



# Mohs Micrographic Surgery (MMS) UK surgical standards & service guidance



**BAPRAS**

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

**BOPSS**

BRITISH OCULOPLASTIC SURGERY SOCIETY

# Contents

Introduction	3-5
1. Referral of the MMS patient	6-7
2. Consultation and assessment	8-12
3. Consent process	13-15
4. Pathology results and reporting	16-18
5. Reconstruction, postoperative care and follow-up	19-23
6. Staffing, training and competency	24-26
7. Patient experience exercise	27-28
8. Safety of equipment and facilities	29-30
9. Recording Mohs surgical activity	31-32
10. Clinical governance	33-35

# Introduction

In 2019 the British Association of Plastic, Reconstructive & Aesthetic Surgeons (BAPRAS) and the British Oculoplastic Surgery Society (BOPSS) formed a multidisciplinary working party to set these UK Mohs Micrographic Surgery standards and guidance, supported by an advisory panel of experts from a range of relevant specialties and interests.

Published standards or guidelines for Mohs Micrographic Surgery (MMS) currently exist both in the UK and internationally, but these do not adequately encompass the needs and requirements of all MMS practitioners within the UK's National Health Service (NHS), particularly those practitioners from a surgical training background; whilst Mohs surgery in the UK has traditionally been performed by Dermatologists an increasing number of surgeons have become trained in and practice MMS, to the extent that MMS is now recognised by BAPRAS and BOPSS as being a subspecialist surgical, as well as dermatological, interest. This brings highly specialised clinical workforce expansion to services under increasing demand, and an introduction of additional clinically appropriate surgical skillsets and optimal patient experiences to the specialty. These standards have therefore been produced to allow guidance and representation to these MMS practitioners, whilst equally being applicable for use by practitioners from other colleges or specialties.

The aims of these service standards are:

- To provide standards and guidance for MMS which ensure consistently safe service provision
- To guide on appropriate MMS practice and service provision
- To guide on the subsequent reconstructive processes following MMS
- To provide a framework by which commissioners, employers and healthcare providers can be assured of service efficiency and best practice

Potential topics for self-audit and assessment are suggested and are aimed at being readily collectable, practical and informative, and allow for self-assessment and provision of data to commissioners and peer review groups. This self-assessment process also allows for service providers to ensure their practice meets that which would be expected, and to effectively target any areas of deficiency.

Where appropriate the service standards are presented in a format to reflect the patient pathway, with matters of clinical governance also being discussed. In order to allow these service guidelines to be adopted with minimal disruption to existing MMS services, references and inclusions are made from published guidelines and evidence where appropriate, the salient articles being referenced in each section, including:

- A public poll on the word 'surgeon'. Patient Liaison Group of the Royal College of Surgeons of England, 2012
- Achieving world-class cancer outcomes, a strategy for England 2015-2020. Report of the Independent Cancer Taskforce
- Basal cell skin cancer. National Comprehensive Cancer Network, 2016
- Consent: supported decision-making. A guide to good practice. Royal College of Surgeons of England, 2016
- Dataset for histopathological reporting of primary cutaneous basal cell carcinoma. Royal College of Pathologists, 2019
- Dataset for histopathological reporting of primary invasive cutaneous squamous cell carcinoma and regional lymph nodes. Royal College of Pathologists, 2019
- Duty of Candour: guidance for surgeons and employers. Royal College of Surgeons of England, 2015

- Global guidelines for the prevention of surgical site infection. World Health Organization, 2016
- Good Surgical Practice. Royal College of Surgeons of England, 2016
- Guidelines for the management of basal cell carcinoma, Telfer NR, Colver GB, Morton CA. Br J Dermatol 2008
- Morbidity and mortality meetings: a guide to good practice. Royal College of Surgeons of England, 2015
- Multi-professional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma, Motley RJ, Preston PW, Lawrence CM. Br J Dermatol 2002 (updated 2009)
- National Cancer Peer Review Programme Manual for Cancer Services: skin measures, 2008
- National safety standards for invasive procedures (NatSSIPs). NHS England patient safety domain, 2015
- OPCS Classification of Interventions and Procedures. Clinical classifications service. NHS Digital, 2019
- Outpatient clinics: a guide to good practice. Royal College of Surgeons of England, 2018
- Service Guidance and Standards for Mohs Micrographic Surgery. British Association of Dermatologists, 2019
- Standards for children's surgery. Royal College of Surgeons of England, 2013
- The high performing surgical team: a guide to best practice. Royal College of Surgeons of England, 2014
- Using data to support change in clinical practice. Royal College of Surgeons of England, 2017
- World Alliance for Patient Safety: Implementation manual, surgical safety checklist. World Health Organization, 2008

# 1) Referral of the MMS patient

## Introduction

Patients should have ready access to the MMS team, with clear referral pathways being in place. A member of the local skin cancer multidisciplinary team (LSMDT) or other appropriate specialist who wishes to refer a patient for MMS consultation should refer the case either directly to the MMS service or the relevant point of contact within the specialist skin cancer multidisciplinary team (SSMDT). When direct referral is made to the MMS service, these should be directed to the MMS clinical lead for appropriate triage to members of the MMS team. This allows for triage to appropriate skillsets within teams, efficient use of services, and optimisation of uniform waiting times for consultations and treatment. The MMS team may direct referred patients to alternative care providers when deemed appropriate, without prior approval from the referrer, in order to optimise the patient pathway.

