

The Curriculum Framework for the Surgical Care Practitioner

A consultation document

March 2005

Policy	Estates
HR/Workforce	Performance
Management	IM & T
Planning	Finance
Clinical	Partnership Working

Document Purpose	Consultation/Discussion
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Target Audience	NHS Trusts CEs, SHA CEs, Medical Directors, Directors of Nursing, PCT PEC Chairs, Directors of HR, HEIs, Patient groups, Professional bodies, Regulatory bodies, Trade Unions
Circulation List	
Description	Commissioned by the Changing Workforce Programme, MA, this is the proposed Curriculum Framework for the education of Surgical Care Practitioners. It will enable the commissioning of national training centres and ensure standards.
Cross Ref	N/A
Superseded Docs	N/A
Action Required	Comments welcomed
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The consultation process

We would like to share with you progress that has been made on the development of the role of the Surgical Care Practitioner (SCP) and seek your comments on the proposed curriculum framework. The proposed curriculum framework has been developed over a number of years and builds on the work of the Royal College of Surgeons of England (RCSEng) education and training programme for doctors and the National Association of Assistants in Surgery (NAASP) core syllabus.

The SCP role has developed from many local initiatives by staff already in clinical roles and we are now seeking regulation of this protected title to ensure the safety of patients. To do this we need a very clear national curriculum framework, which states the standards that those using the SCP title will need to meet before entering practice. Registered SCPs will be required to follow continuing professional development as set down by their regulatory body.

This document outlines the details of the proposed curriculum framework for the education, training and assessment of SCPs and describes incremental development to a prescribed standard prior to qualification. The framework describes four levels with respect to both the knowledge and skills to be developed by potential practitioners. The RCSEng Council supports the principle that specialty skills are developed to Level 1 (assist only). We seek further opinion as to whether any of the specialty skills should be developed beyond Level 1. We would particularly welcome comment from specialty specific groups as we recognise that the approach will need to be different for different surgical specialties.

There are a range of views about the range of practice and level of supervision of surgical care practitioners following qualification. We are seeking comments on the development of skills beyond Level 1 following qualification and again this may be different in different specialties.

In summary we would welcome your comments with respect to:

- The Curriculum Framework for the Surgical Care Practitioner as an educational programme
- The range of knowledge and skills in the syllabus
- Methods of assessment
- Appendix 4 – Specialty specific skills and knowledge at qualification
- Appendix 4 – Specialty specific skills and knowledge post qualification
- Appendix 5 – Triggered assessment
- Issues around supervision
- The title of surgical care practitioner

Following the consultation process, comments received will inform the final draft and will lead to implementation by procuring national education and training centres (approved by RCSEng) to deliver programmes to meet demand for the new role.

The consultation documents and results will be accessible online at the following locations:

- ‘What’s New’ on the Department of Health website www.dh.gov.uk.news
- Consultation Register on the Department of Health website www.dh.gov.uk/consultations
- The Government’s central register of consultations www.ukonline.gov.uk
- The Royal College of Surgeons website www.rcseng.ac.uk

Hard copies can be obtained by writing to

Surgical Care Practitioner Curriculum Framework
Room 204A
Heron House
322 High Holborn
London WC1V 7PW

or

by emailing

SCP.consultation@dh.gsi.gov.uk

We welcome comments within the next 12 weeks.

Responses to this consultation can be posted to

Surgical Care Practitioner Curriculum Framework
Room 204A
Heron House
322 High Holborn
London WC1V 7PW

or

emailed to SCP.consultation@dh.gsi.gov.uk

If you have any queries regarding the consultation please contact Jackie Younger, Lead Workforce Designer on: jacqueline.younger@dh.gsi.gov.uk or 07789 653360

Please note: The information you send us may need to be passed to colleagues within the Department of Health and/or published in a summary of responses to this consultation. We assume that you are content for us to do this and if you are replying by e-mail, that your consent overrides any confidentiality disclaimer that is generated by your organisation’s IT system, unless you specifically include a request to the contrary in the main text of your submission to us.

If you have any concerns about the conduct of this consultation process you should contact The Department of Health Consultations Co-ordinator, Steve Wells who is Head of Freedom of Information, Records and Data Protection on steve.wells@dh.gsi.gov.uk or 0207 97 26073

We look forward to receiving your comments.

The development of this document

The document has been produced as a result of a working party aimed at harmonising the Royal College of Surgeons of England's ideals on surgical education and training of surgeons with those non-medically qualified practitioners practicing and developing their own curriculum for similar areas of practice. The work took place between May 2004 and December 2004.

The working party was drawn from The Royal College of Surgeons of England Council and the NHS Changing Workforce Programme 'New Ways of Working in Surgery' Steering Group and represented:

The Royal College of Surgeons of England (RCSEng)

National Association of Assistants in Surgical Practice (NAASP)

Joint Committee for Higher Surgical Training

NHSU

Association of Operating Department Practitioners (AODP)

National Association of Theatre Nurses (NATN)

Skills for Health (SfH)

Health Professions Council (HPC)

Modernisation Agency – Changing Workforce Programme (CWP)

This document was written by:

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The core documents that have formed the basis of the harmonisation are:

The Curriculum Framework for the General Professional Practice of Surgery: The first three years, The Royal College of Surgeons of England, February 2003.

The Royal College of Surgeons' Curriculum Framework for Surgery, Linda de Cossart and Alan Crockard, Versions: September 2003 and July 2004.

Models for Curriculum Planning, RCS England workshop papers, D Fish, 2001.

Surgical Practitioner Core Syllabus, National Association of Assistants in Surgical Practice, 2003

Proposed educational framework for the surgical care practitioner, document tabled for the working party, J Biggins & J Thatcher, June 2004

The audience for this document

This document is intended for:

- Those wishing to become surgical care practitioners (SCPs)
- Those wishing to offer an educational programme leading to qualification
- Patients and the lay public, offering definitions of this new role, and the standards required for the education and development of a SCP
- Regulators of the profession of surgery in general, and for new regulatory bodies setting the standards and requirements of the programme
- Educators in other professions, an explicit statement of the philosophy and the detailed framework for the education of SCPs
- Any health care provider wishing to employ a SCP

The structure and rationale of this document

(Refs: Della Fish for workshops and seminars offered by Practic/se Appreciation to RCS workshops two and Stenhouse, L (1975) *An introduction to curriculum research and development*, London, Heinemann)

The consideration of values is traditionally the first step in designing a curriculum and they are at the beginning of the document. The following sections follow an orthodox structure and headings for the design of a modern, practice-focused curriculum.

Aims (and therefore admission criteria)

Intentions

Content (syllabus)

Principles of teaching and learning

Assessment

Regulations for assessment

Resources

Evaluation (or quality assurance)

This document is the main reference document for the curriculum framework for the establishment of standards and quality assurance of SCPs throughout England (and the United Kingdom and Ireland).

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1 Introduction

1.1 The role and status of this document

Over the past decade and in order to both maintain and increase surgical workload, healthcare practitioners working in healthcare, other than doctors, have been extending their role in the care of surgical patients. Staff interested in developing their skills have been encouraged by the surgeons they work with. The development has been driven by the workforce needs of institutions, which, in collaboration with key surgeons has resulted in the development of bespoke programmes of training for some practitioners who not only manage the clinical care of patients but also assist with technical and operative interventions; a role overlapping therefore with care normally offered by doctors. There has been close affiliation with The Royal College of Surgeons of England during these developments. However, many new roles are now emerging and there is the potential for confusion and variable standards.

In order to ensure that patient safety is maintained and the surgical standards expected by the College are ensured, this project was designated with the specific aim of creating **The Curriculum Framework for the Surgical Care Practitioner**. This is a two-year programme, which will take place in the clinical setting and will require partnership between the NHS and educational institutions.

A surgical care practitioner (SCP) is defined as:

A non-medical practitioner, working in and out of the operating theatre, who performs surgical intervention under defined levels of supervision by a consultant surgeon.

This definition has drawn on the experience of the Department of Health, Welsh Assembly and other collaborating parties who have been involved in piloting the role of SCP and its development in England and Wales. The working definition of this practitioner for this purpose was derived from the National Association of Assistants in Surgical Practice (NAASP 2002).

It is understood that this definition may change as the role develops. This will require the stakeholders to maintain a responsibility for the development of the curriculum. Surgeons in training will normally be expected to have a wider range and depth of competence than the SCP and will be following a longer programme of training (see Figure 1.3).

1.2 The key points of the curriculum

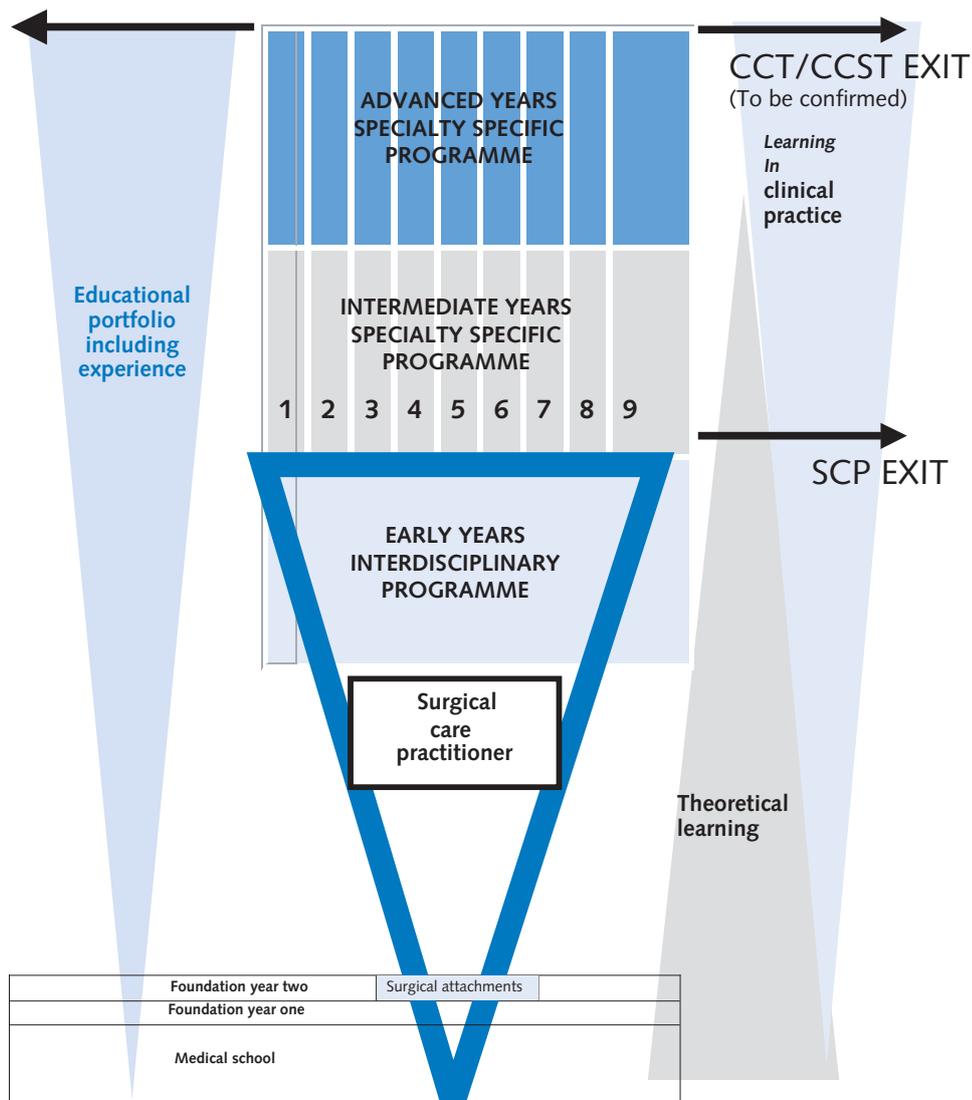
The key points of the curriculum are that:

- Clinical practice is the main arena for teaching, learning and assessment
- Educational liaisons between NHS and educational institutions are fostered
- Entrants will be required to demonstrate appropriate previous experience (See Figure 1.4)

- The programme will provide opportunities for incremental development to a prescribed standard prior to qualification
- Assessment of technical and operative competence will be equivalent to that expected of a medical practitioner performing the same procedure.
- Multidisciplinary learning and practice will be required
- Development of surgeon educators will be essential
- Continuing development of the curriculum and of regulation will be on going.

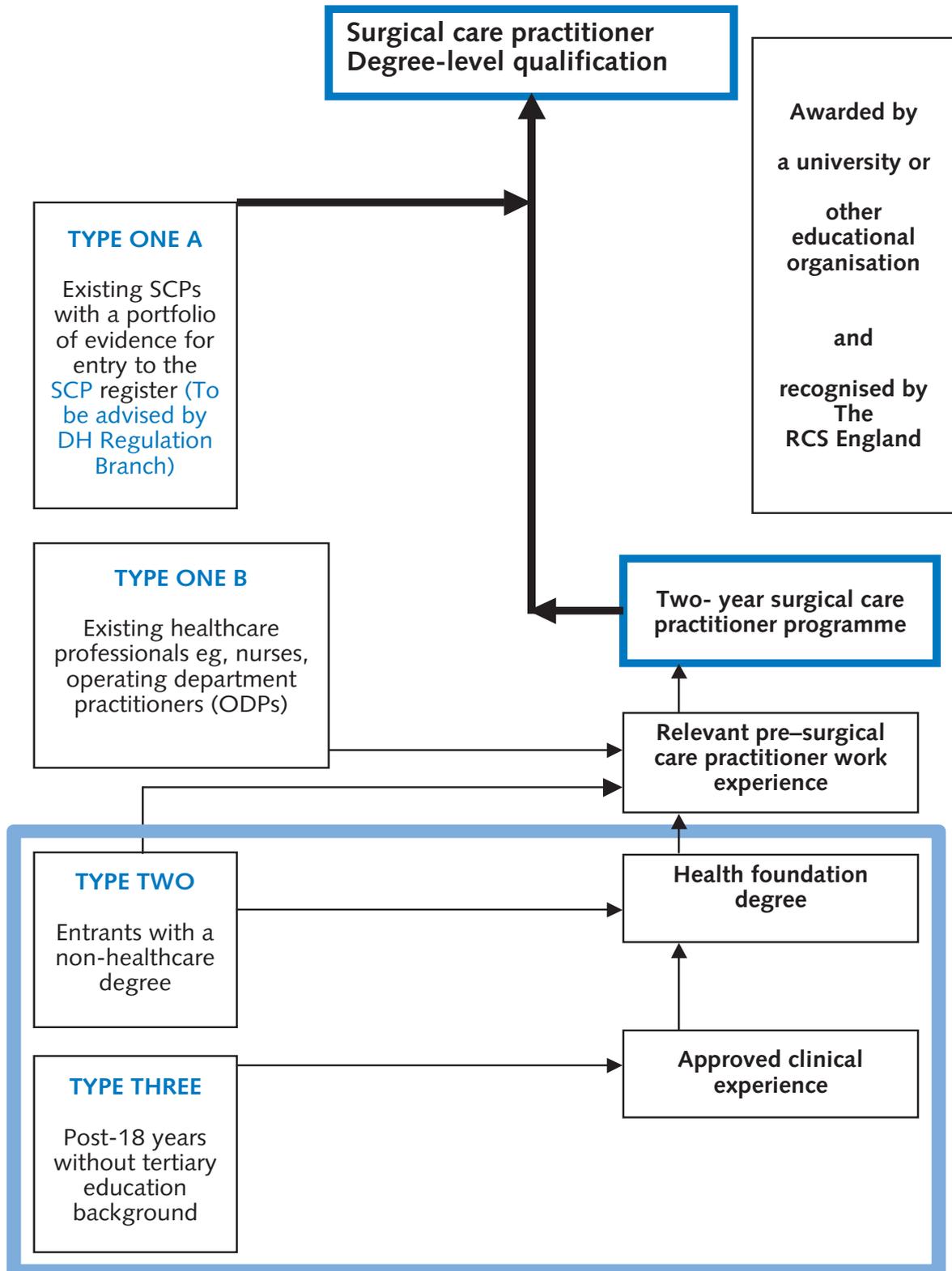
1.3 The relationship of surgical care practitioners and doctors in 'seamless' training programmes in the nine surgical specialties

(the overlap between doctors and SCPs is within the dark blue triangle)



Explanation: Doctors (currently senior house officers (SHOs) in green and specialist registrars (SpRs) in blue) in surgery follow the above programme of development for the nine surgical specialties. The time in training in each part of the programme is variable between specialties. The new proposed changes will streamline each specialty to a run through programme combining the green and the blue areas. These developments are still at the developmental stages. The SCPs' roles will overlap as shown within the dark blue triangle. (NB. CCT is the Certificate of Completion of training. CCST is the Certificate of Completion of Specialist Training)

1.4 Career pathways for becoming a surgical care practitioner (see section 3.6)



NB – The Type Two and Type Three avenues of entry require further scoping and development.

