Curriculum for
Mohs and Advanced Dermatological Surgery

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Dr R. Mallipeddi, Dr V. Ghura, Dr G. Stables, Dr R. Sheehan-Dare, BSDS

Revision 2011, 2012 Dr A.J. Cooper, Canterbury, *BSDS Executive*

Revised 2013 Dr R. Mallipeddi, Dr V. Ghura, *BSDS Executive*

Revised 2019, 2020 Dr R. Mallipeddi, Dr V. Ghura, *BSDS Executive*

raj.mallipeddi@gstt.nhs.uk

British Association of Dermatologists
Willan House
4 Fitzroy Square
London
W1T 5HQ

Telephone: (020) 7383 0266
Facsimile: (020) 7388 5263
Email: siu@bad.org.uk
Website: www.bad.org.uk

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1 Introduction

Dermatology is a broad specialty which has a significant procedural component. Dermatology specialty training addresses core clinical, surgical and histopathology skills required to effectively diagnose and treat skin cancer. More complex dermatological surgery forms a fundamental part of secondary and tertiary dermatology services, and additional training is required to meet the competencies essential for independent practice in advanced dermatology surgery and Mohs Micrographic surgery. This curriculum relates to the delivery of these competencies.

Entry criteria for Fellows includes GMC Specialist Registration for Dermatology, or aligned surgical specialty.

The Curriculum is competency-based, but the indicative duration of training is 12 months.

The curriculum has been created by the British Society for Dermatological Surgery (BSDS) in conjunction with the British Association of Dermatologists (BAD). See Appendix 1 for the full list of contributors.

2 Rationale

2.1 Purpose of the curriculum

The purpose of this curriculum is to define the process of training, assessment and the competencies needed for the award of completion of Fellowship in Mohs and Advanced Dermatological and Mohs Micrographic Surgery.

2.2 Development

This curriculum was originally developed by the British Society for Dermatological Surgery (BSDS) and the Specialty Advisory Committee for Dermatology (SAC) under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). It is now overseen by the BAD Education Board. This is the sixth version, ensuring the curriculum meets GMC's standards for Curricula and Assessment incorporating generic, leadership and health inequalities competencies.

The content and teaching/learning methods were chosen by consensus after consultation with leading Dermatologists specialising in Dermatological Surgery, educational and training leads, and multi-professional stakeholders including oncologists and histopathologists. Further consultation and feedback took place with members and fellow representatives of the British Society for Dermatological Surgery and the British Association of Dermatologists.

2.3 Entry requirements

Entrants to the Mohs and Advanced Dermatological Surgery Fellowship will undergo competitive selection using a nationally agreed person specification.

The mainstream pathway for entry will include completion of Core Medical/Internal Medicine Competences or Acute Common Stem training, and entry onto the GMC Dermatology Specialist Register. Alternative pathways will be considered on an individual basis for entrants who have achieved MRCS and Specialist Registration in a Surgical Specialty, provided the nationally agreed person specification has been met and demonstrated with primary and secondary evidence. Such evidence must include

capabilities in practice relevant to the diagnosis and delivery of skin cancer services and applicants are advised to refer to the current pre-CCT Dermatology curriculum for guidance.

2.4 Enrolment with BAD

Successful candidates are required to register for Fellowship training with the BAD Education Board at the start of their training programmes. Enrolment and full engagement with the on-going assessment process throughout Fellowship training is required in order to achieve the BAD Education Board Fellowship Certification.

2.5 Duration of training

Although this curriculum is competency based, the duration of training must meet the European minimum of one year for full time specialty training adjusted accordingly for flexible training (EU directive 2005/36/EC).

2.6 Flexible training

The Fellowship posts are expected to be for one year on a full-time basis. There may be possibilities for less than full time arrangements although this would need discussion with the hospital Trust where the Fellowship is taking place. Training on a less than full time basis would result in the Fellowship lasting longer than 12 months to achieve equivalency.

3 Content of learning

3.1 Programme content and objectives

This section contains the content of the specialist curriculum for dermatological surgery. The duration will usually be 1 year of full-time training.

3.2 Good Medical Practice

In preparation for the introduction of licensing and revalidation, the General Medical Council has translated Good Medical Practice into a Framework for Appraisal and Assessment which provides a foundation for the development of the appraisal and assessment system for revalidation. The Framework can be accessed at https://www.gmc-uk.org/static/documents/content/The_Good_medical_practice_framework_for_appraisal_and_revalidation_-_DC5707.pdf

The Framework for Appraisal and Assessment covers the following domains:

Domain 1 – Knowledge, Skills and Performance
Domain 2 – Safety and Quality
Domain 3 – Communication, Partnership and Teamwork
Domain 4 – Maintaining Trust

The “GMP” column in the syllabus defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. Most parts of the syllabus relate to “Knowledge, Skills and Performance” but some parts will also relate to other domains.