## Principal recommendations

1a - The SSMDT should record the names of the practitioners that carry out MMS for the catchment area. This includes the procedure known as 'Slow Mohs' or paraffin section MMS

1b - Agreed referral arrangements to the MMS service should be in place with the SSMDT and reviewed annually

1c - A variety of tumour pathologies should be assessed and treated annually by the MMS service

1d - All referred patients should be triaged by the MMS clinical lead. Referrers should be made aware of any redirected patients



**BAPRAS**

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

**BOPSS**  
BRITISH OCULOPLASTIC SURGERY SOCIETY

## Examples of suitable evidence & audits

- SSMDT clinical guidelines for skin cancers including basal cell carcinomas (BCCs), Squamous Cell Carcinomas (SCCs) and other tumours
- GP and LSMDT referral guidelines for accessing MMS services
- Audit of referrals received, referral source and their indications for referral, eg incompletely excised or recurrent tumours
- Audit of proportion of direct consultant to consultant referrals to the MMS team that have been triaged by the MMS clinical lead
- Percentage of patients listed for MMS with pathology other than basal cell carcinoma

## Supporting references and further reading:

- Good Surgical Practice, Domain 1: Knowledge, skills and performance, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- National Cancer Peer Review Programme Manual for Cancer Services: skin measures, 2008

## 2) Consultation and assessment

### Introduction

A pre-operative consultation by the MMS surgeon should accurately assess the tumour, evaluate the patient's overall health status including suitability for general anaesthesia or sedation when required, estimate potential defects and assess their needs for further reconstructive surgery. The MMS surgeon should aim to ensure the patient gains a realistic understanding of the proposed procedures including the broad range of foreseeable reconstructive options, alternative treatment options, and inform on risk factors and possible complications for both the MMS and reconstructive procedures. This will include arrangements for any reconstruction and waiting times in relation to the MMS. In order to deliver an optimal service to the region, the MMS service should provide MMS surgeons that have a range of declared specialist interest surgical skillsets. The service should also have the facilities to consult and treat paediatric patients and those with additional accessibility needs including those of physical, mental or language needs.

With the incidence of non-melanoma skin cancer increasing, the resources of the NHS and availability of MMS as a valuable treatment modality must be carefully considered when assessing patients. When MMS is utilised for the management of BCCs these should be 'high-risk'; in the context of these standards, this is defined as a tumour with high-risk presentation in a high-risk anatomical location. Whilst BCCs form the majority of tumours treated with MMS, treatment for a range of tumour pathologies should be offered by the MMS service.

High risk presentations for BCCs include:

- Recurrent or incompletely excised BCCs
- BCCs at the site of previous radiotherapy



- BCCs >2cm diameter
- BCCs with poorly defined margins
- BCCs with subfascial extension or periosteal/bone invasion
- Pathological features including micronodular, morphoeic/infiltrative or basosquamous BCC, perineural or perivascular infiltration
- BCCs in immunosuppressed patients

High risk sites for BCCs are those where preservation of tumour-free tissue is essential for maintenance of physiology, function or physical appearance:

- Facial areas including the eyelids/peri-ocular area, lower third of nose including tip and ala, ears and lips/peri-oral areas
- Hands, nail units, feet or genitalia

For cases with either high risk pathology or high-risk site then alternative treatments including standard surgery or radiotherapy should be primarily considered, with MMS being considered only where clear clinical reasoning can be evidenced.

## Principal recommendations

2a - Clinical records for Mohs surgery patients should be stored securely but be readily accessible to any relevant staff. The records should include the preoperative evaluation, consent form, peri-operative checklists as per the WHO Checklist, National Safety Standards for Invasive Procedures (NatSSIPs) and Local Safety Standards for Invasive Procedures (LocSSIPs) guidelines, operative notes, and histological results from MMS including the Mohs map

2b - Photographs of the lesion and site should be recorded and presented at SSMDT during case discussion where possible

2c - All patients should have access to a named Skin Cancer Nurse Specialist (CNS)

2d - The MDT should provide written, electronic, and/or audiovisual material for patients, carers and relatives which may include information regarding:

- the MMS services and team
- the tumours which can be treated by MMS and other treatment options
- the potential reconstruction that may be required, including risks and complications and potential cosmetic or functional effects
- patient groups and patient self-help groups, including those that are internet based. Patients should be given the opportunity to talk to other patients who have had MMS and/or similar reconstruction where possible
- the website addresses for internet sites that have been deemed appropriate by the Mohs service and provide information on Mohs surgery, reconstruction and peri-operative care
- services offering psychological, social and spiritual and/or cultural support when available
- services available to support the effects of living with cancer and dealing with its emotional and psychological effects, including Cancer Nurse Specialist (CNS) support

2e - Patients should be given the opportunity to meet and discuss with specialists that could offer suitable alternative treatments to MMS, to gain further information on options

2f – Services should be accessible to all patients of the hospital’s population, including those with additional specific needs including language barriers. Paediatric patients should be seen in designated paediatric clinics and have elective surgery on dedicated paediatric lists; when this is not possible arrangements must be made that recognise the needs of children and their carers

2g - Patients being listed for MMS of basal cell carcinomas should be of a high risk presentation in a high risk site. Any MMS cases falling outside these specifications should have clearly documented reasoning for requiring MMS, and be agreed by the SSMDT

2h - Following initial outpatient assessment, all patients should be discussed at the next available SSMDT

2i - A locally agreed minimum dataset of information for patients to be considered for MMS should be available and provided to SSMDT meetings to aid in discussion wherever possible. This should include diagnostic information such as histology results, and any relevant clinical information including co-morbidities, previous treatment and patient treatment preferences

### **Examples of suitable evidence & audits**

- MMS activity data and SSMDT discussion outcomes
- Percentage of MMS patients discussed at SSMDT
- Audit of completeness and accuracy of patient notes
- Percentage of basal cell carcinoma subtypes, locations and reasons for MMS
- Pre and post-operative information provided to patients in letters and/or leaflets including Macmillan or other information resources on skin cancer care

- Information on the MMS service is available on the Trust website and includes links to local skin cancer support or patient groups
- Audit of proportion of patients that have been offered written or electronic patient information material (as part of consultation and consent process)

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- National Cancer Peer Review Programme Manual for Cancer Services: skin measures, 2008
- Consent: supported decision-making. A guide to good practice. Royal College of Surgeons of England, 2016
- World Alliance for Patient Safety: Implementation manual, surgical safety checklist. World Health Organization, 2008
- National safety standards for invasive procedures (NatSSIPs). NHS England patient safety domain, 2015
- Guidelines for the management of basal cell carcinoma. Telfer NR, Colver GB, Morton CA. Br J Dermatol 2008
- Multi-professional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma. Motley RJ, Preston PW, Lawrence CM. Br J Dermatol 2002 (updated 2009)
- Outpatient clinics: a guide to good practice. Royal College of Surgeons of England, 2018
- Service Guidance and Standards for Mohs Micrographic Surgery. British Association of Dermatologists, 2019
- Basal cell skin cancer. National Comprehensive Cancer Network, 2016
- Standards for children's surgery. Royal College of Surgeons of England, 2013

# 3) Consent process

## Introduction

The process of consent should be considered as informed decision making, or informed request, and not just the signing of a form. Surgeons should establish and maintain effective relationships with their patients and/or supporters, and have open and honest discussions in a sensitive manner. The surgeon should ensure that the patient has capacity to give consent and make provision for those who are unable to provide consent for themselves.

Consent should be taken prior to surgery and either by a person providing, or actively involved in, the proposed treatment. The surgeon discussing treatment with the patient should be suitably trained and qualified to provide the treatment and have knowledge of the associated risks and complications, as well as any alternative treatments available for the patient.

Written information, including a copy of the letter to their GP, should be provided to the patient prior to their procedure to allow them to reflect on the decision-making process and confirm their wishes to proceed. Advice should be provided to the patient to indicate where they can obtain further information on their proposed treatment, including patient leaflets, websites and educational videos. On the day of the procedure, the patient should re-confirm their wishes to proceed with treatment and the surgeon should sign the relevant section if there has been a significant delay since original consent discussions.

## Principal recommendations

3a - The patient's medical records, including the consent form, must reflect the information discussed including treatment and reconstructive options including their risks and complications, any specific requests by the patient, any written, visual or audio information given to the patient, any other procedures that may

be required at the time of treatment, and details of any decisions that were made

3b – Patients should be sent a copy of the letter that is sent to their GP, allowing them to reflect on the decision-making process. The proposed treatment, including risks and complications, should be rediscussed on admission and confirmation of consent gained

3c - MMS services should aim to use standardised and structured documentation that promotes the sharing of patient information between individuals and teams and forms a record for future reference including for purposes of audit and peer review

3d - The possible need for general anaesthesia or sedation for reconstruction and/or MMS should be discussed when appropriate, and the potential risks and complications of this explained

3e - When general anaesthesia is planned, the patient should be assessed for anaesthetic suitability in a pre-operative surgical assessment clinic before their MMS procedure