1.5 The role of the surgical care practitioner

The SCP will be employed as a member of the surgical team answerable to the lead surgeon. The SCP will undertake duties beyond that of scrub practitioner. The role encompasses the provision of care and appropriate intervention within the operating room as well as in ward or clinic areas within a specified surgical specialty and as directed by the surgeon, and within the terms of the local service needs. The SCP will always act within a predetermined level of supervision (see 4.3.4) and within agreed guidelines and protocols.

SCPs may participate in:

- Pre-operative assessment and physical examination as directed by the surgical team
- Assisting with the preparation of patients for surgery including venepuncture, male and female catheterisation, patient positioning and preparation.
- Assisting with surgical procedures in the operating theatre as part of the multidisciplinary team for the surgical specialty under the supervision and direction of the consultant surgeon
- Being first or second assistant at operations as directed by the supervising consultant
- Undertake some technical and operative procedures according to their recorded level of assessment and supervision
- Facilitating the continuity of care of patients
- Arranging appropriate pre and post operative investigations as part of the multidisciplinary team (MDT)
- Liaising with medical, theatre, ward and clerical staff on relevant issues such as theatre lists to support coherent service provision
- Post-operative care, including wound assessment, initial treatment and identification of surgical problems and complications
- A variety of outpatient activities, including seeing patients as and when they are deemed competent to do so
- The evaluation of care, including the discharge process and follow-up care arrangements for surgical patients.

Some qualified SCPs may develop post qualification experience, which enable them to:

- Assist with the co-ordination of on going and new techniques and developments within the speciality
- Participate in management, clinically and financially, including the stock associated with specified surgery procedures
- Supervise training for other healthcare workers associated with developments in the surgical specialty.

This will need agreement from the consultant and the healthcare organisation.

2. Professional and educational values underpinning the philosophy of the curriculum

2.1 Introduction

Values underpin a practitioner's conduct and provide the foundations upon which this curriculum is built. This curriculum emphasises the importance of professional and educational values. They are principles to be considered carefully by those in surgical practice, and by those wishing to develop in this professional role. These principles serve to prepare individuals for, and support them in, their practice. They link members of the extended surgical team together as they care for patients. Professional values are influenced by developing traditions and recognise the context within which practice is taking place.

An early statement of the values of the RCSEng appeared thus in its Charter in 1800:

The object of the College is the promotion of the art and science of surgery and the promotion and encouragement of the study and practice of the said art and science.

Implicit in this statement is an aim shared within the extended surgical team. It highlights the importance of explicit scientific knowledge and skills as well as professional artistry for good surgical practice.

2.2 Professional values for the surgical care practitioner

The professional values that influence SCPs relate to obligations to patients, to professional practice and to professional development. Building upon established professional codes the specific values that have been agreed by NAASP are that:

The National Association of Assistants in Surgical Practice will promote high quality surgical care by meeting the needs of the patient through continuity and the development of skilled, competent healthcare professionals.

NAASP 2001

SCPs are committed to accountability, quality and standards. In demonstration of this commitment, members of NAASP have agreed to abide by a voluntary Code of Conduct until the regulatory framework is established. SCPs who are not members of NAASP will be required to adhere to the Code of Conduct of their regulatory body with regard to extended spheres of practice.

Doctors have already responded to concerns from the public and government about quality and the accountability of professionals. The General Medical Council (GMC) has set out standards for all doctors in *Good Medical Practice* (May 2001) and the RCSEng in *Good Surgical Practice* (September 2002). The NAASP '*Surgical Care Practitioner Good Surgical Practice Guide*', currently being developed, reflects these beliefs and values.

2.2.1 Professional values

Professional obligations to patients which are:-

- A commitment to a partnership of care
- A recognition of the whole person within their social, ethical and cultural context
- The honouring of the relationship of trust with the patient with its concomitant moral and ethical responsibilities
- A dedication to clear, honest and empathetic communication.

Professional practice and professional development which involves:

- A commitment to:
 - Clinical and operative excellence
 - A professional life and the responsibilities that this implies, especially those of accountability
 - Lifelong learning and professional self-development
 - Continuous questioning, deliberation and reflection in developing new professional knowledge and understanding.
- A recognition that:
 - SCPs assist with interventions and operations on patients as a necessary part of their care and, in that respect, differ from many other non-medically qualified practitioners
 - The dynamic nature of professional knowledge and the ability to work in this environment, requires the recognition of personal limits
 - The practice of surgery draws upon both the knowledge and use of science as well as sound professional artistry.
- The ability to:
 - Work with a degree of autonomy within the parameters of the surgical team
 - Engage in the development of the professional group as a whole by sharing knowledge and understanding to influence and change practice
 - Respect and work in collaboration with colleagues
 - Lead where appropriate
 - Focus on the salient features of practice
 - Exercise wisdom
 - Demonstrate a sensitivity to the moral and ethical issues implicit in surgical practice in contemporary society
 - Exercise clinical reasoning and develop professional judgment in their practice.

2.3 Educational values for the surgical care practitioner

2.3.1 Educational values supporting learning in a surgical context

The educational values that have informed the design of this curriculum framework have drawn on those of the nursing, operating department practitioner (ODP) and surgical professions.

They are shaped by two major considerations:

- The complexities involved in the nature of surgical practice itself and the tacit knowledge and understanding of those who teach in this setting

- The defining characteristics of the educational setting in which practitioners both learn and practice at the same time.

Technical skills may be taught and assessed but the development of sound judgment is less easy to teach and assess. Both are essential for the development of a good SCP. Clinical supervisors and SCPs must recognise that there are a number of factors that will affect the development of judgment. For the clinical supervisor, their tacit knowledge, which calls on their own personal feelings, expectations, assumptions, attitudes, beliefs and values will influence this judgment. The clinical supervisor must explore their own tacit knowledge so as to comprehend how they may convey this understanding to the trainee SCPs.

2.3.2 The defining characteristics of learning in practice

The defining characteristics of the SCPs' educational experience and their effect on the working context are described in section 2.3.3 and in Table 1 below:

Table 1: The defining characteristics of learning in practice

Defining characteristics	Clinical context
Learning takes place during professional practice and involves both clinical and educational practice	It demands patient-centred and learner-centred interaction during the same clinical event with the emphasis on oral communication
Learning requires all clinical events to be seen and treated as educational experiences, whilst <u>also</u> being patient centred	Learners need to recognise that clinical settings are at all times a learning resource
Learning requires some of the education to be designed with the focus primarily on the learner	Protected surgical teaching time is essential especially for learning operative skills
Learning is a collaboration between service provision and 'higher education'	It involves critical debate and enquiry
Learning requires working within the framework of degree-level qualification	It requires self directed learning
Although learning is carried out essentially in the practice setting, it must be complemented by opportunities for reflection	It must involve reflective practice
Learning is concerned with professional development	It requires attention to qualities espoused by being a member of a profession
Learning is under constant scrutiny and change	It needs to be flexible and current
Learning requires everyone involved to work both as individuals and as team members in a variety of teams	It requires a variety of interpersonal skills and an ability to work in harmony, especially with peers
Cohesive meaningful learning requires many core skills	SCPs are required to respond to a wide range of scenarios in their clinical practice and are expected to act appropriately

These characteristics reflect the educational standards espoused by the RCSEng in:

The Curriculum Framework for the General Professional Practice of Surgery: The first three years, 2003

The Royal College of Surgeons' Curriculum Framework for Surgery, Versions September 2003 and July 2004.

2.3.3 Educational values underpinning this Curriculum Framework

These are:

- The establishment of a learning partnership between the consultant surgeon and the SCP
- Practitioners examining their own professional and personal values
- Recognition that clinical practice is the key arena in which SCP education takes place and is therefore to be valued
- SCPs developing clinical skills through practice and a thorough knowledge of the theory behind that practice
- SCPs understanding professional judgment within the context of modern surgical care
- SCPs understanding the moral and ethical elements relevant to surgery
- SCPs developing reflective practice and self-motivation in the learning process
- The importance of lifelong learning, continuous professional development and self-assessment
- The importance of learning to communicate with a range of different people
- The importance of discussion in the process of teaching and learning
- The recognition that intuition and intuitive responses are a fundamental element of developing the expert practitioner
- The importance of research into practice and the development of good practice
- The undertaking of good evaluation to allow development and refinement of the curriculum.

3. The Curriculum Framework

3.1 Introduction

This Curriculum Framework is intended to guide the education and development of SCPs in the clinical setting, where not only the teaching and learning is carried out in practice, but also the assessment is undertaken.

Teachers should use this framework to plan the education of the practitioner and maximise the educational opportunities in each clinical setting. The practitioner can then develop their clinical performance in parallel with their clinical understanding within an appropriate conceptual context.

3.2 The principles of teaching and learning

The SCP will need to learn how to:

- Learn in the practice setting
- Carry out specialist and core surgical and medical practices
- Bring formal core and specialist medical and surgical theory into relationship with surgical practice
- Think about and utilise the complex relationship of theory and practice to support good practice
- Use reflection and deliberation to improve and develop practice
- Interrelate appropriately and in a variety of ways with all others in the clinical setting
- Theorise during practice (i.e. how to, during a particular practical incident, formulate new ways of thinking and doing, which go beyond what the text book can offer)
- Theorise practice itself (i.e. how to recognise, in a particular piece of practice, the principles, assumptions, beliefs and theories, which actually shaped that practice).

All these procedural matters will, in turn, determine the formal theoretical knowledge of medicine and surgery to be acquired by the practitioner. The practitioner will be responsible for acquiring some theoretical knowledge through self-directed learning.

The Curriculum Framework assumes that what will shape the practitioner's education is influenced by:

- The professional and educational values espoused by the learner and their teacher
- Sound educational principles for teaching and learning in clinical settings
- The previous knowledge and experience of the practitioner, including their knowledge of themselves as learners in practical settings

- The particular expertise of the people they work with, particularly consultant surgeons
- The needs of practice in the specialty – in the clinic, the ward and the theatre
- The needs of the particular post – in the clinic, the ward and the theatre
- The demands on the practitioner’s theoretical (medical) knowledge made by practice
- The need to utilise theoretical knowledge appropriately in the clinical setting
- The need to learn to theorise during practice
- The need to learn to theorise practice itself
- The educational quality of the professional conversation between the consultant educator and the practitioner (previously referred to as ‘feedback’, but this accentuates only one side of the process)
- The quality of the insights gained via reflection on, and deliberation about, practice
- The possibilities for practical work and its assessment within the particular attachment
- The ultimate need to be assessed summatively.

3.2.1 Learning partnerships

The establishment of a learning partnership between the clinical supervisor and the SCP that moves beyond the traditional approach of apprenticeship is essential to engaging both parties more thoughtfully in the processes of teaching and learning. This in turn should provide the basis for more motivated and better-directed education.

Key issues for the clinical supervisor are:

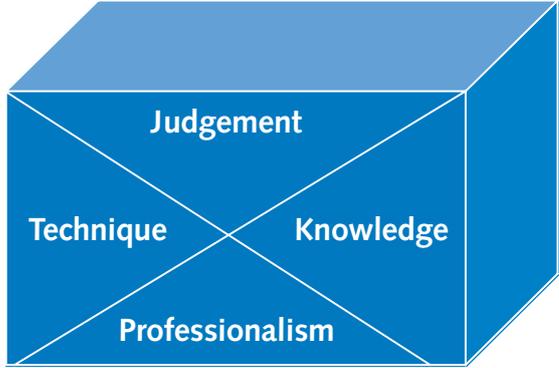
- An understanding of educational principles and values
- The role of professional judgment in educational matters
- The intentions and processes of assessment.

This Curriculum Framework supports the belief that the following principles are essential in shaping the education of the SCP:

- Observation in clinical settings directed so that SCPs learn to see, analyse and interpret all that occurs
- Action (rather than just observation) in the practical setting which is essential to foster learning
- Ongoing dialogue in the clinical setting between educator, clinical supervisor and SCP, which is a vital part of the learning process
- Clinical supervisors helping SCPs to investigate examples of professional judgment in both medical and educational practice
- Problem-solving by the SCP in a range of different practical activities, using critical thinking, creativity and improvisation
- Clinical supervisors enabling SCPs to develop their use of the processes of deliberation and reflection, and encouraging self-knowledge and self-appraisal.

3.3 The aims and outcomes of the programme

3.3.1 Aims of the programme

<p>The aim of the programme is to ensure that all SCPs achieve a common standard through good education and training. It is designed to ensure incremental development and the demonstration of competence by the practitioner prior to qualification. It will require the demonstration of theoretical knowledge, practical skills and an understanding of professional judgment. It has patient safety at its heart and clinical practice as the context for learning.</p>	
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Source: *The Royal College of Surgeons' Curriculum Framework for Surgery*, Versions September 2003

The programme will enable the SCP to:

- Develop both their clinical competence and their confidence in caring for patients within a multi-disciplinary/multi-professional team
- Offer care to patients from their outpatient attendance to discharge from hospital, derived from sound evidence and good judgment
- Review and critique their practice in order to improve it
- Critique the development of new roles in clinical practice.

3.3.2 Outcomes of the programme

At the completion of the programme the SCP will have demonstrated:

- An understanding of the responsibilities of being a SCP and the values that underpin this
- The special attributes needed to be a SCP (see 2.2 and 3.6.2)
- A range of theoretical and practical knowledge related to their core and specialty practice (see section 4)
- The development of professional judgment
- Technical and operative skills and their ongoing development
- An understanding of their role within the extended surgical team
- The understanding and use of reflective practice, deliberation and other educational processes appropriate for examining and developing their own professional practice
- An understanding and respect for the multi-disciplinary/multi-professional nature of healthcare and their role within it.