3.3 Syllabus

Each table below contains a broad statement describing the competencies contained in that table. These are divided in to knowledge, skills and behaviours. For each of these the next column lists suitable assessment methods. The “Assessment Methods” shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used. See section 5.2 for more details.

“GMP” defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. See section 3.2 for more details.

The final column shows the year in which it is expected the fellow should acquire the competence. This applies to progressive elements only. For modular elements, the competencies should be acquired during the year in which the module is undertaken.

The teaching and learning methods listed are appropriate **possible** methods for the competencies. It is not expected that all methods will be used in each case. An indication of the length of time spent on each activity and the workplace based assessments to be arranged should also be included here.

General Principles of Patient Centred Medical Education

For each area of competence in this section it is anticipated that Fellows will recall and build upon the competencies outlined by the Dermatology Curriculum 2010 and which they should have acquired during the ST3-6 training period. For those entering Fellowship via an aligned surgical specialty pathway, development of capabilities based on the same skill set is required. It is recognised that for many of the competencies outlined there is a continuing maturation process which means that the practitioners will become more adept and skilled as their career progresses. It is intended that doctors recognise that these competencies become increasingly sophisticated throughout their career leading to improved ability to ascertain patient needs, make diagnoses and formulate inclusive treatment plans.

1. Anatomy and Physiology

Comprehensive understanding of anatomy and physiology relevant to cutaneous surgery particularly of the head and neck		
Knowledge	**Assessment Methods**	**GMP**
Describe in detail anatomy relevant to dermatological surgery with emphasis on the head and neck region	CbD	1
Identify topographical features and underlying bony and cartilaginous structures	CbD	1
Describe the blood supply of the face	CbD	1
Describe the Sensory and motor innervations of the head and neck and relate to surface anatomy	CbD	1,2
Describe the muscles of facial expression	CbD	1
Describe the lymphatic drainage of the head and neck and lymph node levels	CbD	1
Identify relaxed skin tension lines, cosmetic Boards and junction lines	DOPS, mini-CEX	1
Describe the characteristics of the skin in different cosmetic Boards	DOPS, mini-CEX	1
Identify the reservoirs of excess skin available on the head and neck	DOPS, mini-CEX	1
Identify anatomic free margins	DOPS, mini-CEX	1
Describe the microscopic anatomy of the skin and subcutaneous tissues	CbD	1
Explain the characteristics and causes of photoaging and intrinsic aging of the skin	CbD	1
Describe the physiology of the skin and soft tissues	CbD	1
Skills		
Identify and demonstrate anatomical structures intra-operatively	DOPS	1
Identify ‘danger’ areas of the face and neck	DOPS, mini-CEX	1,2
Formulate options for treatment and repair based on anatomical knowledge	DOPS, mini-CEX	1
Behaviours		
Recognise consequences of damage/disruption of anatomical structures intra-operatively	DOPS, mini-CEX	1,2
Recognise the primary and secondary effects of tissue movement	DOPS, mini-CEX	1
Teaching and Learning Methods		
Demonstration of relevant structures during surgery		
Independent study		
Attendance at a suitable course		
Anatomy demonstrator for medical or dental undergraduates during head and neck teaching		
Attendance at skin surgery or Mohs surgery meeting		
Attendance at neck dissection surgery		

2. Anaesthesia

Competence in safe and effective administration of topical, local, regional and tumescent anaesthesia		
Knowledge	**Assessment Methods**	**GMP**
Explain the pharmacology and dosimetry of topical and injectable local anaesthetic agents	CbD	1
Describe the potential reactions and complications to topical and injectable local anaesthetics	CbD	1,2
Describe topical, local and regional anaesthesia including appropriate technique selection and their complications	CbD	1
Describe the use of preoperative anxiolytics and conscious sedation	CbD	1
Skills		
Select and administer anaesthesia most appropriate for a range of surgical procedures	DOPS	1
Behaviours		
Recognises the importance of patient comfort when carrying out surgical procedures	DOPS, mini-CEX, PS	1,3
Teaching and Learning Methods		
Independent study		
Observation and performance of anaesthetic preparation and administration under supervision in theatre setting		
Attendance at suitable course		
Attendance at skin surgery or Mohs surgery meeting		

3. Perioperative Assessment and Management

Development of a treatment plan **Assessment of medical fitness for procedure** **Preoperative preparation and counselling of patient**		
Knowledge	**Assessment Methods**	**GMP**
Explain how co-morbidities and medications can influence cutaneous surgery treatments and their outcome	CbD, mini-CEX	1,2
Skills		
Evaluate patients pre-operatively for relevant past medical history; review of systems; allergies; medications; drug interactions; need for antibiotic prophylaxis; alcohol/tobacco use; and social history	CbD, mini-CEX	1,2,3
Assess surgical patients preoperatively appropriately by physical examination	CbD, mini-CEX	1,2
Plan lesion excision and closure taking into consideration anatomical location and other relevant cutaneous and histological features	CbD, mini-CEX	1
Select appropriate diagnostic studies (laboratory, histological and imaging)	CbD, mini-CEX	1
Prepare a treatment plan with multidisciplinary liaison where appropriate	CbD, mini-CEX, MSF	1,3