### **Examples of suitable evidence & audits**

- Availability of pre and post-operative patient information sheets specific to MMS and reconstruction
- Audit of the proportion of clinical records that document appropriate discussions of the procedure, including MMS, reconstruction, anaesthesia and pain management requirements, risks and complications, and expected functional and cosmetic outcomes
- Numbers of patients undergoing MMS under general anaesthesia or sedation

- Evidence of the surgeon's job plan, appraisals and evidenced experience in (1) MMS and (2) reconstructive techniques
- Audit of consent forms and checklists contained in the patient records
- Audit of adherence to Local Safety Standards for Invasive Procedures (LocSSIPs) and Standard Operating Procedures for MMS and reconstruction

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 2: Safety and quality, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- Consent: supported decision-making. A guide to good practice. Royal College of Surgeons of England, 2016

# 4) Pathology results and reporting

## Introduction

Various valid techniques may be used to process specimens in the MMS laboratory and the service should have protocols in place for Mohs slide production according to local techniques. Mohs surgeons should read their own slides and record their findings on the Mohs map and should work alongside, or have immediate access to second opinions from, a consultant dermatopathologist; working in conjunction with dermatopathologists optimises governance and safety, and allows for continuous professional development.

A minimum dataset for MMS should be kept in order to record patient demographics, date of procedure, reasoning for MMS, tumour diagnosis and subtype where available, anatomical site, number of stages and blocks performed, tumour and defect sizes, and method of reconstruction.

## Principal recommendations

4a - MMS notes, including a Mohs map signed by the Mohs surgeon annotated with histological findings at each MMS stage, should be readily available to be viewed by other clinicians or to be submitted with microscope slides for third party audit or evaluation

4b - A diagnostic biopsy of the tumour should be analysed pre-operatively or during MMS by a histopathologist. If there are any discrepancies or requirement for paraffin processing and evaluation, the Mohs surgeon should arrange for this and residual tissue from the MMS blocks should be processed for further evaluation as deemed necessary



**BAPRAS**

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

**BOPSS**  
BRITISH OCULOPLASTIC SURGERY SOCIETY



4c - All Mohs surgery lists will have a named Consultant histopathologist assigned to the list. Any non-BCC cases will be dual read and interpreted by both the Mohs surgeon and the Consultant histopathologist prior to any reconstruction. BCC cases may also be dual read according to local standards; of the BCCs that are not dual read, an audit of the greater of a consecutive 25 or 10% of these cases will be performed every 6 months to ensure accuracy of histopathological interpretation. This audit should be performed by a consultant Dermatopathologist in conjunction with another Mohs surgeon, other than the individual being audited, and the results overseen by the service clinical director

4d - All MMS cases should have a typed histology report issued for the patient notes and attention of the patient's general practitioner, clearly indicating findings at each stage of MMS and a summary giving the final diagnosis and number of stages required to achieve clearance

4e - The MMS laboratory should be accredited by a UK accreditation body

4f - All notes, maps and methods of recording of MMS pathology activity should be standardised within each service, to allow for efficient internal and external audit and review

### **Examples of suitable evidence & audits**

- Evidence of SSMDT agreed pathology guidelines for diagnosis and assessment
- Audit of the Mohs surgeon interpreted slides and mapping
- Percentage of MMS cases that have had a second opinion/reading at the time of MMS
- Audit to confirm all cases have a formal histopathology report issued to the patient's GP to indicate tumour diagnosis and MMS findings

- Audit of minimum dataset parameters
- Audit to confirm all non-BCC MMS cases have evidence of a histopathologist opinion prior to reconstruction
- Audit of accuracy of histopathology reading by a Mohs surgeon, as assessed by a Consultant histopathologist

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 1: Knowledge, skills and performance, Domain 2: Safety and quality, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- The high performing surgical team: a guide to best practice. Royal College of Surgeons of England, 2014
- Dataset for histopathological reporting of primary cutaneous basal cell carcinoma. Royal College of Pathologists, 2019
- Dataset for histopathological reporting of primary invasive cutaneous squamous cell carcinoma and regional lymph nodes. Royal College of Pathologists, 2019

# 5) Reconstruction, postoperative care and follow-up

## Introduction

MMS is the process of resecting tumours, however appropriate management of the resulting surgical defect is an intrinsic part of the patient pathway. The defect following MMS, and hence the reconstructive requirements for that defect, will vary between individual patients. It is noted that patients expect their surgeon to be a recognised surgical specialist and the best patient experience is usually obtained when the resection and reconstruction is carried out at the same appointment and by the same surgical team where feasible. Therefore the Mohs surgeon should be trained and deemed competent at:-

1. Assessment of the reconstructive requirements for each defect
2. Assessment of suitability for appropriate anaesthesia including local, local + sedation or general anaesthesia, with ready access to any of these modalities
3. Performing the procedures required for a satisfactory reconstruction
4. Management of post-operative complications that may arise

