certification. On completion of Phase 3 trainees will be eligible for certification and for recommendation to enter the specialist register.

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. OMFS is one of parent specialties in the following TIGs:

Training Interface Group	Parent Specialties
Cleft Lip & Palate Surgery	Plastic Surgery, Oral & Maxillofacial Surgery and Otolaryngology
Head & Neck Surgical Oncology	Plastic Surgery, Oral & Maxillofacial Surgery and Otolaryngology
Reconstructive & Aesthetic Surgery	Plastic Surgery, Oral & Maxillofacial Surgery, Otolaryngology, General Surgery (Breast) and Ocular-Plastic Surgery (Ophthalmology)

1.4.1 Critical Progression points

Indicative levels of supervision are indicated for the end of phase 1. At the end of phase 2 trainees are required to reach level IV in the Capabilities in Practice.

Excellence will be recognised by:

a) achievement of Level V in any of the Capabilities in Practice
b) exceeding the supervision level expected for the end of Phase 1
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 Capability in Practice

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

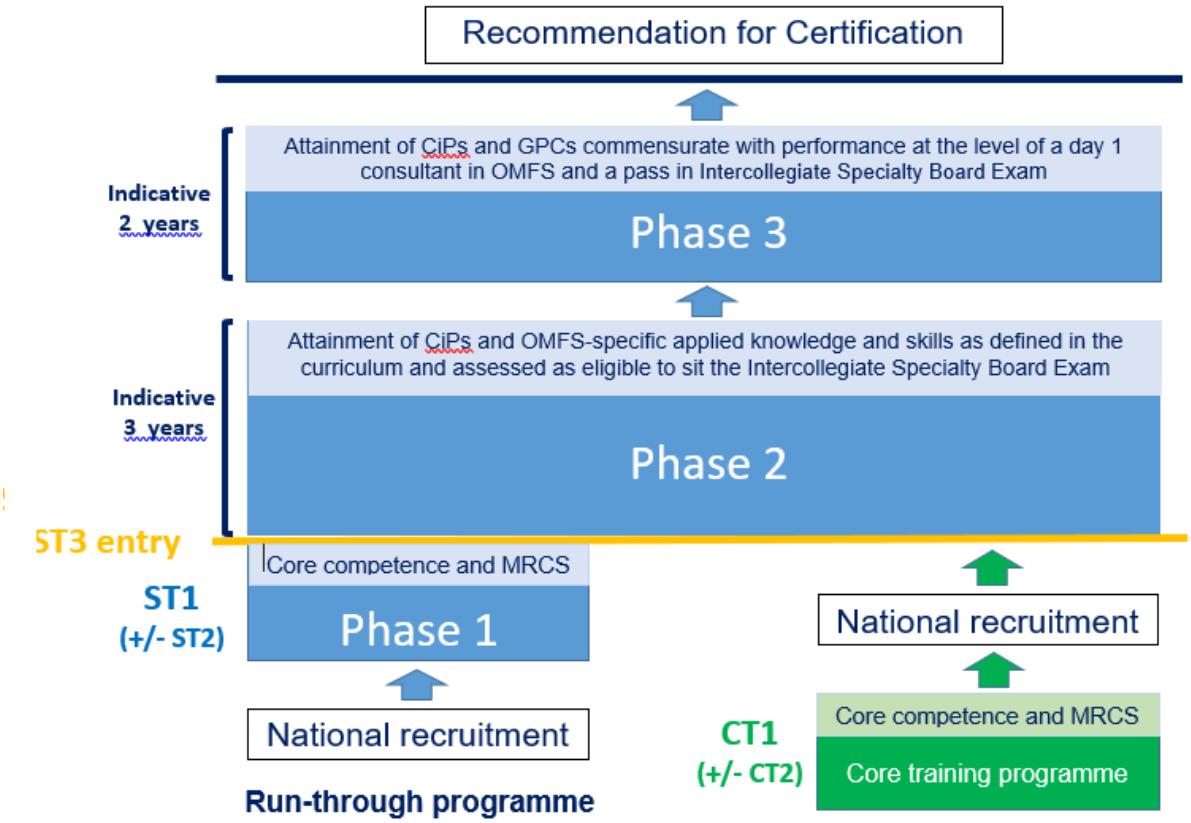

Figure 1: Training Pathway

1.4.2 Training Pathway

The training pathway for Oral and Maxillofacial Surgery is shown in Figure 1.

1.4.3 Proposed place of Credentialing in Training/Post-training

Credentialing is defined as a process which provides formal accreditation of competencies (which include knowledge, skills and performance) in a defined area of practice, at a level that provides confidence that the individual is fit to practise in that area (GMC).[5]

Credentialing will be particularly relevant for surgeons who work in niche areas of medical practice that are not covered by existing standards for training and in new and emerging areas of medical practice.

The SAC is enthusiastic about working with the GMC to introduce a process of credentialing to enhance medical regulation and patient protection by:

- providing a framework of standards and accreditation in areas where regulation is limited or absent
- providing patients and employers with information about doctors' particular capabilities and current areas of competence
- providing better recognition of doctors' capabilities to support:
    - improvements in workforce flexibility and professional mobility

    - the new architecture for postgraduate medical education
- providing recognition of the capabilities of cardiac and thoracic surgeons to assure the public, service providers and employers that they have met and are maintaining UK standards in their field
- developing detailed frameworks, standards, assessment processes and proposals for quality assurance

Areas within the specialty which could be considered suitable for credentialing:

- craniofacial surgery
- cleft lip and palate surgery
- temporo-mandibular joint replacement
- management of vascular malformations
- facial reanimation
- ear reconstruction
- aesthetic surgery

These areas tend to be relatively low volume but complex and important areas, undertaken in specialist centres. Consultants practising in these areas do so after a period of focused training, sometimes as part of a fellowship and thus maybe suitable for credentialing. Aesthetic surgical techniques are required for the management of patients presenting with congenital and acquired facial deformity.

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