Demonstrate ability to work in a multidisciplinary team	CbD, mini-CEX, MSF	1,3
Communicate proposed treatments to patients and carers to include alternative therapies with clear discussion of risks and benefits. Be aware of the consent requirements of the Mental Capacity Act 2005	CbD, mini-CEX, PS	1,3,4
Behaviours		
Consults with other specialties (e.g. haematology, general medicine) when necessary	CbD, MSF	1,3
Works with other specialties when formulating the treatment plan, including plastic surgery, oculoplastic surgery, radiotherapy, dermatopathology, head and neck surgery	CbD, MSF	1,2,3
Teaching and Learning Methods		
Independent study		
Observation and performance of treatment planning and pre-operative assessment under supervision in outpatient clinic		
Attend MDT meeting		
Surgical sessions with plastic surgery, oculoplastic surgery, head and neck surgery		
Attendance at skin surgery or Mohs surgery meeting		

4. Mohs Micrographic Surgery (MMS)

Competence in performing Mohs micrographic excisions with frozen tissue section analysis
Understanding of core standards of care as defined in Mohs Setting Standards, *BAD 2012*

Knowledge	Assessment Methods	GMP
Identify the indications for MMS	CbD, mini-CEX	1
Describe the principles of Mohs excisions, Mohs tissue mapping and producing complete surgical margins	CbD	1
Explain the Mohs laboratory processes	CbD	1
Describe histopathology relevant to MMS	CbD, DOPS	1
Skills		
Select patients appropriate for MMS	CbD, DOPS, mini-CEX	1
Demonstrate correct removal of tissue layers using bevelled technique	DOPS	1
Perform correct orientation and division of tissue	DOPS	1
Demonstrate correct marking and mapping of tissue	DOPS	1
Demonstrate knowledge of the processes and difficulties associated with each stage of preparing a frozen section	DOPS	1
Demonstrate 3D spatial awareness regarding horizontal frozen sections compared with traditional vertical sections	CbD, DOPS	1
Demonstrate the histological features of normal skin frozen sections, including adnexal structures and benign entities which may mimic tumours such as follicular hyperplasia	DOPS	1
Demonstrate comprehensive knowledge of the histopathological features of common tumour types treated with MMS (Nodular / Infiltrative Basal Cell Carcinomas, Squamous Cell Carcinomas)	CbD, DOPS	1

Demonstrate knowledge of adverse histological features such as perineural / vascular invasion	CbD, DOPS	1
Demonstrate knowledge of the histological features of rarer tumour types sometimes treated with MMS (eg. Microcystic Adnexal Carcinoma, Sebaceous Carcinoma, Dermatofibrosarcoma Protruberans, Lentigo Maligna)	CbD, DOPS	1
Behaviours		
Recognise limitation of own skills	DOPS, mini-CEX, MSF	1,2,4
Participate in audit, including auditing own skills	AA	1,3
Consult effectively with dermato-pathologists when necessary	DOPS, MSF	1,3
Teaching and Learning Methods		
Independent study		
Observation and performance of MMS under supervision in a day case theatre		
Involvement in at least 250 Mohs micrographic excisions required, including at least 100 cases which meet at least one of the criteria below*. Of these 250 cases the fellow should be the primary surgeon by making decisions on taking the Mohs layers, processing the specimens, interpreting the histology slides, marking the map and deciding on further Mohs layers in at least 100 cases. Of the 100 cases where the fellow is the primary surgeon, at least 50 should comprise at least one of the criteria below with all being met in the total*		
Maintenance of a case log to include (1) case number, (2) date performed, (3) tumour location, (4) diagnosis/histology, (5) primary/recurrent, (6) pre-op tumour size, (7) post-operative defect size, (8) number of stages and blocks, (9) type of repair, (10) complex case, (11) whether primary surgeon or assisting, (12) supervising consultant, (13) complications and (14) histological concordance with trainer or pathologist		
Attendance at skin surgery or Mohs surgery meeting		

*

1) Difficult sites such as the medial canthus, lid margin, auditory canal, nasal tip & nasal ala, nail bed.
2) Complex malignant tumour histological interpretation i.e. other than BCC or SCC.
3) Tumours involving periosteum or bone.
4) Tumours requiring 3 or more stages.
5) Recurrent tumours following surgical excision with flap or skin graft, 3rd or more recurrence for any modality or recurrent after radiotherapy.
6) Large tumours (greater than 2 cm diameter) involving more than one cosmetic Board or scalp tumours greater than 5cm.