When assessing a patient, if any of the anticipated reconstructions fall outside the skillset of that particular Mohs surgeon, then a referral should be made to an appropriate MMS colleague within the service for management of both the MMS and reconstruction, and MMS services should aim to provide a team with a range of specialist interest surgical skillsets including Mohs surgeons with periocular, hand and complex facial reconstruction specialist training. If this is unavailable due to requirement for separate specialist input outwith the Mohs service, for example in transcranial tumours, then the reconstructive specialist with the appropriate skillset should meet with the patient prior to the commencement of the Mohs resection, to enable optimal planning and consent, and provision made where possible for reconstruction on the same day as the MMS. Exceptionally

reconstruction by a different specialist may occur at a separate day to the MMS, in which case the delay to reconstruction should be minimised and usually no more than 24 hours; clear documentation to explain the reasoning for any further reconstructive delay should be evident.

Post-operative and follow-up care must be undertaken by staff qualified and proficient in the practice, with pathways in place for senior review if required. Pathways should also be in place for the management of any post-operative complications and regular audits of morbidity and mortality should be undertaken to discuss any complications.

## **Principal recommendations**

5a - All MMS surgeons should have evidence of specific training in the reconstruction that they offer to patients and have an in-depth expertise of a range of options including split and full thickness skin grafts, composite grafts, use of dermal substitutes, and flaps including local, regional, rotation, transposition, interpolated, islanded and pedicled flaps.

5b - MMS resection and/or reconstruction of complex anatomical areas (including nasal, perioral\*, auricular, genitalia and hands) should only be performed by Mohs surgeons with specific surgical training for the area, and due to the potential for visual loss any surgery within the periocular\* area should be performed by those with, or in liaison with, ophthalmic expertise as indicated by the JCST curriculum for their respective specialty or that of the Royal College of Ophthalmologists. In such areas it may also be appropriate for other surgeons to perform MMS or reconstruction but only if comparable surgical expertise, with recognised surgical training to the level of CCT for that specialty, as well as per MMS training requirements, can be evidenced\*\*

5c - The MMS surgeon should undertake yearly surgical appraisals

5d - The individual reconstructive skillsets for each MMS surgeon should be documented, and referral pathways defined for cases falling outside these skillsets

5e - When treating patients with larger tumours (e.g facial lesions greater than 2cm in diameter), patients with anxiety disorders, tumours in high-risk areas (including periocular, nasal, perioral, auricular, genitalia and hands) or tumours requiring subfascial or bony resection, the operating MMS surgeon must have access to inpatient beds and theatres for general anaesthesia or local anaesthesia with sedation for both the MMS and the reconstruction, to allow for either clinical need when necessary or patient choice

5f - Inpatient beds on wards with staff experienced in the care of the post-operative patient should be available for those patients that require general anaesthesia, are elderly, have implanted devices such as cardiac defibrillators, or with co-morbidities or transportation difficulties that may make in-patient management appropriate

5g - Provision for wound care should be by a dedicated clinic. Staff should be appropriately trained and employed for such activity. Pathways should be in place for patient review in the wound care clinic by the MMS service, should the need arise

5h - All patients should be informed of contact details in the event of any concerns or complications. Pathways for after-hours care must be available and documented, and access to out-of-hours theatre for cases under general anaesthesia, and in-patient care, must be available to the MMS surgeon for such an event

5i - All complications should be recorded and presented at a departmental meeting of morbidity and mortality. Any adverse events should be investigated as per local protocols

5j - Functional and cosmetic outcomes of reconstruction should be recorded as part of the minimum dataset

## Examples of suitable evidence & audits

- The MMS surgeon's logbook, job plan, evidence of specialist training and completed appraisals
- Evidence of availability to the MMS team of in-patient beds and theatre availability for general anaesthetic or sedation procedures
- Evidence of availability regarding reconstruction provision, wound care provision, and afterhours care
- Audit of reconstructions performed by each Mohs surgeon and their appropriateness according to the specialist training of the Mohs surgeon
- Audit of percentage of reconstructions performed by anyone other than the MMS surgeons, where they were performed, and timing in relation to the primary MMS resection
- Audit of recorded complications
- Audit of outcomes of reconstruction

\* For the purposes of these standards, 'periocular' refers to the tissue lying within the boundaries of: the supraorbital ridge, infraorbital rim, 10mm lateral to the lateral canthus, and 5mm medial to the medial canthus. 'Perioral' refers to all mucosal and intraoral tissue, and cutaneous tissue lying within 10mm of the vermillion border

\*\* For example an Otolaryngology surgeon performing periocular reconstruction should be able to evidence periocular training/expertise comparable to that of Oculoplastic, Plastic, or Maxillofacial surgeons at CCT



**BAPRAS**

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

**BOPSS**  
BRITISH OCULOPLASTIC SURGERY SOCIETY

## Supporting references and further reading:

- Good Surgical Practice, all Domains. Royal College of Surgeons of England, 2016
- Consent: supported decision-making. A guide to good practice. Royal College of Surgeons of England, 2016
- Morbidity and mortality meetings: a guide to good practice. Royal College of Surgeons of England, 2015
- The high performing surgical team: a guide to best practice. Royal College of Surgeons of England, 2014
- A public poll on the word 'surgeon'. Patient Liaison Group of the Royal College of Surgeons of England, 2012

# 6) Staffing, training and competency

## Introduction

MMS and reconstruction services require staff to have specialist training, knowledge and clinical skills appropriate to the role they are undertaking. Staff must be assessed as being competent and safe in order to provide optimal care and treatments that maximise benefit and minimise complications.