3.4 Intentions for each part of the surgical care practitioner programme

3.4.1 Progression through the programme

The clinical supervisor and the trainee SCP will need to review, at the beginning of the programme and following any formative or summative assessment, the further aims to be achieved by the trainee SCP. This will be guided by:

- The requirements of the core syllabus
- The requirements of the relevant specialty syllabus
- The trainee SCP's knowledge and existing capability with respect to the core syllabus
- The trainee SCP's knowledge and existing capability with respect to the relevant specialty syllabus
- The local circumstances of the clinical environment.

3.4.2 Core surgery – clinical milestones (see Appendix 1)

Clinical milestones are intended as a guide for clinical supervisors and trainee SCPs to assist their understanding of what needs to be achieved, who may be available to support this and how it will inform assessment. It aims to support the SCP in safe, accurate and consistent practice. They are not 'tablets of stone' to be enforced by a supervisor or mentor.

3.5 Recommended length of the programme

3.5.1 Two-year surgical care practitioner programme overview

(See Table 2, section 3.5.2 for programme map)

The recommended length of the SCP programme is two years. This is based on the need for a minimum of 2200 hours (based on previous experience which has been confirmed by the current pilot sites) over the two years in combined clinical activities in and out of the operating room where a minimum of 1100 hours is spent in the operating room. The programme periods will provide time for regular progress review meetings with clinical and educational supervisors. These hours do not include study leave, annual leave, or time for audit and research. However, it should be recognised that these are essential components of the complete role. The trainee SCP's job plan therefore, should incorporate these points.

The two-year programme represents the minimum period of training. It provides for the understanding that some practitioners may need targeted training, which may extend this time. It is not anticipated that the programme will take longer than four years.

It is appreciated that a number of surgical practitioners will take a career break. This requirement will need to be negotiated on an individual basis with both the employer and the education institution. This should be done by beginning discussion with the surgical supervisor and must be agreed with the education institution.

3.5.2 Table 2: Two-year surgical care practitioner programme map

Guiding principles throughout Programme: Focused on learning in the clinical setting Explicit principles and standards Rigorous processes of teaching, learning and assessment Explicit principles and standards Specific summative assessment points based on demonstration of competence (at least per 12 months – indicated by heavy Blue line)	Year 1		Year 2		
		CORE SYLLABUS	SPECIALTY SYLLABUS	CORE SYLLABUS	SPECIALTY SYLLABUS
		Formative assessment		Formative assessment	
		Formative/Summative assessment		Formative/Summative assessment	
		Formative assessment		Formative assessment	
	Summative assessment & progression point	Achieve summative Progress to year		Achieve summative Complete programme	

Combined learning in core and specialty aspects throughout the course

The training period for the SCP in years 1 and 2 will encompass learning within the surgical context, and require the trainee to participate in service delivery whilst learning. This will incorporate core and specialty learning in parallel throughout the programme. Technical, operative and clinical assessments will be ongoing throughout the programme (see sections 5.3, 5.4). Progression will be based on successful achievement of summative assessments.

3.6 Criteria for entry to the programme

3.6.1 Education institutions

Education institutions will determine their own specific academic requirements for entry onto their programme leading to the qualification of SCP. An essential requirement will be evidence of an appropriate clinical background. This will need to take account of the career pathway shown in 1.4.

In offering the programme, the education institution will have been required to demonstrate that their programme is at the standard and detail (especially with respect to the clinical and operative aspects) set out in this curriculum framework. The RCSEng's Recognition Committee, consisting of representatives from the stakeholders who have designed this curriculum framework for SCPs, will evaluate this standard (see 4.6). Some institutions will have forged a partnership with the RCS Eng in order to gain advice and support for the standards of the clinical aspects of the programme. It is recognised that to take account of the diversity of academic standing of individual SCPs, institutions may seek to offer academic awards of degree, post-graduate certificate/diploma and MSc level.

3.6.2 Candidates

Candidates preparing to enter the SCP programme will need to be able to demonstrate in broad terms their:

- Commitment to patient care and patient safety
- Understanding of the relationships within the multidisciplinary team especially with respect to the changing role of surgery
- Recognition of the role and responsibilities of being a SCP
- Understanding of the programme with particular respect to their own work and educational experience
- Aptitude for both clinical and operative practice
- Recognition that educational as well as clinical development will be required.
- Be in, or in a position to be appointed to, a substantive/recognised trainee SCP post or be assured of a whole time equivalent trainee SCP post prior to commencing the SCP Programme.

The background of potential entrants into the programme will be varied (for diagram see section 1.4). Issues related to each type will be explored in the remaining sections (3.6.3, 3.6.4, 3.6.5, 3.6.6). Potential candidates will broadly fit into one of the identified types; however each candidate will need a personally planned route to the qualification. Most candidates for the SCP programme are expected to come from types One B and Two.

3.6.3 Type One A: Existing surgical care practitioners

Type One A practitioners will have already obtained the equivalent education and training as a SCP, and will not be required to undertake the new SCP programme.

They will have:

- A professional qualification in a recognised area of healthcare (e.g. ODP, nursing)
- Developed skills and experience assisting the surgeon prior to the development of this programme
- Developed a portfolio of evidence demonstrating that their experience as an SCP meet the outcomes of this curriculum
- Current employment in an SCP role

They may already have undertaken and successfully completed verifiable professional development. For example, by completing:

- English National Board (ENB) N77 / D10 courses
- Cardiac Surgical Assistants Diploma.

3.6.4 Type One B: Existing healthcare professionals

Type One B candidates will be existing qualified healthcare professionals. They will have consolidated their training and education in their pre-existing clinical profession and now wish to obtain a degree-level qualification as an SCP. They will need to demonstrate evidence of practicing as a healthcare professional after qualification, in order to further develop experience in the clinical arena of surgical practice at post-diploma level (see Table 3 for examples).

Table 3: Exemplars for Type One B practitioners prior to commencing programme

Qualification	Practitioners would be expected to have completed:
Registered ODPs	A sufficient period in practice following registration to enable consolidation before commencing the SCP programme.
Registered nurses	Preceptorship and consolidation in the operating theatres or surgical ward
Registered Physiotherapists	A sufficient period in practice following registration to enable consolidation before commencing the SCP programme

3.6.5 Type Two: Entrants with a non-healthcare degree

Prospective candidates choosing to enter a career programme leading to qualification as an SCP who have no qualifications or experience in healthcare, but do have a science-related diploma or degree qualification, will need to acquire healthcare work experience. This will require employment within a surgical healthcare setting to gain relevant experience and knowledge,

and to ensure they have the interest and aptitude, prior to commencing the SCP programme (see section 1.4). Advice should be sought from the programme directors.

3.6.6 Type Three: Post 18 years entrants without higher education qualifications

Prospective candidates aged 18 and above, choosing to enter a career pathway leading to entry to the SCP programme will be required to gain clinical experience within the surgical healthcare environment in general (and the operating theatre in particular) prior to completing a health foundation degree. The aim will be to develop appropriate clinical experience as well as a relevant qualification prior to entering the SCP programme (see section 1.4). Advice should be sought from the programme directors.

Type Three candidates will be required to demonstrate relevant healthcare experience and will have successfully completed a recognised healthcare qualification that may not be at degree or diploma level (eg: assistant practitioner – NVQ level 3). The candidate will have to demonstrate their capacity to meet the academic demands of the SCP programme.

3.6.7 Caveat to embracing the agendas for 'widening participation' to develop Type Two and Type Three routes of entry

It is recognised that implementation of the curriculum for SCPs is independent of the potential to widen the entry gate to Type Two and Type Three entrants. Any future development of this aspect of the curriculum will require continuing discussion between professional associations and relevant education, healthcare and patient groups.

The RCSEng Recognition Committee will take responsibility for this to ensure the surgical standards required of non-medically qualified practitioners.

4 Assessment, supervision and syllabuses

4.1 Competence

The programme requires the trainee SCP to demonstrate competence in both core and specialty elements (see 4.3 and appendices four and five) at the key points along the programme. The programme must provide the opportunities for teaching, learning and assessment within the clinical setting by appropriately qualified supervisors.

Competence, in this framework is defined within a professional context and is the broad ability with which a professional person is able to practice to the required standards in a range of situations. Thus by its very broad nature this includes attributes that can be applied, clinical performance (Stuart 2003), and the use of professional judgement (Carr 1993).

Competences therefore are the elements performed to the predetermined standard, which combine to create professional competence in a defined role (Stuart 2003).

4.2 The role of assessment

Assessment is a fundamental aspect of teaching and learning, and is a continuous process. It ensures the appropriate development of the trainee and covers any of the situations in which aspects of their education or training are measured, recognised, or formally appreciated, whether this is by a teacher, an educator, a patient or the learner themselves. It is concerned with demonstrating how well, and in what ways, the trainee has profited from the learning opportunities as reflected in their self-knowledge and deliberation with their teachers.

Assessment, however, is not an exact science. It inevitably involves some subjectivity and there is no single method that will overcome this. The professional judgment of the clinical supervisor will always be a key component of the process just as the professional judgment of doctors is a key element in medicine. Teachers cannot help but make everyday, on-going judgments of those who are learning, and so, in order to be fair, such judgments must be part of a well-planned process and should involve multiple perspectives. The trainees and all those who receive the results of such judgements must understand these. The trainee's insight into his or her development will be essential to this.

The requirements of the SCP programme are that the trainee will maintain a **portfolio of evidence**. This will contain a record of progress and will inform the assessment process and its outcome. Summative assessment at the prescribed times will take account of the development of the trainee SCP against the aims and intentions set. As a minimum requirement, a summative assessment will take place at the end of year one and a final assessment at the end of year two. The trainee SCP must have succeeded in the core requirements by the completion of the programme. At the end of the programme, the final assessment will indicate the level and range of capabilities successfully achieved by the SCP.

Assessment must be designed not only to assess the trainee but also to ensure that the proper opportunity to fulfil the aims and outcomes of the programme is possible. It must be structured to ensure that the development of the trainee can be supported by means of monitoring their progress during the practice experience. This in turn should enable remedial action to be taken by both clinical supervisors and trainees before the summative assessment of practice is reached.

There must be an equivalent standard of assessment for both doctors and non-medically qualified practitioners who will perform similar procedures.

4.3 Factors guiding assessment

Assessment will take account of professional and education values, attitudes, knowledge, clinical skills, technical and operative skills and the needs of the employing authority. It will be informed by the:

- Clinical supervisor's professional judgment
- Need to ensure that assessment provides a quality learning experience for both the SCP and the clinical supervisor
- Need to ensure that all learning opportunities are well utilised
- Purpose and the criteria of the assessment being clearly understood by all parties
- Need for multiple perspectives on each assessment
- Recognition that the soundness of the assessment is related to the rigour with which the multiple perspectives are collected, recorded and utilised
- Need for assessment to develop through and across the programme, where differences in specialties need to be taken into account
- Need to engage the SCP in self-assessment throughout the process
- Need to ensure that there are no surprises for the SCP at the summative and final assessments through effective use of formative assessments
- Need for the SCP to satisfy the required standard by the end of each negotiated learning period, and the end of the programme
- Need to subject the summative assessment process of the Curriculum Framework for SCPs to quality assurance procedures.

4.3.1 Multiple perspectives

In all assessments (formative or summative; informal or formal), attention to the following information will ensure that multiple perspectives (many observations by one person and/or observations by many different people) on the SCP's progress will be properly considered.

Account must be taken of:

- The visible performance of the SCP
- How the SCP has related theory to practice

- The SCP's ability to articulate understanding of the values underpinning their clinical performance
- The way the SCP's ideas, beliefs, values and assumptions have influenced their performance
- The impact of the SCP's performance on all others involved
- How the SCP has used the learning opportunities provided
- The SCP's knowledge of self
- How much input there has been from the clinical supervisor
- How the resulting judgments compare with those made of the SCP by others
- How the resulting judgments of the SCP compare to those made by the SCP themselves.

It is important to recognise that SCPs learn at different speeds and an SCP who is a good performer naturally, may not have used the new opportunities to learn (and may therefore not be a learner), but a SCP who has struggled a little more, may have demonstrably learnt from the opportunities available. Recognising these different styles of learning will enable the clinical supervisor to tailor the opportunities available to the SCP accordingly.

4.3.2 Professional judgement

Professional judgment, in this context refers to the SCP demonstrating their ability to:

- Recognise the changing nature of supervision derived from the surgeon leading the team
- Determine appropriate responsibilities within the team
- Negotiate sharing clinical commitments with other team members
- Recognise situations beyond their scope of practice and act upon them appropriately
- Consider and utilise all available sources of information and data to support actions
- Respect and understanding the patient's viewpoint.

4.3.3 Harmonisation of levels of supervision and assessment for both surgeons and surgical care practitioners

The RCSEng has developed identifiable levels that denote the developmental stage of the surgeon in training. In order to ease the incorporation of training and supervision for SCPs as well as junior surgeons, these have been applied to the corresponding levels utilised by NAASP in their definition (Section 1). The NAASP levels refer to the level of supervision received by a trainee/graduate in a given situation. From the table below it can be seen that these harmonise well, with simple correlation between both groups. It is recognised that trainees will attain these levels at different times for different competences (skills) during the programme.

Table 4: Harmonising terminology (ladder of supervision)

Level	Surgeons description: for theoretical knowledge	Surgeons description: for technical and operative skills	NAASP levels
1	Having to ask or be told	Surgeon showing: SCP assisting	Direct
2	Knowing where to find the knowledge but not really knowing it	SCP doing: Surgeon assisting	
3	Confident in knowledge and able to demonstrate that knowledge	SCP doing: Surgeon watching	
4	Able to understand and use that knowledge	SCP doing: Surgeon within the theatre or clinic environment	Indirect

Source: de Cossart and Fish 2004 in press; Adapted from the General Professional Practice of Surgery, 2003

4.3.4 Determining levels of supervision required

For surgeons in training or SCPs in training, the level description can be used to inform the assessment of progress in any given situation. This can be seen as a ‘ladder of supervision’ with step-wise progression from full supervision to responsible action. A guide to supervisors and SCP trainees to help decide on a level of supervision is shown in 4.3.4.1.

4.3.4.1 Using the descriptors to assess level of supervision achieved

Supervisors and trainees should use the descriptors in Table 5 below to determine what aspects of practice need to be developed in order to achieve each step on the ladder of supervision. In so doing that will establish the appropriate level of supervision the trainee requires for the given assessed situation.

Each level of supervision encompasses three perspectives:

- Assessment of knowledge and reasoning
- Performance
- Personal and professional awareness.

The supervisor must be satisfied that a trainee has fulfilled all descriptors within these three perspectives in order to be deemed performing at that level.