5. Reconstruction

Competence in reconstruction of defects resulting from surgical excisions		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate in depth knowledge of surgical techniques employed in reconstructive surgery	CbD	1
Identify safety issues in the theatre environment (sharps safety, infection risks)	CbD	1,2
Explain the different forms of wound management and wound dressings	CbD	1
Skills		
Demonstrate correct aseptic technique with regard to scrubbing, gowning, gloving and site preparation	DOPS	1,2

Demonstrate correct instrument handling and sterility	DOPS	1
Demonstrate atraumatic tissue handling	DOPS	1
Perform undermining	DOPS	1
Perform haemostasis	DOPS	1
Demonstrate suture technique (both subcutaneous and cutaneous sutures including simple interrupted, running simple, vertical and horizontal mattress, tip stitches)	DOPS	1
Demonstrate correct tourniquet use	DOPS	1
Appropriately select and execute reconstructive surgical techniques: direct closure; random and axial pattern flaps; rotation, advancement, transposition flaps; pedicle cutaneous, fasciocutaneous, and myocutaneous flaps; full thickness skin grafts, split thickness skin grafts. Composite grafts, cartilage harvesting & cartilage grafting	CbD, DOPS, mini-CEX	1
Select wounds for secondary intent healing where appropriate	CbD, DOPS, mini-CEX	1
Perform correct post-operative dressing application	DOPS	1
Demonstrate suture removal	DOPS	1
Behaviours		
Recognise limitations of own skills	CbD, DOPS, MSF	1,2,4
Consult effectively with other reconstructive surgeons where necessary	CbD, mini-CEX, MSF	1,3
Teaching and Learning Methods		
Independent study		
Observation and performance of reconstruction in day case theatre under supervision		
Completing at least 150 reconstructions involving, flaps, grafts, direct closure and where appropriate second intention healing. Furthermore, in at least a further 100 cases the fellow should be 1st operator for reconstruction of the nasal ala/tip/columnella, perioral, periocular and auricular areas, including advancement, rotation, transposition, interpolation flaps, grafts and direct closure. Of these 100 cases, a minimum of 20 should be performed on each of the four areas and no more than 10 overall should be direct closure		
Maintenance of a case log to include (1) case number, (2) date performed, (3) tumour location, (4) diagnosis/histology, (5) primary/recurrent, (6) pre-op tumour size, (7) post-operative defect size, (8) number of stages and blocks, (9) type of repair, (10) whether primary surgeon or assisting, (12) supervising consultant and (13) complications		
Attendance at skin surgery or Mohs surgery meeting		
Participation in specialist skin cancer multi-disciplinary team meetings		

6. Surgical Complications

Competence in management of early and late complications of surgery		
Knowledge	**Assessment Methods**	**GMP**
Describe wound healing physiology, antibiotic regimes, and scar revision techniques	CbD	1
Skills		
Communicate effectively to patients postoperative education regarding possible complications, wound care, activity level, and need for surgical revision	DOPS, mini-CEX, PS	1,3,4
Demonstrate effective management of surgical emergencies (syncope, convulsions, haemorrhage, anaesthetic toxicity, allergic reactions, anaphylaxis, myocardial infarction, cardiac arrest)	CbD	1
Demonstrate effective management of: tissue necrosis, bleeding, haematoma, formation, infection, wound dehiscence and non-healing wounds	CbD, mini-CEX	1
Demonstrate appropriate management of suboptimal scars, to include scar revision: elongation and reorientation; z-plasty; w-plasty; geometric; resurfacing; dermabrasion and laser, and non-surgical approaches: intralesional and topical steroids, silicone gel sheeting and massage	CbD, DOPS, mini-CEX	1
Behaviours		
Recognise limitation of own skills	CbD, DOPS, mini-CEX, MSF	1,2,4
Recognise differing patient expectations	mini-CEX, PS	1,3,4
Teaching and Learning Methods		
Completion of advanced life saving certificate		
Independent study		
Observation and management of complications under supervision		
Attendance at skin surgery or Mohs surgery meeting		
Participation in specialist skin cancer multi-disciplinary team meetings		

7. Nail Surgery

Competence in diagnostic and therapeutic nail procedures		
Knowledge	**Assessment Methods**	**GMP**
Describe nail anatomy, conditions affecting the nail, and techniques in nail surgery	CbD, DOPS	1
Skills		
Perform nail avulsion	DOPS	1
Perform biopsy techniques a. Punch b. Incisional/Longitudinal biopsy c. Excision of growth plate	DOPS	1

Perform matricectomy a. Chemical b. Surgical c. Laser	DOPS	1
Demonstrate reconstruction a. Linear b. Flaps c. Grafts	DOPS	1
Behaviours		
Recognise limitation of own skills	CbD, DOPS, mini-CEX, MSF	1,2,4
Consult effectively with plastic/orthopaedic surgeons where necessary	CbD, MSF	1,3
Teaching and Learning Methods		
Independent study		
Observation and performance of nail procedures in day case theatre under supervision		
Attendance at hand surgery (plastics or orthopaedic) operating list		
Attendance at skin surgery or Mohs surgery meeting		