All MMS staff, including outpatient nurses, recovery nurses, theatre personnel, and laboratory staff should be suitably qualified and only undertake roles for which they have been specifically employed and are contracted to undertake. Professional development must be ongoing and encouraged and include both internal and external multidisciplinary education.

MMS and reconstruction by surgical Mohs specialists should only be undertaken by those with evidence of MMS competency and specialist surgical and reconstructive training according to the Joint Committee on Surgical Training (JCST) or Royal College of Ophthalmologists specifications and criteria, and within their relevant specialty limitations.

Staffing levels should be maintained at those necessary to provide a safe, patient-centred environment. Staffing arrangements and provision should be made by relevant staffing departments, with the MMS service maintaining close liaison with these departments to ensure optimal workforce planning. Staffing levels should allow for periods of absence including annual leave, maternity/paternity leave, or sickness.

## Principal recommendations

6a - The Mohs surgeon should regularly undertake a caseload sufficient to maintain and develop their Mohs excision skills, Mohs pathology interpretation



and reconstructive expertise. It is suggested that this be a minimum of 2 PAs (programmed activities) of MMS per week and a total of at least 50 Mohs surgical procedures per year averaged over the last three calendar years

6b - MMS of complex areas, (including periocular, nasal, perioral, auricular, genitalia and hands), should only be performed by Mohs surgeons with specific surgical training for the area, as indicated by the JCST or Royal College of Ophthalmologists curriculum for their respective specialty. Other surgeons can also perform MMS and/or reconstruction on these areas but only if comparable experience and expertise to the level of CCT, for that surgical specialty can be evidenced

6c - Laboratory, nursing and ancillary staff should regularly engage in MMS and reconstruction activity to maintain their skills and expertise. Any mandatory local or national guidelines should be followed, and appraisals completed where appropriate

6d - Theatre staff should be part of the Trust's regular theatre team and have undertaken specific training to undertake their roles

### **Examples of suitable evidence & audits**

- The Mohs surgeon's job plan
- Evidence of training/ continuing professional development including relevant conferences and courses for all staff
- Record of MMS and reconstruction staff and their contracted duties
- For each individual Mohs surgeon an audit from the minimum dataset including number of cases per year, range of tumour types treated, number of stages of MMS surgery, reconstructive techniques used, and outcomes post-surgery

## Supporting references and further reading:

- Good Surgical Practice, all Domains. Royal College of Surgeons of England, 2016
- The high performing surgical team: a guide to best practice. Royal College of Surgeons of England, 2014
- Using data to support change in clinical practice. Royal College of Surgeons of England, 2017
- Service Guidance and Standards for Mohs Micrographic Surgery. British Association of Dermatologists, 2019



**BAPRAS**

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

**BOPSS**  
BRITISH OCULOPLASTIC SURGERY SOCIETY

# 7) Patient experience exercise

## Introduction

Patient experience should be on par with clinical effectiveness and safety, and patients should feel empowered to be equal partners in decisions regarding their care. This includes access to a skin cancer Clinical Nurse Specialist (CNS) or other key worker to help coordinate their care and holistic needs, which can be wide-ranging, including medical, practical, psychosocial and financial. Where relevant and applicable, Experience Surveys, Patient Reported Outcome Measures (PROMS) or Patient Reported Experience Measures (PREMS) may be used to provide meaningful patient experience measures to drive improvement.

## Principal recommendations

7a - The patient should have the opportunity to see a key worker including a skin CNS

7b - The patient should have the opportunity for psychological support when appropriate

7c - The patient should have been given information for them and/or their carers, and be given a copy or summary of the consultation notes at which their treatment options were discussed

7d - Discussions regarding alternative treatment options should be had when appropriate, and further consultations arranged if needed to ensure the patient reaches the most appropriate treatment decision

7e - A consultation at least 3 months post-surgery should be conducted to assess functional and cosmetic outcomes of reconstruction and address any concerns

7f – Patients should have access to a cosmetic camouflage and/or prosthetic service

### **Examples of suitable evidence & audits**

- Evidence of information available for patients and carers
- Evidence of a completed and presented patient experience exercise within the last 2 years
- Audit of the proportion of patients that are offered a post-surgery outcome assessment and consultation
- Audit of the proportion of patients that are offered a permanent record or summary of a consultation at which their treatment options were discussed
- Assessment of the proportion of patient that have access to a key worker including skin CNS

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 2: Safety and quality, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- Using data to support change in clinical practice. Royal College of Surgeons of England, 2017
- Achieving world-class cancer outcomes, a strategy for England 2015-2020. Report of the Independent Cancer Taskforce

# 8) Safety of equipment and facilities

## Introduction

The MMS unit will usually consist of a patient recovery area, one or more theatre rooms, a dedicated laboratory, and access to appropriate surgical beds including in-patient care.