4.3.4.2 Descriptors to assist allocating a level of supervision

Table 5: Criteria to inform the level of supervision required by a SCP in training

Level of supervision	Criteria		
	Knowledge/reasoning	Level of performance	Personal and professional awareness
1	<ul style="list-style-type: none"> • Has limited relevant knowledge • Has no awareness of alternatives • Is unable to explain or give reasons for actions. 	<ul style="list-style-type: none"> • Needs to develop accuracy and confidence • Needs continuous guidance and supervision • Has poor organisation • Has no awareness of priorities. 	<ul style="list-style-type: none"> • Acts and behaves without reference to the needs of the client and situation • Gives no meaningful explanations • Lacks insight into personal and professional conduct.
2	<ul style="list-style-type: none"> • Has knowledge that is usually accurate • Has little awareness of alternatives • Identifies reasons for actions. 	<ul style="list-style-type: none"> • Demonstrates accurate performance but lacks some confidence and efficiency • Requires frequent direction and supervision • Has some awareness of priorities, but requires prompting. 	<ul style="list-style-type: none"> • Recognises the need to modify actions, interventions and behaviour towards the patient and situation, but unable to do so in non-routine situations • Gives standard explanations or does not modify information.
3	<ul style="list-style-type: none"> • Applies accurate knowledge to practice • Has some awareness of alternatives • Begins to make judgments based on contemporary evidence. 	<ul style="list-style-type: none"> • Demonstrates safe, and accurate practice • Requires occasional direction or support • Begins to initiate appropriate actions • Identifies priorities with minimal prompting. 	<ul style="list-style-type: none"> • Acts, intervenes, and behaves in a way generally appropriate for the patient and situation • Gives explanations usually at an appropriate and coherent level • Identifies the need for assistance.
4	<ul style="list-style-type: none"> • Applies evidence based knowledge • Demonstrates awareness of alternatives • Gives sound rationale for actions • Makes judgments and decisions based on contemporary evidence. 	<ul style="list-style-type: none"> • Demonstrates confident, safe, consistent, and efficient practice • Needs minimal direction or support • Able to prioritise • Able to adapt to the situation. 	<ul style="list-style-type: none"> • Demonstrates conscious, deliberate planning • Acts, intervenes and behaves in a way appropriate to the patient and situation • Gives coherent and appropriate information.
5	<ul style="list-style-type: none"> • Utilises existing knowledge and develops new understandings in daily practice. 	<ul style="list-style-type: none"> • Requires minimal direction in unusual circumstances • Participates in the development of new ideas through research and enquiry. 	<ul style="list-style-type: none"> • Has a strong sense of limitations of practice and recognition of changing situations • Identifies and makes appropriate referrals or requests for assistance.

Source: Table 5 above has been adapted with kind permission of the School of Health and Social Care at the University of Greenwich.

4.3.5 Key elements of assessment

The processes of assessment must be robust and relevant. The portfolio of evidence is the key educational tool of the programme and must be maintained throughout the programme. It will provide a record of the evidence of assessment together with trainee reflections. Details of the contents of the portfolio are summarised in Appendix 2.

The main elements of assessment are:

- **The assessment of core clinical and operative skills**
 - 1) The assessment of **operative skills** is required to meet the same standards as for surgeons in training who are performing the same procedures. An example of operative assessment is given in Appendix 5.
 - 2) The essence of assessment of clinical and operative skills however also encompasses **non-operative clinical skills**. It would, therefore, also form the basis of assessment for the following skills:
 - Theoretical knowledge
 - Use and function of commonly used equipment
 - Professional values and responsibilities
 - Self-knowledge especially with respect to the SCP role
 - Understanding the use of reflective practice, deliberation and other educational skills and processes appropriate for examining and developing professional practice
 - Understanding and respect for the multi-professional nature of health care
 - Understanding the role of research in clinical practice.

4.4. The core syllabus

The core syllabus covers the essential (minimum) theoretical knowledge, operative skills, clinical skills, equipment and educational processes that all trainee SCPs will need to learn and demonstrate the use of, during their practice. The syllabus below has drawn on the *NAASP Surgical Practitioner Core Syllabus* (www.naasp.org.uk) for its content and range. The content outlined below should be used in conjunction with the speciality syllabus (Appendix 4). It provides for the trainee SCP and their supervisor the basis for developing a plan for learning and formative and summative assessment. The syllabus will be adapted over time to meet the development of the programme. **The trainee SCP must keep records of their learning as well as the outcomes of summative assessments.**

4.4.1 Core theoretical knowledge

The trainee SCP must demonstrate their knowledge of the core syllabus to Level 4. This must include their ability to relate their knowledge to human disease, its treatment and the healthcare environment in which this is done. They must be able to relate it to their own patients.

- **Core surgical anatomy**

The surgical anatomy including, muscles, skeleton and circulatory structures for:

 - The head and neck, breast and axilla. Upper and lower limbs, spinal column, thoracic cavity and the mediastinum. The abdominal cavity, the pelvic cavity and of the skin.

- **Core physiology**
Including fluid and electrolyte balance and its relationship to surgical conditions. Assessment, monitoring and treatment of fluid imbalance. Also including understanding respiratory function and its control and impairment, renal function and its impairment and the physiology of pain.
- **Core surgical sciences**
Including epidemiology of normal and diseased populations and their investigation taking the following as examples cancer, age, peptic ulcer disease, diabetes, heart disease, peripheral vascular disease, degenerative disease, trauma, life style and genetics. Also including the principles of anaesthesia and anaesthetic techniques and common complications of surgery and their management.
- **Principles of microbiology**
Including asepsis, infection control, sterilisation, disinfection and risks for surgical infection.
- **Principles of pharmacology**
Including basic principles of pharmacodynamics and pharmacokinetics, drug administration, complications of drug treatment and drug efficacy and safety.
- **Principles of pathology**
Including structure and function of normal and abnormal cells and types of tissue injury.
- **Principles of pain management**
Including assessment and evaluation and therapies.
- **Principles of tissue viability, related to wound healing and wound management**
Including physiology and care management for acute and chronic wounds.
- **Principles of postoperative and preoperative care**
Including the understanding the use of cardiovascular monitoring, identifying the appropriate postoperative environment, i.e. needing critical care, or ward care or day care. Also including the principles and of patients follow up.
- **Principles of health education for patients.**
- **Principles of teaching, assessing and supervising**
- **The changing face of the NHS and healthcare policy**
Including, professional development, legislation and policies underpinning and influencing practice.

4.4.2 Core technical and operative skills

These include fundamental skills for:

- Performing investigations
- Physical assessment
- Pre-operative ward-based and in-theatre preparation of the patient

- Intra-operative infection control
- Intra-operative surgical assistance
- Wound care and management
- Post-operative ward-based and clinic-based care of the patient.

The trainee SCP will be required to demonstrate their ability to perform these skills in their practice.

See Appendix 3 for detail and levels of attainment to be achieved for the required core skills.

4.4.3 Core clinical skills

These include the skills underpinning principles of:

- The patient consultation, assessment and history-taking
- Consent
- The use and understanding of investigations
- Risk management
- Post-operative care
- Discharge planning and post-discharge care
- Record keeping
- Evidence-based care

The trainee SCP will be required to demonstrate their ability to use these skills in their practice.

4.4.4 Commonly used equipment

These include the principles of:

- Patient monitoring equipment
- Patient temperature control devices
- Electro-surgical equipment
- Pneumatic compression devices and tourniquets
- Intra-operative surgical technology, eg. ultrasonic scalpel, internal tissue staplers devices, lasers
- Imaging equipment

The trainee SCP will be required to demonstrate their ability to use these principles and the equipment in their practice.

4.4.5 Educational processes

These include the principles of:

- Communication skills
- The role of talk in learning
- Learning to learn in clinical settings
- Learning to teach appropriately in clinical settings
- Use of information technology
- Reflection in practice and on practice
- Deliberation
- Critical thinking
- Lateral thinking and problem solving
- Decision-making, clinical reasoning and professional judgment
- Investigating practice including audit, research and critical appraisal
- Self-assessment
- Use of the portfolio as an aid to professional development

The trainee SCP will be required to demonstrate their ability to use these principles in their practice.

4.5 The specialty syllabuses

The specialty syllabuses encompass the full range of activities and knowledge required to support patients throughout the surgical experience. This commences with the first pre-operative contact with the surgical team, extends through the process of surgery itself, including the patient's discharge into the community, and completes with appropriate follow-up and referral as necessary.

Overall, the specialty syllabus will reflect the structure of the core syllabus and build upon this. The length and breadth of the particular specialty will be reflected within the specialty syllabus to the extent that can be reasonably expected within a typical healthcare setting providing surgical services. The exact nature and scope of each specialty syllabus will vary according to the requirements of the specialty itself as guided by the relevant surgical specialty association.

Complex and major interventions not representative of a typical surgical facility would not fall within the remit of the specialty syllabus. This would be anticipated as part of a continuing professional development (CPD) process, rather than pre-qualification learning.

The details of the range and required levels for achievement for each surgical specialty are described in Appendix 4.

4.6 The portfolio of evidence

Each trainee will compile a portfolio of evidence to demonstrate that the core and specialty syllabuses have been achieved. The portfolio is a collection of evidence demonstrating entry level experience, progression, development and learning. This will comprise of:

- Educational profile
- Clinical logbook
- Personal profile
- Reflective statements

The contents of the portfolio and the contents required to enable the trainee SCP to fulfil the summative assessment processes is shown in Appendix 2.

Support from the supervisor in enabling the trainee SCP to develop their portfolio is essential. It will require the supervisor and trainee to review the document on a regular basis.

4.6.1 Educational profile

Every trainee should compile a profile, which will include:

- An individual plan for education and training
The progression in the programme will depend on previous experience and professional background. All trainee SCPs will have an individual development plan.
- Record of clinical and operative skills assessment or triggered assessments (refer to section 5.4 and Appendix 5)
- Record of non-operative skills assessment including the use of theoretical knowledge when carrying out clinical and operative skills
- Records of meetings with supervisor and progress reports
- Records of any formative work completed by trainee.

4.6.2 Clinical logbook

This will demonstrate the depth and breadth of clinical activities that have been completed. It is essential that whatever form the logbook takes, the principles of data protection and confidentiality are followed.

It will include records of:

- Pre-assessment and post-operative evaluation
- Surgical activity and operations
- Procedure activity
- Research and audit activities.

4.6.3 Personal profile

This will demonstrate cognitive and conduct development through personal and professional reflection as well as:

- Curriculum vitae
- Documentation of attendance for professional development opportunities and experiences
- Additional evidence supporting clinical competences
- Reflective statements (see details below)
- Documentation of employment.

4.6.4 Reflective statements

These statements will be reflective notes derived from the trainee SCP's professional and personal experiences. Personal reflections will be written for the trainee SCP's own use to make a self-assessment of their development. They are private and will not be required to be presented. It will provide a source of information which the trainee may use to write personal statements that to be presented at key assessment points. Details in the private diary must be anonymised as must any reflections included in the reflective statements.

The statements are not intended to be completed daily. It should however be regularly used to record key points and events, which may include but are not limited to:

- Reflections on assessments especially operative assessments
- Reflections on memorable or unexpected events
- Deliberation on meetings and examples of practice
- Reflection upon and critique of signed attendance records and certificates of formal lectures, tutorials and conferences attended
- Critique of reading and course content.

4.7 Validation, accreditation and evaluation of the programme

Validation and evaluation are central parts of the quality assurance procedures. Those with appropriate knowledge and authority will carry this out.

4.7.1 Validation and accreditation of the programme

The process of validation is that which the university applies to its courses. The process of accreditation is what the professional/regulating body applies to the specific course. The accreditation of a programme occurs at the time of validation and so is a joint meeting between the university and professional body.

The RCSEng in conjunction with NAASP will accredit the theoretical and clinical aspects of the programme, until such time that regulation of the SCP is established when it will become the responsibility of the regulating body.

4.7.2 Evaluation of the programme

The evaluation of a programme, or 'review' in university terms occurs annually, leading to formal re-validation usually five years following initial validation. The professional body is responsible for receiving reports of the review, supporting any change and preparing the university for the next validation event.

Evaluations will take account of as wide a range of perspectives as possible. It should cover all aspects of the programme and reports should be sought both orally and written. The evaluation should be focused on what the intentions of the programme are, and the use and effectiveness of the opportunities for this to be achieved. The evaluation should be informed by both qualitative and quantitative information.

5 The assessment of progression and completion

5.1 Context of assessment

Assessment in clinical practice and theory are linked to each other and are a fundamental part of the programme. Clinical assessment will be carried out in clinical practice and will take the form of competency assessment. The nature of theoretical assessment will be determined by the educational institution delivering the programme but will enable the practitioner to demonstrate that they have attained appropriate theoretical knowledge to underpin safe, accurate and consistent practice, and they have met the outcomes of this curriculum.

Formative assessment will be ongoing between the trainee, their supervisor and other key members of the multidisciplinary surgical team. Clearly agreed and recorded developmental plans between the supervisor and the trainee will be essential to good assessment. A disciplined approach will underpin the rigour of the process. All formal meetings will be required to be recorded and stored by the trainee, signed by the supervisors and placed in the education profile.

5.1.1 Key personnel involved in the assessment process

The quality of the assessment process requires a range of personnel to be involved in the formative and summative assessment of the trainee SCP. It is acknowledged that the trainee SCP themselves is a vital component of this assessment. See section 1.5 for a detailed explanation of the SCP role.

The key personnel responsible for the ongoing assessment process are:

- RCS approved clinical supervisor – consultant surgeon
- Mentor – senior hospital professional (registered professional with suitable background to support trainee SCP)
- Educational supervisor – linked with higher education institution
- Teachers – supervisors, mentors, and other members of the MDT who may be anaesthetists, qualified nurses, qualified ODPs, or trainee surgeons.

5.2 Characteristics, roles and responsibilities of the key personnel

5.2.1 Clinical supervisor

The essential characteristics for clinical supervisors are:

- RCS accredited surgeon
- Completed a recognised training course, eg: RCSEng Train the Trainers

Clinical supervisors have a responsibility to:

- Ensure opportunities for the trainee's personal and professional development are available
- Be cognisant of the assessment documents and the SCP portfolio of evidence
- Teach the trainee within the clinical environment as appropriate to the stage of progression within the programme
- Liaise with the mentor for the assessment of competence in related practice processes.
- Undertake the required assessments and ensure that they liaise with all parties as the need arises
- Ensure that the trainee has sufficient opportunity, in a safe environment, to be taught, and to learn the required skills.
- Coordinate the start and completion date of the programme with the trainee SCP, programme manager and mentor
- Take the lead and make the final decision in the assessment of the trainee SCP including the completion of documentation.
- Provide advice and support and, where necessary, address specific needs such as difficulties in progression.
- Ensure that the trainee has access to relevant educational resources e.g. library, intranet, Internet.

5.2.2 Mentor

The essential characteristics for mentors are:

- An experienced professionally qualified practitioner (ie senior nurse, senior ODP, senior SCP) with appropriate education and training to perform the role of mentor
- A holder of a recognised mentoring qualification e.g. ENB 998 or C&G 730 PGCE, PGDipE

Mentors have a responsibility to:

- Be cognisant of the assessment documents and the SCP portfolio of evidence
- Ensure the assessment documents and portfolio are discussed with the trainee during the first week of the course
- Ensure that time is identified for initial interviews in order to assess learning needs and develop a learning contract
- Identify and provide access to learning opportunities and resources to assist the trainee SCP to reflect on experiences, to facilitate learning in and from practice, and to ensure that the learning experience is a planned process
- Liaise with clinical supervisor(s) regarding related practice experiences, and confirm assessment of competence
- Undertake the required assessments and ensure that they liaise with all parties as the need arises
- Complete the necessary sections of the SCP portfolio

- Coordinate the start and completion date of the programme with the trainee SCP, programme manager and clinical supervisor
- Contribute to a supportive learning environment for students
- Be approachable, supportive and aware of individual trainees learning style
- Have knowledge and information of the trainee's programme of study and practice assessments
- Be willing to share knowledge of patient care
- Encourage the use of enquiry based learning and problem solving
- Offer encouragement to trainees to work in partnership with the multidisciplinary team
- Ensure the provision of time for reflection, feedback and monitoring of the progression
- Ensure that the trainee has constructive feedback with suggestions on how to make further improvements to progress.
- Seek evaluation of the programme from the trainee on a regular basis.