8. Management of Benign and Malignant Cutaneous Tumours

Competence in surgical procedures for both benign and malignant tumours
Competence in selecting patients to refer for radiotherapy
Competence in safe and effective use of photodynamic therapy (PDT)

Knowledge	Assessment Methods	GMP
Describe the different cutaneous tumour types and pre-malignant lesions, their histopathology and biology	CbD,	1
Describe alternative therapies (local surgical procedures including the different electrosurgical modalities and their risks and benefits, nonsurgical treatments including radiation treatment, PDT and topical immunomodulatory treatment)	CbD, mini-CEX	1,2
Explain local and national guidelines on skin cancer management and treatment pathways	CbD	1,2
Skills		
Perform electrosurgery in its various modalities including electrodessication, electrofulgaration, electrocoagulation, electrosection and electrocautery with and without curettage	DOPS	1
Perform cryosurgery	DOPS	1
Perform PDT	DOPS	1
Perform surgical management of benign conditions including but not limited to chondrodermatitis nodularis helicis, cysts, lipomas, neurofibromas and cylindromas	DOPS	1
Counsel patients on use of topical chemotherapeutic and immunomodulatory treatments	CbD, mini-CEX	1,3
Demonstrate use of combined surgical non-surgical treatments where applicable	CbD, DOPS, mini-CEX	1

Behaviours		
Choose conservative management approach wherever appropriate	CbD, mini-CEX	1
Teaching and Learning Methods		
Independent study		
Observation and performance of alternate treatments under supervision		
Participation in specialist skin cancer multi-disciplinary team meetings		
Attendance at clinical skin oncology clinics		
Attendance and participation at skin cancer conferences		

9. Teamworking and Management in Cutaneous Oncology

Understand the value of clinical teams in the management of patients suffering from skin cancer

Knowledge	**Assessment Methods**	**GMP**
Describe the function of the various multidisciplinary team meetings (MDT, LSMDT, SSMDT)	CbD, mini-CEX	1,2
Describe the roles of the following health care practitioners: 1) Dermatologists 2) Oncologists 3) Maxillofacial, Plastic, Oculoplastic and reconstructive Surgeons 4) Radiologists 5) Specialist / Macmillan Nurses 6) MDT Coordinator	CbD, mini-CEX	1
Describe cancer pathways of care	CbD	1
Skills		
Demonstrate MDT organisational and administrative skills	CbD, mini-CEX	1
Demonstrate knowledge of National Site-Specific Groups (NSSG) / Regional Skin Cancer Networks	CbD	1
Behaviours		
Recognise limitation of own skills	CbD, DOPS, mini-CEX, MSF	1,2,4
Demonstrate effective teamworking skills	MSF	1
Teaching and Learning Methods		
Attendance at relevant course		
Independent study		
Record of attendance at the MDT and relevant specialist skin cancer clinics		

10. Cutaneous Laser Surgery and Aesthetic Procedures (Optional)

Competence in safe and effective use of cutaneous lasers

Understand the indications and principles behind various cosmetic procedures including botulinum toxin and soft tissue filler injections for facial rejuvenation, tumescent liposuction, hair transplantation, chemical peels and sclerotherapy

Knowledge	Assessment Methods	GMP
Describe laser physics, laser safety and indications for laser treatments	CbD	1,2
Describe the how the following procedures are undertaken and their relative risks and benefits: 1) Botulinum toxin injections and soft tissue fillers for facial rejuvenation 2) Tumescent liposuction 3) Hair transplantation 4) Chemical peels 5) Sclerotherapy for thread veins	CbD, mini-CEX	1
Skills		
Demonstrate anaesthetic selection and administration	CbD, DOPS, mini-CEX	1
Set and execute vascular specific, pigment and resurfacing laser techniques	DOPS	1
Observe the following aesthetic procedures and perform where possible: 1) Botulinum toxin injections and soft tissue fillers for facial rejuvenation 2) Tumescent liposuction 3) Hair transplantation 4) Chemical peels 5) Sclerotherapy for thread veins	CbD, DOPS	1
Behaviours		
Recognise limitation of own skills	CbD, DOPS, mini-CEX, MSF	1,2,4
Manage patient expectations appropriately	CbD, mini-CEX	1,3,4
Teaching and Learning Methods		
Attendance at relevant course		
Independent study		
Observation and performance of laser treatments under supervision		

4 Learning and Teaching

4.1 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences. Fellows will learn from practice, clinical skills appropriate to their level of training and to their attachment within the department.

Fellows will achieve the competencies described in the curriculum through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment.

This section identifies the types of situations in which a Fellow will learn.