Regular checking, maintenance and servicing of equipment is essential to optimise efficiency and safety, and Standard Operating Procedures (SOPs) should be available for any essential pathways and procedures.

## Principal recommendations

8a - The Mohs laboratory will be under the clinical governance of the Trust pathology department and have SOPs in place for the event of equipment failure which should ideally enable access to backup equipment

8b - All chemicals used in the MMS laboratory must have a COSHH assessment and be safely handled and stored according to manufacturer and local guidance. SOPs should be in place in the event of untoward chemical events such as spillage

8c - The protection of all MMS staff must comply with safety standards and training in such standards given where appropriate. Protective clothing including gloves, eye protection and cryo-protective clothing must be available and used where required. All treatment areas must have warning and hazard signs when appropriate

8d - Patients should have access to a bed or reclining chair with appropriate privacy in a designated recovery area, ideally a dedicated ward. Monitoring equipment and resuscitation equipment must be available including oxygen supply

8e - The operating theatre will be under the governance of the Trust surgical theatre team and will comply with theatre specifications and World Health Organization (WHO) checklist / NatSSIPs / LocSSIPs policies

8f - All MMS stages must be performed with standard surgical practice as per WHO guidelines, including surgical hand preparation, use of sterile gloves and surgical gowns, and separate instrument trays for each stage of surgery. Facilities must be present in the operating theatre to allow for this practice

### **Examples of suitable evidence & audits**

- Evidence of formal written risk assessments of the Mohs unit
- Evidence of current COSSH assessment of risks from exposure to liquid nitrogen and cell staining solvents, where used
- Evidence of maintenance and service logs and temperature logs being completed and kept up to date
- Evidence of formal assessments and governance reviews of the operating theatre being maintained by the Trust surgical theatre team
- Audit to ensure theatre processes comply with WHO checklist / LocSSIPs guidelines and adhere to standard surgical practice

### **Supporting references and further reading:**

- Global guidelines for the prevention of surgical site infection. World Health Organization, 2016
- Good Surgical Practice, Domain 2: Safety and quality, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- The high performing surgical team: a guide to best practice. Royal College of Surgeons of England, 2014

# 9) Recording Mohs surgical activity

## Introduction

The recording of activity undertaken during a patient's care is essential to provide an accurate record of their care and ensure recognition and appropriate reimbursement by commissioners and payment providers. Accurate coding also facilitates effective local and national audit and healthcare planning, and helps allow commissioners to evaluate the effectiveness and value a service is providing. MMS providers should actively engage with their Trust's coding and finance departments to ensure accuracy of the coding and finance process.

## Principal recommendations

- 9a - Agreed methods should be in place for ensuring accurate recording of the MMS procedure and reconstruction by the Trust's coding team
- 9b - Regular review of MMS and reconstruction activity should occur, to ensure accuracy of clinical information before charges are made to payment providers
- 9c - The MMS team should maintain regular communication with the Trust coding team to review coding principles being used and ensure accuracy in recording of activity

## Examples of suitable evidence & audits

- Audit of patient case notes for accuracy of recording of the procedures undertaken, co-morbidities of patients, type of admission, type of anaesthesia, complications, and any requirements for HDU/ITU/Critical care

- Audit of the accuracy of coding for MMS and reconstruction
- Evidence that the MMS service has agreed protocols in place for the recording and coding of its MMS and reconstruction
- Evidence that the MMS unit regularly reviews its MMS and reconstruction activity and coding to ensure accuracy

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 1: Knowledge, skills and performance, and Domain 2: Safety and quality. Royal College of Surgeons of England, 2016
- Using data to support change in clinical practice. Royal College of Surgeons of England, 2017
- OPCS Classification of Interventions and Procedures. Clinical classifications service. NHS Digital, 2019



# 10) Clinical Governance

## Introduction

MMS services should operate within a single departmental clinical governance process with clearly documented governance pathways and named personnel with responsibility for safety and compliance. The MMS service should include a named MMS lead clinician, who will be responsible for facilitating governance for the service, including compliance with these guidelines, and escalating any issues accordingly.

Specific governance issues relating to the recovery ward, theatre, or Mohs laboratory will be overseen and managed by the leads for nursing, surgical theatres and pathology laboratory respectively. The MMS lead will liaise with these leads on any identified issues.