5.2.3 Educational supervisor

The essential characteristics for educational supervisors are:

- Working as a lecturer within a higher education institution
- Appropriate education qualifications
- Relevant professional qualification

Educational supervisors have a responsibility to:

- Be cognisant of the assessment documents and the SCP portfolio of evidence
- Identify and provide access to learning opportunities and resources to assist the trainee SCP to reflect on experiences, to facilitate learning in and from practice, and to ensure that the learning experience is a planned process
- Liaise with clinical supervisor(s) and mentor regarding related practice experiences, and confirm assessment of competence has been completed
- Coordinate the start and completion date of the programme with the trainee SCP, clinical supervisor and mentor
- Contribute to a supportive learning environment for students
- Be approachable, supportive and aware of individual trainees learning style
- Have knowledge and information of the trainee's theoretical and practice assessments
- Teach the trainee within the education institution as appropriate to the stage of progression within the programme
- Encourage the use of enquiry based learning and problem solving
- Ensure the provision of education instruction from appropriate teachers
- Ensure the provision of time for reflection, feedback and monitoring of the progression.

- Ensure that the trainee has constructive feedback with suggestions on how to make further improvements to progress
- Review the trainee's portfolio and monitor progression
- Seek evaluation of the programme from the trainee on a regular basis.

5.2.4 Teacher

The essential characteristics for teachers are:

- Working within the relevant clinical setting
- Relevant professional qualifications
- Have expert knowledge to share with trainee SCP

Teachers have a responsibility to:

- Facilitate opportunities for the trainee's personal and professional development are available
- Be cognisant of the assessment documents as relevant to their area of expertise
- Teach the trainee within the clinical environment as appropriate to the stage of progression within the programme
- Liaise with the mentor and clinical supervisor for the assessment of competence in related practice processes
- Undertake the required assessments and ensure that they liaise with all parties as the need arises
- Provide advice and support to the trainee whilst working with them
- Provide the trainee with constructive feedback and suggestions on how to make further improvements to progress.

5.3 Formative assessments

As illustrated in section 3.5.2 (Two-year SCP programme map), formative assessment will be an ongoing element of the programme. It is envisaged this will take place at regular intervals and be formally convened for the purpose. The purpose of formative assessment is to provide a learning opportunity and a rehearsal for summative assessment. This process includes discussion between trainee and teacher both during and after the assessment, followed by further development, prior to actual summative assessment takes place.

An important element is trainee self-assessment, encouraging the trainee to participate in their own assessment, and taking responsibility for their development. This engenders motivation and assists acquisition of critiquing and appraisal skills (Stuart 2003).

Outcomes of formative assessment should be recorded to provide evidence of ongoing support and trainee progress. Ultimately the results of formative assessments should inform summative assessment and progression. The following table sets out a timetable for regular formative assessments linked to key summative assessment points.

5.4 Summative assessments

5.4.1 Theoretical assessments

Theoretical assessments will take place within, and will be determined by, the education institution responsible for maintaining and overseeing the programme. Theoretical assessments will in conjunction with clinical assessments ensure that all outcomes of the curriculum have been tested and achieved.

5.4.2 Clinical assessments

Clinical assessments must equate to at least 50 per cent of the total summative assessment procedures undertaken by the trainee throughout the programme. The format and documentation supporting these may vary, but must include competency testing and periodic triggered assessments

5.4.2 Triggered assessments

Triggered assessments provide the opportunity for the trainee to demonstrate a cohort of skills within a real clinical context. For example, preparing the patient within theatre prior to skin incision may entail demonstration of cohesive and competent skin preparation, catheterisation, and draping. The advantages of this format of assessment are:

- 'Real time' situation
- Grouping several skills and knowledge sets
- Enabling assessment of the trainee's judgement in action as well as individual element skills

Triggered assessments must include whole or part procedures within the operating theatres, but may also include procedures undertaken in other areas, eg: outpatient clinics.

Table 6: Process and timing of assessments

Month	Activity		Outcome
Three	Meeting with clinical supervisor Aim: <ul style="list-style-type: none"> • Review portfolio • Review progress • Identify difficulties 	Trainee to produce portfolio Self assessment statement	Agree outcomes from aims previously set Agree intentions to be achieved by next meeting
Six	Meeting with clinical supervisor Aim: <ul style="list-style-type: none"> • Review portfolio • Review progress • Identify difficulties 	Trainee to produce portfolio Self assessment statement	Agree outcomes from aims previously set Agree intentions to be achieved by next meeting
Nine	Meeting with clinical supervisor Aim: <ul style="list-style-type: none"> • Review portfolio • Review progress • Identify difficulties 	Trainee to produce portfolio Self assessment statement	Agree outcomes from aims previously set Agree intentions to be achieved by next meeting
Twelve	Summative Assessment by Academic Institution Aim: Progression to year 2	Trainee to produce portfolio Self assessment statement Discussion Theoretical assessment	Progression to year 2 Remedial programme
Fifteen	Meeting with clinical supervisor Aim: <ul style="list-style-type: none"> • Review portfolio • Review progress • Identify difficulties 	Trainee to produce portfolio Self assessment statement	Agree outcomes from aims previously set Agree intentions to be achieved by next meeting
Eighteen	Meeting with clinical supervisor Aim: <ul style="list-style-type: none"> • Review portfolio • Review progress • Identify difficulties 	Trainee to produce portfolio Self assessment statement	Agree outcomes from aims previously set Agree intentions to be achieved by next meeting

Month	Activity	Outcome
Twenty one	Penultimate assessment from supervisors Aim: <ul style="list-style-type: none"> • Portfolio review • In depth discussion about progress 	Trainee to produce portfolio Self assessment statement
Twenty four	Summative and Final Assessment by the Academic Institution Aim: Portfolio review	Trainee to produce portfolio Self assessment statement Discussion Theoretical assessment
	Aim: Accreditation or Referral	Recommendation for accreditation or remedial programme Accreditation
		Remedial programme

5.5 Assessment criteria and standards

5.5.1 Criteria and standards for core clinical processes

The trainee SCP must be assessed in the clinical practice and reach Level 4 (see 4.3.3). This must be recorded in their portfolio.

5.5.2 Criteria and standards for core and specialty technical/operative skills

The trainee SCP must reach Level 4 (4.3.3) for all core technical and operative skills by the end of the programme (see Appendix 3). Assessment must be by the supervisor. All assessment outcomes must be recorded in the portfolio. The rate of progress must be documented. The milestones may be able to assist in this process. Supervisors must use an operative competence test eg triggered assessment, for the operative assessment of whole or part procedures (see Appendix 5).

5.5.3 Criteria and standards for triggered assessments for partial and whole clinical and operative procedures

Clinical supervisors must use an operative competence test eg triggered assessment, for the operative assessment of whole or part procedures (see Appendix 5). Triggered assessments must be agreed in advance between the trainee SCP and clinical supervisor for the next period of supervision at the interim meetings (see section 5.4). The identified whole or part procedure must be performed within the real clinical situation. If the agreed procedure can not be completed (for any reason) another opportunity for assessment must be arranged. The triggered assessment form should be completed whenever an assessment is undertaken, whether the trainee is successful or not. Should the assessment need to be abandoned for any reason this should be noted. Upon completion of the assessment the trainee SCP and clinical supervisor should have an opportunity for discussion. This should enable the clinical supervisor to clarify their judgement of the trainee's theoretical knowledge underpinning the clinical actions demonstrated within the triggered assessment.

5.5.4 Criteria for assessment of the reflective statements in the portfolio of evidence

The trainee SCP must demonstrate the ability to:

- Record descriptions of clinical and educational events (including context and personal thoughts and reactions)
- Recognise significant patterns in these and other events
- Link clinical and educational events with wider theory and practice
- Demonstrate how this will influence their future practice
- Recognise and respect the importance of confidentiality and data protection of individuals and institutions

5.5.5 Criteria for assessment of the reflective statements in the portfolio of evidence

The trainee SCP must demonstrate their:

- Knowledge and understanding of the differing intentions, processes and results of scientific and practitioner research;
- Ability to critique relevant research
- Ability to carry out a systematic literature search and articulate its role in the different kinds of research
- Ability to conduct inquiry in a variety of research methods
- Ability to communicate appropriately the processes and results of their inquiries.

5.5.6 Criteria for monitoring the portfolio of evidence

The portfolio of evidence is the most important record of the educational development of the trainee SCP. It is essential therefore that the following are recorded and the clinical supervisor is responsible for ensuring that the:

- Triggered assessments are completed and the group reflection recorded
- Core clinical skills assessment form is up to date
- Professional reflective entries are included from the trainee SCP
- Trainee SCP is involved in research or audit into practice and this is recorded appropriately
- A clinical logbook is maintained of the pre, intra and postoperative activities, including technical operative procedures undertaken, and is up to date.

6 Regulation and accountability

6.1 Future intentions

It is probable that new legislation in 2006 will enable SCPs to be registered as a professional group. It is intended that further non-medically qualified practitioners will be registered in the coming years. Regulation is a safeguard for public and employers to allow differently trained practitioners to take on new roles including elements of existing roles.

Statutory regulation has four functions:

1. Establish standards of competence, ethics and conduct
2. Establish standards for training
3. Keep a register of those who meet the standards
4. Have a mechanism for dealing with those registrants who do not meet the standards.

As registered professionals, SCPs will be accountable for their own practice and subject to the professional requirements of the regulator. These include professional standards of conduct, performance and ethics and standards of proficiency.

From a legal perspective, one regulatory body can undertake statutory regulation for a distinct profession. From an individual's perspective, practitioners can keep dual registration if qualified for two regulated professions and wish to practise either profession (eg, a registered nurse can change career and become a registered SCP). However, only registration with the appropriate regulator will confer entitlement to practise as a specific regulated professional, so for instance, a registered nurse cannot work as a SCP without undergoing a new registration process which will demonstrate competence to work in that role.

6.2 Accountability and supervision

It is envisaged that consultant surgeons will be accountable overall for all work of the SCP, in a similar manner to their responsibilities for trainee surgeons (SpRs and SHOs), non-consultant career grade doctors, staff and associate specialist grade surgeons. Individual SCPs will still be accountable for their own practice, within the boundaries of supervision and delegation. Consultant surgeons must accept overall responsibility for any duties that are delegated to a trainee or qualified SCP. By this, consultant surgeons should delegate duties and responsibilities only to those SCPs whom they know to be competent in the relevant area of practice. (Adapted from *Good Surgical Practice*, RCSEng: 2002).

Specifically, for the SCP profession, it should be emphasised that they will be under the supervision of the consultant surgeon without exception throughout their working lives. For those SCPs that have progressed through other professional registrations, such as registered nurses, it may first appear that, as a result of a career change, they are moving from 'independent' or 'autonomous' practice to that of supervised practice. However, it should

be recognised that the consultant surgeon delegates work to the SCP as part of the overall undertakings of the extended surgical team in pre-operative and perioperative care. It is also the case that other regulated professions including registered nurses and allied health professions remain professionally and managerially accountable to others throughout their working lives despite being independent clinically autonomous practitioners.

7 Principles of quality assurance

The quality assurance of programmes offered by healthcare organisations and their collaborating higher education institutions must meet the criteria set by the RCSEng Recognition Committee, which will have representation from the profession of surgery as well as all participants in the development of this curriculum framework.

The principles of these requirements are that:

- There is an established agreement between the higher education institution and the healthcare provider in the clinical setting
- The collaboration has in place appropriate human resources (HR) and contractual procedures
- There are appropriate recruitment and admission policies
- The collaboration can provide the appropriate educational opportunities
- The collaboration encourages multidisciplinary teaching and learning
- The requirements of the Curriculum Framework are included
- There is an ongoing process of evaluation of the education programme
- There are appropriate teaching and learning resources (which may link with other programmes)
- There is clear leadership of the programme both educationally and managerially
- There is involvement in the development of the faculty of supervisors and teachers
- There is commitment and action in research and development of the programme.

8 Principles of the review and appeals procedures

The educational opportunities offered to the trainee SCP must be designed to give maximum support to allow them to progress. The formative and summative assessment processes will guide understanding of their development. Those making slower than expected progress will need to have targeted or intensified educational opportunities.

The following are the principles of managing slower than expected educational progression (as distinct from professional or personal misconduct which although sometimes difficult to separate from educational progress will present different problems and solutions):

- The trainee SCP and their supervisor must agree in writing the difficulties that are being encountered in progression. There should be no surprises to trainee or supervisor
- The relevant committees (educationally and contractually) must be kept informed of the decisions
- Aims should be identified to re-establish satisfactory progress and the strategy recorded and agreed by all involved parties (trainee SCP, supervisor, HR manager of the programme, education institution lead for the programme)
- In the event of more than half the agreed aims set at the beginning of the programme being unachieved at the appropriate milestone, consideration must be given to repeating that part of the programme, and opportunity must be provided
- It is the responsibility of the supervisor to ensure that the remedial programme does not unduly overburden the trainee and thus confounding the chance of their improving
- It is envisaged that a remedial programme should not increase the length of training by more than two years
- A remedial programme must take account of mitigating factors such as health or unduly difficult domestic circumstances
- Suitable career advice should be part of the review process
- Local panels of personal and educational specialist should be drawn up to act as advisors to the process
- Three levels of support may be offered:
 - Step I Targeted opportunities within the normally agreed programme
 - Step II Intensified supervisions and repeat experiences
 - Step III Withdrawal from the programme.

9 Glossary of terms

Curriculum Framework	The main educational policy document providing the background, development, entry routes, definitions, structure of education and training, and assessment strategy for trainees on the programme.
Core syllabus	The document produced by NAASP (2003) providing the detail of the generic subject knowledge and range of skills required by all SCPs regardless of specialty focus. This has been developed and agreed upon by a broad spectrum of advisors from all specialty associations within the RCSEng.
Competence	The broad ability with which a professional person conducts themselves in their own practice (by its very broad nature includes competences); it requires the use of professional judgment (See Carr 1993).
Competences	A range of specific skills which may be taught and tested in a very didactic way. It does not require professional judgment.
Portfolio of evidence	A collection of evidence demonstrating an individual's development, progression and achievement of the core and specialty competences over a period of time. This portfolio contains a clinical logbook, personal profile and educational profile including competences.
Clinical logbook	Electronic or hardcopy recording of principle information demonstrating development of practical expertise. This will demonstrate the depth and breadth of clinical activities that have been completed.
Education profile	The primary documentation demonstrating completion of all aspects of theoretical and practical learning in order to achieve the stated syllabus content. Information drawn from all aspects of the portfolio for the specific purpose of demonstrating preparation for the role and the achievement of the detailed syllabus (core and relevant specialty), including triggered assessments, record of meetings and of formative and summative assessments.
Personal profile	Document containing reflective notes derived from the individual's professional and personal experiences. Personal reflections will be written for the individual's own development. These are private to the individual and would not be required in the final analysis. However, professional reflections on development will form a key part of the portfolio of evidence submission.