Learning with Peers - There are many opportunities for Fellows to learn with their peers. Local postgraduate teaching opportunities allow Fellows of varied levels of experience to come together for small group sessions

Work-based Experiential Learning - The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

- New patient and review clinics. After initial induction, Fellows will review patients in outpatient clinics, under supervision. The degree of responsibility taken by the Fellow will increase as competency increases.
- Operative sessions. After initial induction, Fellows will carry out operative procedures under supervision. The degree of responsibility taken by the Fellow will increase as competency increases.
- New and review clinics with other specialties. Fellows will attend appropriate oncology clinics.
- Operative sessions with other surgical specialties. Fellows will attend surgical sessions with plastic surgery, oculoplastic surgery, head and neck surgery, and hand surgery.
- Multi-disciplinary team meetings. There are many situations where clinical problems are discussed with clinicians in other disciplines. These provide excellent opportunities for observation of clinical reasoning.

The degree of responsibility taken by the Fellow will increase as competency increases. There should be appropriate levels of clinical supervision throughout training with increasing clinical independence and responsibility as learning outcomes are achieved (see Section 5: Feedback and Supervision).

Independent Self-Directed Learning - Fellows will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- Reading, including web-based material
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- Audit and research projects
- Reading journals
- Achieving personal learning goals beyond the essential, core curriculum
- Anatomy demonstration for medical or dental undergraduates during head and neck teaching.

Other learning models
Each training centre will provide a variety of additional training opportunities in addition to work-based experiential learning. These will include:

- Clinical meetings – departmental and regional clinical and clinicopathological meetings where fellows can participate in the detailed discussion of difficult clinical problems.
- Journal Club, or similar. Usually organised on a departmental basis, and used in a small group format to discuss journal articles, research, textbooks of dermatology, recent national meetings.
- Active participation in audit, both self-directed and departmental meeting to include data collection and presentation

Formal Study Courses and meetings - Time to be made available for formal courses is encouraged, subject to local conditions of service. In particular, attendance at a skin surgery or Mohs meeting (organisations which can provide this include the British Society for Dermatological Surgery, the American Society for Dermatologic Surgery and the American College of Mohs Surgery) and an advanced life saving course will be encouraged.

5 Assessment

The domains of Good Medical Practice will be assessed using both workplace-based assessments and examination of knowledge and clinical skills, which will sample across the domains of the curriculum i.e. knowledge, skills and behaviour. The assessments will be supplemented by structured feedback to fellows within the training programme of Dermatological surgery. Assessment tools will be both formative and summative and will be selected on the basis of their fitness for purpose.

5.1 The assessment system

The purpose of the assessment system is to:

- Enhance learning by providing formative assessment, enabling Fellows to receive immediate feedback, measure their own performance and identify areas for development;
- Drive learning and enhance the training process by making it clear what is required of Fellows and motivating them to ensure they receive suitable training and experience;
- Provide robust, summative evidence that fellows are meeting the curriculum standards during the training programme;
- Ensure Fellows are acquiring competencies within the domains of Good Medical Practice*;*
- Assess Fellows' actual performance in the workplace;
- Identify Fellows who should be advised to consider changes of career direction.

The integrated assessment system comprises workplace-based assessments. Individual assessment methods are described in more detail below.

Workplace-based assessments will take place throughout the training programme to allow Fellows to continually gather evidence of learning and to provide Fellows with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision making. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

5.2 Assessment Blueprint

In the syllabus (3.3) the "Assessment Methods" shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used.

5.3 Assessment methods

The following assessment methods are used in the integrated assessment system:

Workplace-based assessments WPBAs

- Mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Multi-Source Feedback (MSF)
- Case-Based Discussion (CbD)
- Patient Survey (PS)
- Audit Assessment (AA)

Other methods of assessment

- Clinical supervisors report
- Logbook of surgical procedures performed
- Logbook of Mohs cases performed

These methods are described briefly below. More information about these methods including guidance for Fellows and assessors is available on the British Association of Dermatologists website. Workplace-based assessments should be recorded in the Fellow's portfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process; this is explained in the guidance notes provided for the techniques.

Mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The Fellow receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a Fellow and patient interaction and an assessor is available

Direct Observation of Procedural Skills (DOPS) and **Global Rating Form** (GRF)
A DOPS is an assessment tool designed to assess the performance of a Fellow in undertaking a practical procedure, against a structured checklist. The Fellow receives immediate feedback to identify strengths and areas for development. A specifically designed DOPS (direct observation of procedural skills) assessment, termed the Advanced Dermatological Surgery Global Rating Form (GRF) will also be employed for excisional surgical procedures. The GRF was produced as part of an MSc in medical education with Cardiff University undertaken by Dr Ghura. It formed the research dissertation of the MSc and both it and the overall MSc were awarded with distinction. The GRF was developed using consensus methodology and an expert panel of dermatological surgery trainers from across the UK. It has documented content, face and concurrent validity and provides a more comprehensive assessment and feedback than the standard DOPS assessment (Appendix A). A Mohs surgery GRF has also been developed by Dr Ghura and will be used to assess the skills of the Fellow with respect to Mohs surgery.