## Principal recommendations

10a - The MMS team should have at least 3 minuted governance meetings per year. Attending personnel should include the MMS surgeons and representative staff from the recovery ward, theatres, Mohs laboratory, histopathology, appointments/theatre booking team, Trust management, and the SSMDT. Discussions and agendas may vary, but all meetings should include as standard:

- a review of MMS and reconstruction activity since the previous minuted meeting
- a review of current waiting times and numbers of patients waiting for MMS (including urgent/non-urgent cases)

- a review of any adverse events or complications and measures taken to avoid a repetition of such events
- discussion of any difficult, educational or unusual cases

10b - The Trust should have easily accessible standardised methods for recording incidents, including DATIX or equivalent

10c - Any postoperative complications should also be discussed as part of the wider morbidity and mortality meeting for the department overseeing governance for the MMS service

10d – Any patients experiencing an event of untoward complications or harm should be made aware of such events, an investigation be undertaken, and a full explanation given by the healthcare Trust to meet their duty of candour and ensure pathways are in place to limit or rectify the harm to the patient

10e – The service should have a named clinician as MMS lead, who will be responsible for facilitating governance issues including compliance of the service to relevant national guidelines, and will have dedicated time allocation in their job plan for such activity

### **Examples of suitable evidence & audits**

- Minutes of previous MMS meetings
- Waiting list cases and times on the list, in relation to national targets for both urgent and non-urgent cases
- The Local Safety Standards for Invasive Procedures (LocSSIPs), Standard Operating Procedures (SOPs) and governance protocols for the department
- Records of reporting data for serious or untoward incidents and never events, and investigations undertaken

- Audit of use, and recording of, WHO Surgical Safety Checklist and/or LocSSIPs checklists
- Audit of recovery nurse documentation, including regular standard observations, clinical history recording, medications, and the post-operative information given
- Audit of tumour recurrences following MMS, and complications including graft or flap failures, post-operative bleeding and infection rates

### **Supporting references and further reading:**

- Good Surgical Practice, Domain 2: Safety and quality, and Domain 3: Communication, partnership and teamwork. Royal College of Surgeons of England, 2016
- Morbidity and mortality meetings: a guide to good practice. Royal College of Surgeons of England, 2015
- Duty of Candour: guidance for surgeons and employers. Royal College of Surgeons of England, 2015
- Using data to support change in clinical practice. Royal College of Surgeons of England, 2017
- Service Guidance and Standards for Mohs Micrographic Surgery. British Association of Dermatologists, 2019

# Members of the Working Party Group (WPG) advisory board and guideline authors

Hamid Tehrani	Consultant Plastic, Reconstructive & Mohs surgeon St Helens & Knowsley NHS Trust (Chairman for the WPG)
Howard Peach	Consultant Plastic & Reconstructive surgeon Leeds University NHS Trust
Prof Marc Moncrieff	Professor of Plastic & Reconstructive surgery Norfolk & Norwich University Hospital Trust
Julia Sen	Consultant Ophthalmic & Mohs surgeon Worcestershire Acute Hospitals NHS Trust
Su Sethi	Consultant, Public Health Medicine Specialised Services Commissioning Team, North West region
Mark Henley	President, British Association of Plastic, Reconstructive & Aesthetic Surgeons (BAPRAS) Consultant Plastic & Reconstructive surgeon Nottingham & Derby NHS Hospitals
Carole Jones	President, British Oculoplastic Surgery Society (BOPSS) Consultant Ophthalmic surgeon Maidstone & Tunbridge Wells NHS Trust

Prof Louise Higgins	Patient representative Emeritus Professor of Psychology Chester University
Jennifer Garioch	Consultant Dermatologist & Mohs surgeon Norfolk & Norwich University Hospital Trust
Prof Iain Whittaker	Professor of Plastic & Reconstructive Surgery Surgical Specialty Lead, Health & Care Research Wales SAC Lead for Academic Plastic Surgery Swansea University
Jonathan Morton	Locum Consultant Plastic, Reconstructive & Mohs surgeon St Helens & Knowsley NHS Trust
Charlotte Defty	Consultant Plastic, Reconstructive & Mohs surgeon St Helens & Knowsley NHS Trust
Rakhee Nayar	Consultant Plastic, Reconstructive & Mohs surgeon St Helens & Knowsley NHS Trust
Prof Sandip Hindocha	Consultant Plastic & Reconstructive surgeon Bedford Hospital NHS Trust
Sarwar Khan	General Practitioner Liverpool
Su Enn Low	Consultant Dermatopathologist St Helens & Knowsley NHS Trust
Naveen Sharma	Consultant Dermatopathologist St Helens & Knowsley NHS Trust
Karen Pocock	Skin Cancer Nurse Specialist St Helens & Knowsley NHS Trust



BAPRAS

British Association of Plastic  
Reconstructive and Aesthetic Surgeons

BOPSS

BRITISH OCULOPLASTIC SURGERY SOCIETY