Professional judgement	<p>Is the crucial capacity that links deliberation and practical wisdom to action. An example would be:</p> <p>Having determined by deliberation what is the best way of conducting this particular procedure, and having decided that that way is indeed the best I can think of for this particular patient today, I decide to act, am able to get it done (practically in technically well), and I do so, negotiating as I go with any unexpected events and making good judgements about any additional and unexpected problems I find on the spot.</p>
Values	<p>Values are about priorities, motivation and example. Our values are those visions and views of the world, which underlie our conduct, and our way of seeing the world. They are held consistently, and are able to be justified. They need to be recognised overtly by professionals who are attempting to develop their practice (because they shape our understanding of our practice as well as our actions). Values have a moral seriousness. The values of a community are the established currencies in things about which those people care and which will deeply affect what they do, how they do it, and how they will justify it.</p>
Core knowledge and skills	<p>The content of surgical practice which is common to all surgical specialties (and often to other medical disciplines).</p>
Specialty knowledge and skills	<p>The content of the speciality syllabus pertains to the generality of practice for that speciality, over and above the core expected of all SCPs in any specialty, but excludes complex clinical and operative aspects of the specialty practice (these aspects may form part of continuing professional development after qualification).</p>
Teacher	<p>Anyone directly involved in the teaching of trainee SCPs and who has some responsibility, whether directly or delegated, in full or in part, to ensure the trainee addresses the requirements of the programme.</p>
Educational supervisor	<p>Those working within educational institutions having responsibility for the delivery of the programme</p>
Clinical supervisor	<p>An accredited consultant surgeon with responsibility for an identified trainee SCP within their surgical team</p>
Mentor	<p>An experienced professionally qualified practitioner (ie senior nurse, senior ODP, senior SCP) with appropriate education and training to perform the role of mentor</p>
Triggered assessment	<p>Clinical assessment of a cohort of skills, within a whole or part procedure, in a 'real time' clinical context.</p>

10 References

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Appendix 1

Core surgery – clinical milestones

These clinical milestones are a guide to introduce the trainee to the new role of SCP. They are not ‘tablets of stone’ to be enforced by any supervisor or mentor but an aid to assisting the team to identify the initial steps to gaining the training and knowledge required of an SCP.

By the end of Month One			
Activities/competences		Activities/competences	
Introduced to role		Undertaken observation at host hospital (first two clinical weeks)	
Introduced to surgical team and dynamics		Introduction to (simulation exercises): – Suturing, – Surgical knot tying	
Introduction to role transition from scrub/ward/allied professional practitioner to trainee SCP		Proficiency in scrubbing, gowning and gloving	
Commenced limited assistance, (3rd clinical week) • Patient preparation • Patient positioning • Tissue exposure, handling • Application of suction • Assisting with the cutting of sutures and ligatures • Assistance with haemostasis • Indirect application of diathermy where necessary • Camera holding for minimal access surgery procedures • Suturing subcutaneous and skin layers • Female urinary catheterisation (male if already undertaken MUC training) • Drain securing • Introduction to pre-operative site marking		Begin to consider and examine issues around: • Considering aspects of consent • Codes of conduct	
Commence clinical log book		Participate or gain an introduction to pre- and post-operative visiting	
Identify local/regional or national guidelines and protocols – where applicable.			

Source: The National Association of Assistants in Surgical Practice. These milestones are regularly updated on the NAASP website: www.naasp.org.uk

By the end of Month Two			
Activities/competences		Activities/competences	
Demonstrate: <ul style="list-style-type: none"> • The application of skin preparation and discuss best practice in relation to this role. • Draping and discuss best practice in relation to this role • Patient positioning, including care of vulnerable tissues an joints • Retraction of skin and tissues and organs and providing good exposure • Safe and effective use of suction • Assistance with haemostasis • Camera holding for minimal access surgery procedures • Performing skin closure by suture or clip under the direct supervision of the surgeon • Demonstrate by discussion, knowledge of all types of suture and where they may be used and all types of suture techniques • Female urinary catheterisation (male if already trained) • Skilled at tying surgical knots • Insertion and suture of drain 		Gain an introduction to: <ul style="list-style-type: none"> • Chest and abdominal X-rays • Electro-surgical principles • Introduction to male catheterisation (if not already done) 	
Gain an introduction to team dynamics <ul style="list-style-type: none"> • Observation on ward rounds • Attendance at X-ray meetings. • Observation at out-patients clinics 		Gain an introduction to ward duties <ul style="list-style-type: none"> • Venepuncture • Cannulation • 12 lead ECG 	
Catheterisation female using an aseptic technique and commenced supervised training of male catheterisation practice.		Safe at infiltrating the wound with local anaesthetic post-surgical procedure under supervision	
Demonstrate manual dexterity and application of instrument		Be proficient at pre-operative site marking	

Source: The National Association of Assistants in Surgical Practice
 These milestones are regularly updated on the NAASP website: www.naasp.org.uk

By the end of Month Four			
Activities/competences		Activities/competences	
Practitioners should reach competence in: <ul style="list-style-type: none"> • Pre- and post-operative visiting • Patient preparation • Patient positioning • Tissue exposure, and handling • Application of suction • Assistance with haemostasis • Camera holding for minimal access surgery procedures • Suturing subcutaneous and skin layers • Male and female urinary catheterisation 		Should have an understanding the principles of: <ul style="list-style-type: none"> • The Harmonic scalpel • Principles of internal stapling devices • Principles of lasers • Principles of robotics in surgery 	
Gain an introduction to consenting patients for specified procedures after assessment by consultant		Introduction to: <ul style="list-style-type: none"> • Venepuncture • Venous cannulation • Arterial gas stabs 	
Introduction to taking a medical and surgical history			

By the end of Month Six			
Activities/competences		Activities/competences	
Introduction further ward duties <ul style="list-style-type: none"> • X-Ray evaluation • Wound care evaluation • Post-operative physiotherapy evaluation • Knowledge of complementary therapies and their uses • Post-operative follow-up standards 		Transferable IT skills <ul style="list-style-type: none"> • Demonstrate IT competence • Access, retrieve, interpret and utilize information and evidence • Appropriately, including numerical data 	
Demonstrate effective communication skills		Work collaboratively	
Demonstrate personal organisation and responsibility		Contribute to management of change	
Demonstrate critical thinking skills		Apply reflective skills	
Continue to undertake and participate in the process of gaining a patient medical and surgical history			

Source: The National Association of Assistants in Surgical Practice
 These milestones are regularly updated on the NAASP website: www.naasp.org.uk

By the end of Month Nine			
Activities/competences		Activities/competences	
Interpret normal haematological values		Understand blood groups and transfusion and signs and symptoms of transfusion incompatibility	
Interpret normal clinical chemistry values.		Interpret biochemistry investigations	
Competently take a patients medical and surgical history			

By the end of Month Twelve			
Activities/competences		Activities/competences	
Demonstrate an informed and evidence based knowledge of the philosophy behind the role of SCP, with understanding of the legal and ethical issues, vicarious liability,		Demonstrate/audit clinical effectiveness with accurate record keeping and documentation.	
Demonstrate evidence base to learning and practice			

By the end of Month Fifteen	
Activities/competences	
Be able to demonstrate an understanding of the risk management/clinical governance/quality assurance audit cycle of patient care and professional practice	

By the end of Month Eighteen	
Activities/competences	
Review guidelines and protocols to ensure meeting the extent of practice. This should be a rolling programme as each role and job description will vary according to the individual specialism and the individual concerned.	

By the end of Month Twenty-One	
Activities/competences	
Review competencies required for qualification for the role of SCP	

By the end of Month Twenty-Four	
Activities/competences	
Be able to demonstrate the knowledge required by the RCSEng and NAASP to undertake the role of qualified SCP	

Source: The National Association of Assistants in Surgical Practice; These milestones are regularly updated on the NAASP website: www.naasp.org.uk

Appendix 2 A guide to help you create your portfolio of evidence

Portfolio of evidence		Contents	Elements assessed
Clinical logbook			
Introduction		Log of experience	Provides overview of operative experience
Section 1		Pre- and post-operative care	Specific clinical non-operative skills
Section 2		Operations	Specific operative skills
Section 3		Procedures	Specific clinical non-operative skills
Section 4		Courses	Development of knowledge and skills supporting practice
Section 5		Teaching	Development of core theoretical knowledge; core educational processes
Section 6		Audit and research	Research experience statement Development of knowledge and experience of a range of enquiry processes, and evaluation of research evidence
Personal profile			
Section 1		Personal and professional details	Professional values
Section 2		Core syllabus competency evidence	Core theoretical knowledge; core operative and non-operative skills
Section 3		Specialty syllabus competency evidence	Specialty theoretical knowledge; specialty operative and non-operative skills
Section 4		Record of visits and other learning experiences	Development of core or specialty theoretical knowledge; development of core or specialty skills; development of professional values
Section 5		Reflection statements	Development of core theoretical knowledge; development of core educational processes; development of professional values
Section 6		Hospital documentation	Provides overview of current employment position
Education profile including clinical competences			
Section 1		Personal details	Provides overview of individual
Section 2		Individual training plan	Sub-section A: Learning and training needs analysis Sub-section B: Outcome and progress
Section 3		Clinical competences	Sub-section A: Core clinical competences and theoretical outcomes Sub-section B: Specialty clinical competences and theoretical outcomes

Portfolio of evidence		Contents	Elements assessed
Section 4		Record of meetings with supervisors	Overview of supervision process
Section 5		Record of formative assessments	Overview of trainee progress and development
Section 6		Record of summative assessments	Overall progress in practical and theoretical elements – both at the end of each attachment and at the end of the experience. (Core theoretical and clinical knowledge, and communication skills assessed in the higher education institutions)
Section 7	Record of triggered assessments	Triggered assessment forms and Core technical operative skills record sheets	Specialty-specific operative skills. Core theoretical knowledge; Core educational processes; Core technical/operative skills; Specialty-specific theoretical knowledge

Source: The National Association of Assistants in Surgical Practice

Appendix 3 Core technical and operative skills

Technical skills	Level One	Level Two	Level Three	Level Four	Date	Clinical supervisor's signature
Venepuncture						
Venous cannulation						
Arterial blood sampling						
Pre-operative surgical site marking						
Conduct 12 lead ECG						
Interpret 12 lead ECG						
Scrub technique, gowning and gloving						
Patient preparation						
Patient positioning						
Patient draping						
Handling of basic surgical instruments						
Maintenance of surgical haemostasis						
Performing an incision						
Knot tying						
Suturing of skin						
Suturing of deeper layers						
Insertion of skin clips						
Tissue retraction, exposure and handling						
Application of suction						
Application of diathermy						
Female urinary catheterisation						
Male urinary catheterisation						
Minimal access surgery camera skills						

Technical skills	Level One	Level Two	Level Three	Level Four	Date	Clinical supervisor's signature
Maintenance of specimens						
Apply appropriate surgical dressings						
Insertion of surgical drain						
Fixation of surgical drain						
Patient documentation and record keeping						
Develop guideline/protocol						

Note: Practitioners must reach Level 4 prior to qualification.
Adapted from the National Association of Assistants in Surgical Practice

Appendix 4 – Specialty specific theoretical knowledge and skills

Levels for theoretical knowledge and skills

RCSEng Level	Surgeons description: theoretical knowledge	Surgeons description: technical and operative skills	NAASP levels
1	Having to ask or be told	Surgeon showing: SCP assisting	Direct
2	Knowing where to find the knowledge but not really knowing it	SCP doing: Surgeon assisting	
3	Confident in knowledge and able to demonstrate that knowledge	SCP doing: Surgeon watching	
4	Able to understand and use that knowledge	SCP doing: Surgeon within the theatre or clinical environment	Indirect
5	Able to develop that knowledge and build on it during practice. Able to research and critique that knowledge and use it wisely	SCP doing: surgeon in the hospital	Proximal

Qualified SCPs will be expected to attain specialty specific theoretical **knowledge of the principles at Level 4** in all cases. The RCSEng approved specialty clinical/technical skills levels are set at Level 1, where the SCP **assists** the surgeon. However, technical and operative skills Levels 2,3, 4 and 5 are defined above for the consultation process.

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58 1A: Urology – theoretical knowledge

	Required level of knowledge:	Description
Normal anatomy and physiology of the kidneys and the rest of the urinary tract and male genital apparatus (deeper than expected at core knowledge)	4	Able to understand and use that knowledge
Altered renal physiology (including renal failure)	4	Able to understand and use that knowledge
Physiology of urinary tract obstruction	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the urology patient	4	Able to understand and use that knowledge
Naturopathic bladder dysfunction	4	Able to understand and use that knowledge
Clinical Investigation of the urinary tract <ul style="list-style-type: none"> • Haematological • Biochemical • Urodynamics • Histological • Microbiological • Radiological and imaging 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • Haematuria • Urinary retention (acute and chronic) • Ureteric colic • Lower urinary tract symptoms (LUTS) • Acute testicular pain • Scrotal swellings 	4	Able to understand and use that knowledge

	Required level of knowledge:	Description
Principles of management of the following conditions: <ul style="list-style-type: none"> • Bladder dysfunction and incontinence • Urinary tract trauma • Urological infections • Urinary stone disease <ul style="list-style-type: none"> – Both medical and surgical management • Urinary tract obstruction (including urological stents) • Benign prostatic hypertrophy (BPH) • Urological malignancy • Disorders of the scrotum and penis 	4	Able to understand and use that knowledge
Principles of relevant urological procedures: <ul style="list-style-type: none"> • Circumcision • Hydrocele • Epididymal cyst • Vasectomy • Testicular torsion • Rigid cystoscopy and biopsy • Flexible cystoscopy and biopsy 	4	Able to understand and use that knowledge

1B: Urology – clinical/technical skills

	Required level of supervision	Description
Suprapubic catheterisation	1	Surgeon showing: SCP assisting
Flexible cystoscopy and biopsy	1	Surgeon showing: SCP assisting
Wound opening – <ul style="list-style-type: none">• Laparotomy• Nephrectomy	1	Surgeon showing: SCP assisting
Wound closure – <ul style="list-style-type: none">• Laparotomy• Nephrectomy	1	Surgeon showing: SCP assisting

1C: Optional urology – clinical/technical skills

	Required level of supervision	Description
Rigid cystoscopy and biopsy	1	Surgeon showing: SCP assisting

2A: Trauma and orthopaedic surgery – theoretical knowledge

	Required level of knowledge	Description
In general, principles of:		
Normal and altered anatomy and physiology of the locomotor system and spinal cord	4	Able to understand and use that knowledge
Examination of joints	4	Able to understand and use that knowledge
Clinical Investigation relating to orthopaedics and trauma surgery <ul style="list-style-type: none"> • Haematological • Biochemical • Histological • Microbiological • Radiological and imaging <ul style="list-style-type: none"> – MRI – CT – Bone scan – Ultrasound scan 	4	Able to understand and use that knowledge
Understanding the role of neurophysiological investigations	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the orthopaedic patient	4	Able to understand and use that knowledge
Antibiotics prophylaxis and treatment	4	Able to understand and use that knowledge
Thromboembolic precautions specific to orthopaedic and trauma patients	4	Able to understand and use that knowledge
Principles of rehabilitation	4	Able to understand and use that knowledge