Multisource feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective systematic collection and feedback of performance data on a Fellow, derived from a number of colleagues. 'Raters' are individuals with whom the Fellow works, and includes doctors, administration staff, and other allied professionals. The fellow will not see the individual responses by raters, feedback is given to the Fellow by the Educational Guide.

Case based Discussion (CbD)
The CbD assesses the performance of a fellow in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by Fellows. The CbD should include discussion about a written record (such as written case notes, out-patient letter, and discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

Patient Survey
Patient Survey address issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the Fellow's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

Audit Assessment Tool
The Audit Assessment Tool is designed to assess a Fellow's competence in completing an audit. The Audit Assessment can be based on review of audit

documentation OR on a presentation of the audit at a meeting. If possible, the Fellow should be assessed on the same audit by more than one assessor.

Assessments
Minimum satisfactory assessments sampled during the year: 5 Advanced Surgery GRFs 5 Mohs GRFs 2 other DOPS 4 mini-CEX 10 CbD 1 MSF 1 patient survey **Logbook of Mohs cases performed** **Logbook of Surgical procedures performed** 1 audit assessment Educational supervisor's report

5.4 Final Assessment

Regular appraisals (at least every 3 months) will be conducted. The Educational Guide in conjunction with Clinical Guides, and two BSDS representatives to provide external review will decide whether the Fellow has successfully completed the Fellowship. This will be determined after the final month of the training.

5.5 Complaints and Appeals

All workplace-based assessment methods incorporate direct feedback from the assessor to the Fellow and the opportunities to discuss the outcome. If a Fellow has a complaint about the outcome from a specific assessment this is their first opportunities to raise it.

Appeals against decisions concerning in-year assessments will be handled at Trust level and Trusts are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is to be pursued this should be referred in the first instance to the Education Director of the BAD Education Board.

6 Supervision and feedback

6.1 Supervision

All elements of work in training posts must be supervised with the level of supervision varying depending on the experience of the fellow and the clinical exposure and case mix undertaken. Outpatient and referral supervision must routinely include the opportunities to personally discuss all cases if required. As training progresses the Fellow should have the opportunities for increasing autonomy, consistent with safe and effective care for the patient.

Fellows will at all times have a named Educational Guide.

Educational Guide
A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified fellow's educational progress during a training placement or series of placements. The Educational Guide is responsible for the Fellow's Educational Agreement.

Clinical Guide
A trainer who is selected and appropriately trained to be responsible for overseeing a specified fellow's clinical work and providing constructive feedback during a training placement. Some training schemes appoint an Educational Guide for each placement. The roles of Clinical and Educational Guide may then be merged.

The Educational Guide will be allocated to the fellow at the beginning of the year. In addition to day to day supervision, educational supervisors will meet formally with their fellows four times per year. At the first meeting the educational objectives for the year and a personal development plan (PDP) will be agreed. The PDP should be based firmly on the syllabus objectives for the year. The space for 'methods agreed by supervisor and fellow' should be used to define how the fellow will acquire the competencies planned for the year.

Subsequent meetings will be a dialogue between Fellow and Educational Guide and will review progress and take into account the supervisor's observations of the Fellow's performance, feedback from other Clinical Guides, and analysis and review of workplace-based assessments. Attendance at educational events should also be reviewed. The PDP can be modified at these meetings.

Towards the end of the year of training a formal summative assessment of the Fellow's evidence of competencies and training progression will take place. This will provide a structured assessment of the Fellow's progress, based on assessment methods as above and will form the basis of the Educational Guide's report.

The Educational Guide, when meeting with the Fellow, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the fellow. The Educational Guide should be part of the clinical specialty team. Thus if the clinical directorate (clinical director) have any concerns about the performance of the Fellow, or there were issues of doctor or patient safety, these would be discussed with the Educational Guide. These processes, which are integral to Fellow development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

Opportunities for feedback to Fellows about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues.

6.2 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, provides continuity between posts and different supervisors and is one of the main ways of providing feedback to Fellows.

7 Managing curriculum implementation

The Trusts are responsible for quality management, the GMC/BAD will quality assure the educational providers and they are responsible for local quality control, to be managed by the Trust. The role of the BAD in quality management remains important and will be delivered in partnership with the Trust. The BAD role is one of quality review of Trust processes and this will take place on a regular basis.

Clinical and Educational Guides will be clinicians fully competent in their area of clinical supervision (Appendix 3). They will be appointed by the Trust. They will be trained in supervision, appraisal and assessment. Courses for this will be regularly available in theTrust. Nationally there are regular meetings for Educational Supervisors, Guides and Trainers in dermatology, organised by the BAD Education Board. These meetings include updates on new methods of assessment and bench-marking exercises to ensure equitable and bench-marked national standards for workplace-based assessments.