Trauma, principles of:		
Interpretation of specific orthopaedic X-rays <ul style="list-style-type: none"> • Dislocation • Fractures 	4	Able to understand and use that knowledge
Classification of closed and open fractures	4	Able to understand and use that knowledge
Pathophysiology of bone healing	4	Able to understand and use that knowledge
Principles of management of soft tissue injury <ul style="list-style-type: none"> • Ligament, • Tendons, • Nerves, • Compartment syndrome 	4	Able to understand and use that knowledge
Principles of management of fractures <ul style="list-style-type: none"> • Techniques of reduction • immobilisation • Specific <ul style="list-style-type: none"> – Wrist – Ankle – Hip – Elbow – Shoulder – Tibia – Fibula – Femur – Pelvis – Radius – Ulna 	4	Able to understand and use that knowledge
Principles of management of head injuries	4	Able to understand and use that knowledge
Principles of management of joint dislocations	4	Able to understand and use that knowledge
Principles of management of pathological fractures	4	Able to understand and use that knowledge
Simple test of vestibular function	4	Able to understand and use that knowledge

Orthopaedics, principles of:		
Pathophysiology of joint disease <ul style="list-style-type: none"> • Degenerative • Inflammatory 	4	Able to understand and use that knowledge
Strategies of management of joint diseases	4	Able to understand and use that knowledge
Use of implants in orthopaedic surgery	4	Able to understand and use that knowledge
Implant fixation: <ul style="list-style-type: none"> • Materials • Techniques 	4	Able to understand and use that knowledge
Principles within arthroscopic surgery <ul style="list-style-type: none"> • Joint manipulation • Investigative/diagnostic • Therapeutic 	4	Able to understand and use that knowledge
Investigation and treatment of spinal disorders <ul style="list-style-type: none"> • Physio • Exercise • Advice 	4	Able to understand and use that knowledge
Investigation of and available treatment of entrapment neuropathies	4	Able to understand and use that knowledge
Investigation of and available treatment of the painful hip in a child	4	Able to understand and use that knowledge
The recognition of abnormalities in the growing child	4	Able to understand and use that knowledge

Immobilisation of fractures, principles of:		
Use of splints	4	Able to understand and use that knowledge
Application of a cast (Plaster of Paris (POP) and synthetic)	4	Able to understand and use that knowledge
Splitting of a cast	4	Able to understand and use that knowledge
Application of skin traction <ul style="list-style-type: none"> • Setting up and maintaining traction systems' • Rationale 	4	Able to understand and use that knowledge
Insertion of skeletal traction pin and application of traction <ul style="list-style-type: none"> • Setting up and maintaining traction systems' • Rationale 	4	Able to understand and use that knowledge
Management of spinal injury <ul style="list-style-type: none"> • First aid • Conservative management 	4	Able to understand and use that knowledge
Management of dislocations of hand and foot	4	Able to understand and use that knowledge
Management of dislocated hip	4	Able to understand and use that knowledge
Understanding of biomechanics <ul style="list-style-type: none"> • Gait 	4	Able to understand and use that knowledge
Principles of relevant orthopaedic procedures <ul style="list-style-type: none"> • Incision and drainage of superficial and deep abscess • Split skin grafting • Fasciotomy (including knowledge of BOA/BAPS guidelines) • Extensor tendon repair • Flexor tendon repair • Nerve and vessel repair • K-wiring of a wrist • Plating of a wrist/forearm fracture • Internal fixation of olecranon fracture • Harvesting of bone graft • Closed manipulation and casting of tibial fracture • Tibial nailing • Closed manipulation and casting of ankle fracture • Internal fixation of fractured ankle 	4	Able to understand and use that knowledge

<ul style="list-style-type: none"> • Excision of ganglion • Shoulder cuff repair • Total hip and knee replacement <ul style="list-style-type: none"> – Making skin incision – Exposing bone – Closing the incision • Examination under anaesthetic • Spinal decompression +/- discectomy • Spinal fusion • Fixation of a slipped upper femoral epiphysis • Scaphoid fracture • Phalangeal fracture • Cannulated screws • Release of trigger finger • Carpal tunnel decompression • Removal of metalwork • Release of Dupuytren's contracture • Tendon transfers • Ulna nerve decompression • Subacromial decompression • ACL reconstruction • Amputation of toe • Great toe surgery • Ingrowing toenail surgery • Diagnostic knee arthroscopy • Shoulder stabilisation e.g. Bankart repair 		
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Note: Detailed comments were received from the BOA and have not been incorporated into this version of the Appendix.

66 2B: Trauma and orthopaedic surgery – clinical/technical skills

Trauma	Required level of supervision	Description
General		
Assessment and management in the emergency room of the severely injured patient	1	Surgeon showing: SCP assisting
Digital block	1	Surgeon showing: SCP assisting
Aspiration of joints e.g. <ul style="list-style-type: none"> • Haemarthrosis 	1	Surgeon showing: SCP assisting
Wound opening <ul style="list-style-type: none"> • Hip • Knee • Shoulder • Long bones 	1	Surgeon showing: SCP assisting
Deep layer wound closure <ul style="list-style-type: none"> • Hip • Knee 	1	Surgeon showing: SCP assisting
Debridement of soft tissue <ul style="list-style-type: none"> • Wound 	1	Surgeon showing: SCP assisting
Setting up and maintaining traction systems	1	Surgeon showing: SCP assisting
Fracture management		
Application of Plaster of Paris and synthetic casts	1	Surgeon showing: SCP assisting

3A: Cardiothoracic surgery – theoretical knowledge

Principles of:	Required level of knowledge	Description
Detailed normal and altered anatomy and physiology of the cardiovascular system	4	Able to understand and use that knowledge
Detailed normal and altered anatomy of the lower limb	4	Able to understand and use that knowledge
Detailed normal and altered anatomy of the upper limb	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the cardiovascular and thoracic patient <ul style="list-style-type: none"> • Elective • Emergency • Trauma • Central venous lines <ul style="list-style-type: none"> – Internal jugular subclavian – Swanganz catheters – Cardiac output studies 	4	Able to understand and use that knowledge
Pre- and post-operative assessment of the cardiovascular and thoracic patient <ul style="list-style-type: none"> • Respiratory function • Cardiac assessment • Peripheral vascular assessment • Risk/benefit assessment in cardiothoracic surgery. 	4	Able to understand and use that knowledge
Clinical Investigation relating to cardiovascular and thoracic surgery <ul style="list-style-type: none"> • Haematological • Biochemical • Histological • Microbiological • Radiological and Imaging <ul style="list-style-type: none"> – MRI, – CT – Ultrasound scan – Echocardiogram 	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
Principles, understanding and awareness of: <ul style="list-style-type: none"> • The use of cardiopulmonary by-pass • The use of intra aortic balloon pumps. • Minimally invasive procedures and 'off pump' procedures. 	4	Able to understand and use that knowledge
Complications following <ul style="list-style-type: none"> • Cardiac surgery. • Thoracic surgery 	4	Able to understand and use that knowledge
Principles of relevant cardiovascular and thoracic surgery procedures: <ul style="list-style-type: none"> • The surgery for coronary artery disease • The surgery for cardiac valvular disease • Oncological surgery • Chest drain insertion, management and removal • Aortic surgery • Cardiac pacing • Bronchoscopy • Sternotomy open and closure • Insertion of arterial lines (radial, femoral) • Management of tracheostomy 	4	Able to understand and use that knowledge
Cancer therapy (radiotherapy, chemotherapy, palliative)	4	Able to understand and use that knowledge
Monitoring and recognising deviations from the normal range	4	Able to understand and use that knowledge
Recognising tamponade and the management.	4	Able to understand and use that knowledge
Congenital abnormalities.	4	Able to understand and use that knowledge
Drug therapies.	4	Able to understand and use that knowledge
Understand the principles of myocardial protection.	4	Able to understand and use that knowledge

3B: Cardiothoracic surgery – clinical/technical skills

	Required level of supervision	Description
Long and short saphenous vein harvest	1	Surgeon showing: SCP assisting
Thoracic incision and closure	1	Surgeon showing: SCP assisting
Radial artery removal	1	Surgeon showing: SCP assisting
Sternotomy open and closure	1	Surgeon showing: SCP assisting
Assist surgeon to prepare patient for cannulation and de-cannulation.	1	Surgeon showing: SCP assisting
Groin dissection	1	Surgeon showing: SCP assisting

70 4A: Plastic and reconstructive surgery – theoretical knowledge

Principles of:	Required level of knowledge	Description
Detailed normal and altered anatomy and physiology of the <ul style="list-style-type: none"> • Hand • Foot • Breast • Head and neck • Skin 	4	Able to understand and use that knowledge
Assessment of viability of skin <ul style="list-style-type: none"> • Relating to skin flap monitoring • Skin cover – the ‘reconstructive ladder’ 	4	Able to understand and use that knowledge
Principles of relevant plastics procedures <ul style="list-style-type: none"> • Skin grafting <ul style="list-style-type: none"> – Split – Full thickness • Flaps <ul style="list-style-type: none"> – Local – Distant – Free transfer • Tendon repair • Microvascular repair • Nerve injury and repair • Nail-bed repair • Lower limb trauma: skin and soft tissue loss • Breast reconstruction • Congenital: prominent ears • Hand trauma: <ul style="list-style-type: none"> – Flexor tendon – Extensor tendon – Nerve injury/repair 	4	Able to understand and use that knowledge
Diagnosis and management of skin tumours	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
The management of burns <ul style="list-style-type: none"> • Assessment • Resuscitation • Debridement and grafting 	4	Able to understand and use that knowledge
The management of congenital defects	4	Able to understand and use that knowledge
Soft tissue infections, e.g. hand and necrotising fasciitis	4	Able to understand and use that knowledge
Management of scars <ul style="list-style-type: none"> • Steroid injection into scar 	4	Able to understand and use that knowledge
Leg ulcers: <ul style="list-style-type: none"> • Debridement • Grafting 	4	Able to understand and use that knowledge

72 4B: Plastic and reconstructive surgery – clinical/technical skills

	Required level of supervision	Description
Skin lesion, benign	1	Surgeon showing: SCP assisting
Skin cancer: <ul style="list-style-type: none"> • Basal cell carcinoma excision • Squamous carcinoma excision • Melanoma excision 	1	Surgeon showing: SCP assisting
Breast reconstruction: wound closure	1	Surgeon showing: SCP assisting

5A: Neurosurgery – theoretical knowledge

	Required level of knowledge	Description
Normal and altered anatomy and physiology of the <ul style="list-style-type: none"> • Central nervous system 	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the neurosurgical patient <ul style="list-style-type: none"> • Critical care • Neuro-rehabilitation • Neurological examination 	4	Able to understand and use that knowledge
Clinical Investigation of the neurosurgical patient <ul style="list-style-type: none"> • Haematological • Biochemical • Histological • Microbiological • Radiological and imaging <ul style="list-style-type: none"> – Interpretation of CT scans and MRI scans • Insert intracranial pressure monitor • Lumbar puncture/tap CSF reservoir 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • CNS infection • Deteriorating level of consciousness including use of Glasgow Coma Scale and score 	4	Able to understand and use that knowledge
Principles of management of the following conditions: <ul style="list-style-type: none"> • Head injury • Intracranial tumours • Subarachnoid haemorrhage/intracerebral haemorrhage • Spinal degenerative disease • Spinal injuries 	4	Able to understand and use that knowledge

	Required level of knowledge	Description
Principles of relevant neurosurgical procedures: <ul style="list-style-type: none"> • Shunt surgery • Harvest iliac crest bone graft • Interventional neuroradiology procedures • Spinal procedures • Image guided surgery • Stereotaxy • Muscle/nerve/temporal artery biopsy • Burr hole for chronic subdural or insertion of ventricular drain • Craniotomy, including raising the bone flap <ul style="list-style-type: none"> – Raising the bone flap – Closing • Spinal cord/cauda equina compression 	4	Able to understand and use that knowledge
Neuro-opthamology	4	Able to understand and use that knowledge
Neuro-pathology	4	Able to understand and use that knowledge
Neuro-vascular disorders	4	Able to understand and use that knowledge
Neuroradiology	4	Able to understand and use that knowledge
Neuro-oncology	4	Able to understand and use that knowledge
Neuro-otology	4	Able to understand and use that knowledge
Maxillofacial surgery	4	Able to understand and use that knowledge
Paediatric neurosurgery	4	Able to understand and use that knowledge

5B: Neurosurgery- clinical/technical skills

	Required level of supervision	Description
Open and close laminectomy	1	Surgeon showing: SCP assisting
Muscle/nerve/temporal artery biopsy	1	Surgeon showing: SCP assisting
Application of skull traction/halo brace	1	Surgeon showing: SCP assisting
Opening and closing craniotomies	1	Surgeon showing: SCP assisting

76 6A: Paediatric surgery – theoretical knowledge

	Required level of knowledge:	Description
Understanding pre- and post-operative management of the paediatric and neonate <ul style="list-style-type: none"> • Assessing the sick child • Fluid and electrolyte balance in children • Antibiotics in children • Dosage of drugs • Blood products in children • IV access in children • Venepuncture for blood investigations and intravenous fluids in children • Consent: child/parents 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • Abscesses • Pain relief 	4	Able to understand and use that knowledge
Principles of management of the following conditions: <ul style="list-style-type: none"> • Abscesses <ul style="list-style-type: none"> – Superficial – Intraperitoneal • Renal tract anomalies/obstruction • Chest trauma • Gastro Intestinal bleeding • Paediatric malignancies • Acute scrotum • Hypertrophic pyloric stenosis • Neonatal intestinal obstruction – significance of bilious vomiting • Acute abdominal pain – presentation and causes • Sepsis 	4	Able to understand and use that knowledge

	Required level of knowledge:	Description
Principles of relevant paediatric and neonatal procedures: <ul style="list-style-type: none"> • Inguinal hernia • Epigastric hernia • Umbilical hernia • Hydrocoele • Undescended testis • Retractable testis • Phimosis • Abdominal trauma • Laparotomy wound closure • Intussusception • Minor surgery <ul style="list-style-type: none"> – Seb/dermoid cysts – Ingrowing toenail surgery – Diathermy – Suturing 	4	Able to understand and use that knowledge

78 6B: Paediatric surgery – clinical/technical skills

	Required level of supervision	Description
Wound closure <ul style="list-style-type: none"> Laparotomy Thoracotomy 	1	Surgeon showing: SCP assisting
Abscesses <ul style="list-style-type: none"> Superficial Intraperitoneal 	1	Surgeon showing: SCP assisting
Surface surgery <ul style="list-style-type: none"> Ingrowing toe nail Seb/dermoid cysts 	1	Surgeon showing: SCP assisting
Inguinal hernitology	1	Surgeon showing: SCP assisting
Epigastric/umbilical hernias	1	Surgeon showing: SCP assisting
Orchidopexy	1	Surgeon showing: SCP assisting
Scrotal exploration	1	Surgeon showing: SCP assisting
Circumcision	1	Surgeon showing: SCP assisting
Venous access	1	Surgeon showing: SCP assisting
Chest drain	1	Surgeon showing: SCP assisting