Standards of training and assessment and the Fellowship process will be reviewed annually by the BAD Education Board and appropriate stakeholders, using the GMC – recommended tools including: the Fellow survey, trainer survey, and programme visits if required.

7.1 Intended use of curriculum by trainers and fellows

The Educational Guides and trainers can access the up-to-date curriculum from the BAD Education Board and will be expected to use this as the basis of their discussion with Fellows. Both trainers and Fellows are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

Each Fellow will engage with the curriculum by maintaining a portfolio and logbook. The Fellow will use the curriculum to develop learning objectives and reflect on learning experiences.

It is important that the Educational Guide is aware of the requirement of each Fellow to cover all the elements of the curriculum. Progress will be reviewed at each Educational Guide meeting and the Convened Panel with expert assessors.

It is important to note that a clinical observership or attachment in Mohs surgery alone without demonstration of the above capabilities is not considered adequate evidence of meeting the published standard.

7.2 Recording progress

On enrolling with the BAD, fellows will be given the necessary documentation for their portfolio. The Fellow's main responsibilities are to ensure their portfolio and logbook is kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their personal development plan, record their reflections on learning and record their progress through the curriculum.

The Educational Guide's main responsibilities are to evaluate outcomes of assessments, reflections and personal development plans to inform appraisal meetings. They are also expected to update the Fellow's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.

Logbooks (preferably electronic) recording Mohs cases and Surgical reconstructions must be maintained as indicated in content of learning (3.3 above).

8 Curriculum review and updating

The specialty curriculum will be reviewed and updated with minor changes on an annual basis as necessary. Curriculum review is a standing item on the agenda for the BAD Education Board. As clinical practice changes with time, it will be necessary to amend the curriculum accordingly. Advice will be sought from the BSDS.

The curriculum should be regarded as a fluid, living document and the BAD Education Board will ensure to respond swiftly to new clinical and service developments. In addition, the curriculum will be subject to three-yearly formal review. This will be informed by curriculum evaluation and monitoring. The BAD Education Board will have available:

- The Fellows' survey, which will include questions pertaining to their specialty
- Specialty-specific questionnaires (if applicable)
- Reports from other sources such as educational supervisors, programme directors, specialty deans, service providers and patients
- Fellow representation on the SAC of the JRCPTB
- Informal Fellow feedback during appraisal.

Evaluation will address:

- The relevance of the learning outcomes to clinical practice
- The balance of work-based and off-the-job learning
- Quality of training in individual posts
- Feasibility and appropriateness of on-the-job assessments in the course of training programmes
- Current training affecting the service

Interaction with the NHS will be particularly important to understand the performance of specialists within the NHS and feedback will be required as to the continuing needs for that specialty as defined by the curriculum.

Fellow contribution to curriculum review will be facilitated through the involvement of Fellows in local faculties of education and through informal feedback during appraisal and College meetings.

The BAD Education Board will respond rapidly to changes in service delivery. Regular review will ensure collaboration of all the stakeholders needed to deliver an up-to-date, modern specialty curriculum. The curriculum will indicate the last date of formal review monitoring and document revision.

9 Equality and diversity

The BAD will comply, and ensure compliance, with the requirements of equality and diversity legislation, such as the:

- Race Relations (Amendment) Act 2000
- Disability Discrimination Act 1995
- Special Educational Needs and Disabilities Act 2001
- Data Protection Acts 1984 and 1998

The BAD believes that equality of opportunities is fundamental to the many and varied ways in which individuals become involved, either as members of staff and officers; as advisers from the medical profession; as members of the professional bodies or as doctors in training and examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

Quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC.

Compliance with anti-discriminatory practice will be assured through:

- Monitoring of recruitment processes
- Ensuring all BAD representatives have attended appropriate training sessions prior to appointment or within 12 months of taking up post
- Ensuring Fellows have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature
- Monitoring of College Examinations
- Ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training

10 Appendix 1

Original list of Contributors

BSDS Members

Dr Rob Sheehan-Dare (BSDS past-President and original author)
Dr James Langtry (BSDS President 2009-2011)
Dr Graeme Stables (BSDS President 2011-2013)
Dr Raj Mallipeddi (BSDS President Elect 2013-2015)
Dr Vindy Ghura (BSDS Executive Committee)
Dr Ashley Cooper (BSDS Executive Committee, manuscript revision 2011)

SAC members

Dr Tamara Griffiths (Chair of SAC)
Dr Giles Dunnill (Past Dermatology Curriculum lead)
Dr Ruth Murphy (Past Chair of SAC)

We have not been able to list all individuals who contributed via the SAC here, but are grateful to the major effort undertaken by all who provided feedback.