Core 7A: General surgery – theoretical knowledge

Part I – Core general surgery

	Required level of knowledge	Description
Detailed normal anatomy and physiology of the kidneys and the rest of the abdominal cavity	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the general surgery patient	4	Able to understand and use that knowledge
Clinical investigation related to general surgery <ul style="list-style-type: none"> • Haematological • Biochemical • Histological • Microbiological • Radiological and imaging • Central venous access For nutrition For acute resuscitation <ul style="list-style-type: none"> – For monitoring 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • Acute abdominal problems <ul style="list-style-type: none"> – Pain – Peritonitis – Trauma Renal Cardiac Respiratory Alimentary Neurological Diabetic Haematological Haemodynamic Sepsis de novo	4	Able to understand and use that knowledge

	Required level of knowledge	Description
Principles of management of the following conditions: <ul style="list-style-type: none"> • Appendicitis and its complications • Small and large bowel obstruction • Obstructed hernia • Gallstone disease and their complications <ul style="list-style-type: none"> – Acute presentations • Pancreatitis and its complications • Chest injuries <ul style="list-style-type: none"> – Pneumothorax – Stabbings – Trauma – Pericardial injury • GI bleeding <ul style="list-style-type: none"> – Upper – Lower – Post-operative 	4	Able to understand and use that knowledge
Principles of relevant general surgery procedures: <ul style="list-style-type: none"> • Abscesses <ul style="list-style-type: none"> – Superficial <ul style="list-style-type: none"> o Perianal o Ischiorectal o Breast o Pilonidal o Axiall o Breast – Intra-peritoneal – Deep muscle • Appendicectomy • Minor surgery <ul style="list-style-type: none"> – Ingrowing toenail surgery – Sebaceous cysts – Lipomata – Other subcutaneous nodules 	4	Able to understand and use that knowledge

	Required level of knowledge	Description
<ul style="list-style-type: none"> • Epididymal cyst • Great toenail <ul style="list-style-type: none"> – Nail avulsion – Nail bed ablation • Herniae <ul style="list-style-type: none"> – Inguinal – Femoral – Incisional – Hiatus – Umbilical – Spegilan – Obstructed • Cholecystectomy <ul style="list-style-type: none"> – Open surgery – Laparoscopic surgery • Abdominal wound closure <ul style="list-style-type: none"> – Midline – Transverse – Retro-peritoneal <ul style="list-style-type: none"> o Wound debridement • Laparotomy • Bowel resection <ul style="list-style-type: none"> – Small bowel with mesentery – Large bowel with mesentery – Hartman's procedure – Anastomosis <ul style="list-style-type: none"> o Small bowel o Large bowel • Stomach <ul style="list-style-type: none"> – Over sewing of perforated duodenum ulcer • Formation of stoma <ul style="list-style-type: none"> – Colostomy – Ileostomy 		

	Required level of knowledge	Description
<ul style="list-style-type: none"> • Loop • Endoscopy <ul style="list-style-type: none"> – Upper GI – Rigid sigmoidoscopy – Flexible sigmoidoscopy – Colonoscopy – ERCP – Bronchoscope • Anal surgery <ul style="list-style-type: none"> – Piles: injection/RBL, – Haemorrhoidectomy • Vascular surgery <ul style="list-style-type: none"> – High tie long saphenous vein, – Avulsion varicose vein – Femoral embolectomy • Breast surgery <ul style="list-style-type: none"> – Wide local excision, – Guide wire localised excision, – Mastectomy, • Laparoscopic surgery <ul style="list-style-type: none"> – Diagnostic laparoscopy – Laparoscopic cholecystectomy , – Laparoscopic appendicectomy • Thyroid surgery <ul style="list-style-type: none"> – Lobectomy – Total/subtotal thyroidectomy • Tracheostomy <ul style="list-style-type: none"> – Percutaneous – Surgical 		

7B: General surgery – clinical/technical skills

Core general surgery skills		
	Required level of supervision	Description
Wound debridement	1	Surgeon showing: SCP assisting
Wound opening <ul style="list-style-type: none">Laparotomy	1	Surgeon showing: SCP assisting
Wound closure <ul style="list-style-type: none">Laparotomy	1	Surgeon showing: SCP assisting
Laparoscopy <ul style="list-style-type: none">Insertion of trocar and pneumoperitoneum	1	Surgeon showing: SCP assisting
Suprapubic catheterisation	1	Surgeon showing: SCP assisting

84 7C: General surgery – sub-specialty theoretical knowledge

Part II – Sub specialty general surgery – to be identified by sub specialty surgical care practitioners only

Principles of:	Required level of knowledge	Description
<p>Vascular surgical care practitioners Ruptured abdominal aortic aneurysm Acutely ischaemic limb Acute deep vein thrombosis Vascular trauma Post-operative complications of intra-peritoneal surgery Strokes Long saphenous vein surgery and sapheno-femoral disconnection Short saphenous vein surgery Endovenous procedures for varicose Veins Transthoracic endoscopic sympathectomy Skin grafting leg ulceration Carotid disease Claudication Lower limb bypass surgery</p>	4	Able to understand and use that knowledge
<p>Colorectal surgical care practitioners Right hemicolectomy Left hemicolectomy procedure Anterior resection Abdominal perineal resection Sigmoidcolectomy Ileo cecal resection (Crohns) Panproctocolectomy Subtotal colectomy</p>	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
Advanced laparoscopic procedures (related to practice) <ul style="list-style-type: none"> • Laparoscopic inguinal hernia repair • Laparoscopic colorectal surgery • Laparoscopic gastrectomy • Laparoscopic splenectomy • Laparoscopic adrenalectomy • Laparoscopic hellers myotomy 	4	Able to understand and use that knowledge
Breast surgery: surgical care practitioners <ul style="list-style-type: none"> • Sentinel node biopsy • Axillary sampling <ul style="list-style-type: none"> – Axillary dissection 	4	Able to understand and use that knowledge
Upper GI and hepato biliary surgical care practitioners <ul style="list-style-type: none"> • Liver surgery <ul style="list-style-type: none"> – Training Resection – Radiofrequency treatment • Pancreatic surgery <ul style="list-style-type: none"> – Whipple surgery – Upper endoscopy • Pancreatitis and its complications 	4	Able to understand and use that knowledge

∞ 7D: General surgery – sub-specialty clinical/technical skills

	Required level of supervision	Description
Upper GI and hepato biliary surgical care practitioners Upper GI endoscopy (only if undertaking/undertaken JAG accredited course)	1	Surgeon showing: SCP assisting
Colorectal surgical care practitioners <ul style="list-style-type: none"> • Flexible sigmoidoscopy (only if undertaking/undertaken JAG accredited course) • Rigid sigmoidoscopy 	1	Surgeon showing: SCP assisting
Breast surgery: surgical care practitioners <ul style="list-style-type: none"> • Punch biopsy • Fine needle aspiration 	1	Surgeon showing: SCP assisting
Vascular: surgical care practitioners Long and short saphenous vein harvest	1	Surgeon showing: SCP assisting

8A: Maxillofacial surgery – theoretical knowledge

Principles of:	Required level of knowledge	Description
Normal anatomy and physiology of the head and neck regions <ul style="list-style-type: none"> • Jaws, • Mouth • Head • Neck 	4	Able to understand and use that knowledge
Pathology of the: <ul style="list-style-type: none"> • Jaws • Mouth • Head • Neck 	4	Able to understand and use that knowledge
Principles of aesthetic surgery including the elderly and post-traumatic injuries	4	Able to understand and use that knowledge
Principles of surgical management of the airway	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the maxillofacial surgical patient <ul style="list-style-type: none"> • Ward management of ablative head and neck surgery and reconstruction • Examination and planning of complex facial anomalies like cleft lip and palate and craniofacial surgery • Examination, planning of ablative and reconstructive surgery, including microvascular tissue transfer 	4	Able to understand and use that knowledge
Clinical investigation of the maxillofacial surgery <ul style="list-style-type: none"> • Osseo-integration • Surgical management and planning of orthognathic surgery 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • Fractures of the cranio-facial skeleton • Maxillofacial injuries, including airway and soft tissues 	4	Able to understand and use that knowledge
Principles of the use of magnification for operating	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
Principles of management of the following conditions: <ul style="list-style-type: none"> • Benign and malignant facial skin lesions • Management of facial pain • Diagnosis and treatment of common surgical and medical conditions of the: <ul style="list-style-type: none"> – Face – Neck – Mouth – Jaws 	4	Able to understand and use that knowledge
Principles of relevant maxillofacial procedures: <ul style="list-style-type: none"> • Flap harvesting <ul style="list-style-type: none"> – Bone – Soft tissue flap harvesting – Cartilage grafts • Skin grafting <ul style="list-style-type: none"> – Split skin – Full thickness • Reconstruction including microvascular tissue transfer of the face, mouth and jaws • Facial deformity • Primary and secondary cleft lip and palate • Craniofacial surgery • Dento-alveolar surgery • Basic dento-facial prosthesis techniques • Reduction and fixation of facial bone fractures • Cosmetic facial soft tissue repair of the: <ul style="list-style-type: none"> – Mouth – Face – Head – Neck • Initial surgical care of cranio-facial trauma 	4	Able to understand and use that knowledge

8B: Maxillofacial surgery – clinical/technical skills

	Required level of supervision	Description
Familiarity with lupes and operating microscope	1	Surgeon showing: SCP assisting
Application of osseo-integrated implants to face, mouth and jaws	1	Surgeon showing: SCP assisting

9A: Otorhinolaryngology surgery – theoretical knowledge

Principles of:	Required level of knowledge	Description
Normal anatomy and physiology of the head and neck regions <ul style="list-style-type: none"> • Ear • Nose • Larynx and naso-pharynx 	4	Able to understand and use that knowledge
Physiology of otorhinolaryngology	4	Able to understand and use that knowledge
Understanding pre- and post-operative management of the otorhinolaryngology patient <ul style="list-style-type: none"> • Assessment and management of airway problems • Otology • Rhinology • Laryngology 	4	Able to understand and use that knowledge
Management of foreign bodies in <ul style="list-style-type: none"> • Ear • Nose • Larynx and naso-pharynx • Oropharynx and hyper pharynx 	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
Clinical investigation of the otorhinolaryngology surgery <ul style="list-style-type: none"> • Haematological • Biochemical • Histological • Microbiological • Radiological and imaging • Examination of the ear –auroscope • Examination under the microscope – dewax external meatus and mastoid cavity • Suction clearance for otitis externa and insertion of wick • Simple tests for hearing • Simple test of vestibular function • Examination of the neck <ul style="list-style-type: none"> – fine needle aspirate of masses • Use of the laryngeal mirror, and/or the flexible or rigid endoscope to examine the larynx and laryngoparynx 	4	Able to understand and use that knowledge
Management of the following symptoms <ul style="list-style-type: none"> • Epistaxis and its management • Management of facial fractures • Discharging ear • Otalgia and deafness • Nasal obstruction • Rhinorrhoea • ‘Sore’ throat • Hoarse voice • Difficulty with swallowing • Neck masses • Treatment of otitis externa 	4	Able to understand and use that knowledge
Familiarity with different types of hearing aids available and the technique of mould impression	4	Able to understand and use that knowledge
Principles of management of the following conditions: <ul style="list-style-type: none"> • Reduction of fractured nose • Incision/drainage of quinsy 	4	Able to understand and use that knowledge

Principles of:	Required level of knowledge	Description
<p>Principles of relevant ENT procedures:</p> <ul style="list-style-type: none"> • Emergency and elective tracheostomy • otology <ul style="list-style-type: none"> – Myringotomy and grommit insertion – Mastoid surgery – Incision/drainage of conchal haematoma – Myringotomy and grommet insertion – Middle ear procedure, – Myringoplasty, – Mastoid surgery, – Stapedectomy – Audiology and vestibular testing • Rhinology <ul style="list-style-type: none"> – Rigid nasal endoscopy – Flexible nasal endoscopy and examination of the post nasal space – Examination of the nose – anterior – Suction under endoscopic control of surgical cavity – Insertion and removal of a nasal pick and or balloon for epistaxis – Simple polypectomy – Biopsy of the nose and nasopharynx – Antral washout in the management of acute sinusitis – Drainage of septal haematoma, – Endoscopic sinus surgery, – Principles of rhinoplasty – Septal surgery – Submucous resection – Reduction of turbinates – Adenoidectomy and tonsillectomy • Laryngology <ul style="list-style-type: none"> – Direct laryngoscopy – Biopsy of larynx, pharynx and oral cavity – Incision/drainage of quinsy 	4	Able to understand and use that knowledge

9B: Otorhinolaryngology surgery – clinical/technical skills

Otology	Required level of supervision	Description
Examination of the ear using otoscope	1	Surgeon showing: SCP assisting
Examination under microscope with microsuction and ability to remove wax from the external auditory meatus and mastoid cavity	1	Surgeon showing: SCP assisting
Treatment of otitis externa by microsuction and insertion of a medicated dressing	1	Surgeon showing: SCP assisting

Appendix 5 Triggered assessments

(An example of an holistic operative competence assessment for a whole or part of an operation)

An operative competence assessment process suitable for core and specialty, part and full procedures (See GPPS RCSEng, 2003)

The process leading up to and for triggered assessments

The learner will:

- At the start of the assessment period have indicated and agreed with their supervisor the procedures/operations they hope to trigger during the attachment
- Collect evidence (a log) in their portfolio that these procedures had been practised and logged appropriate to the triggered assessment
- Provide evidence of their discussions with their supervisor on their progress and their readiness to trigger an assessment.

There are the following elements to the triggered assessment (providing a holistic assessment in real practice)

- Pre-operative
- Operative
- Post-operative
- Reflective account by trainee SCP
- Discussion by assessor with the senior nurse and the anaesthetist with supervisor and trainee SCP
- Debrief and final outcome decision by the supervisor
- Record of the outcome by indicating a level of supervision and advice for future processes.

Triggered assessment form for technical and operative procedures

- (An example of an holistic operative competence assessment for whole or part of an operation)

Name:

Specialty:

Supervisor:

Procedure/Operation:

Date:

The trainee must:	Assessor's comments	Outcome: tick if standard approved
Pre-operative Communicate appropriately with the other members of the theatre team		
Greet the patient appropriately and identifies the patient with the notes and takes/checks consent		
Confirm appropriateness of operation		
Confirm with patient the need to proceed		
Confirm/mark the operative site/side appropriately		
Prepare and position and drape the patient correctly		
Operative Performs the procedure/operation according to specialty protocol		
Post-operative Dress the wound appropriately		
Make operative record and post-operative plan		
Check patient in recovery		
Be able verbally to demonstrate a reasonable knowledge of the condition during procedure		
Demonstrates the attitudes and professional manner appropriate for a surgeon		
Reflective account of their performance		
Conduct a reflective debriefing after the procedure and presents it to the assessors		

Account of debriefing prior to final assessment outcome:

(Including ability to be realistically self critical in relation to this operation and the professional responsibilities involved in the process)

1. Comment by assessor of the use of theoretical knowledge

2. Comments from the assessor on the reflective notes of learner

3. Approved sign off/comment from senior nurse and senior anaesthetist

Assessment outcome

Learner name		Date
Assessor name		
Level	Definition	Level approved
1	Teacher showing: learner assisting	
2	Learner doing: teacher assisting	
3	Learner doing: teacher watching	
4	Learner doing: teacher within theatre dept/clinic	
5	Learner doing: teacher in the hospital	

Advice for the next step:

Signatures _____ Date _____

Supervisor _____ Trainee SCP _____

Other assessors

1. _____

2. _____

