HIGHER SURGICAL TRAINING IN UROLOGY

A Guide for Trainers and Trainees in the U.K and Ireland

CONTENTS

1. FOREWARD

By their very nature the content and regulation of surgical training programmes are part of a continuously evolving process which seeks to adapt and change to the progressive and developing requirements of both patients and service providers. By definition, therefore, publication of a manual for trainers and trainees can in one sense only be a 'snapshot' of the training process as it has evolved thus far and it may be expected that the process will continue to be revised and refined in response to developing healthcare initiatives.

Nevertheless exhaustive discussions within the Urological SAC, BAUS itself and other specialised committees have produced a broad consensus on the urological training process which is represented within this manual. The detail has been reviewed at length by the JCHST and passed for provisional implementation subject to approval by the STA (spring 2003). Hence each section contained within should be regarded by trainers and trainees alike as a consultation document which will undoubtedly evolve as experience is gained in the various training programmes; indeed feedback of strengths and weaknesses will be an essential part of future development. Publication of this hard copy will be accompanied by publication on the JCHST and BAUS websites which will facilitate future modification as and when necessary.

At the time of writing surgeons will be aware of far reaching changes to surgical training – BST and HST – that are being considered by the Department of Health. Regardless of these initiatives, the absolute requirement for certain skills and competencies to manage patients with specific urological disorders will remain unchanged; by contrast the timing and mechanisms by which this goal is achieved my be subject to considerable revision. Hence the core values represented in this manual will remain as valid targets for both trainees and trainers but the process by which the values are achieved can be expected to be subject to change which will be duly reflected in future revisions of the manual.

DAJ : NJRG : KJO'F : SRP February 2003

2. INTRODUCTION

This manual describes the process of training, the environment within which such training should take place and the mechanisms by which the trainee is assessed so as to enter the Specialist Register as a fully competent urological surgeon able to practice and function within the modern NHS.

The manual is intended for use by *both trainees and trainers* so that each knows precisely what is expected of them during the training period and each can clearly recognise a profile of success and failure. It is to be used (by the trainee) in conjunction with the **training portfolio** and the contents of this, mandated by the JCHST, are tabulated in section 7.

The structure, function and operation of the SAC in Urology is outlined so as to dispel misunderstanding and promote a unity of purpose between those who set and those who endeavour to uphold standards of training. The Urology Syllabus, the structured Curriculum and the formalised RITA assessment process are described as are the various competencies, both generic and specific, that have to be achieved in order to proceed further into the training programme. Broad guidelines are included as to which reading requirements, postgraduate course attendance etc, are required as training progresses. Finally, a series of appendices gives examples of documentation in use by many Deaneries within the UK with which both trainees and trainers need to be familiar so as to smooth and harmonise the assessment process.

The manual draws on documents previously circulated and revised by the SAC (Mundy, Neal, Williams) as well as work initiated by the College and HST curriculum development team, in turn influenced by the Canadian CanMEDS 2000 competency assessment project. Much detail of annual assessments and methodology has been assimilated from the North West Urological HST training manual (Ed. Andy Jones, Kieran O'Flynn, Steve Payne) initially published in 1999.

SECTION 3

OVERVIEW: The pathway to consultant urological practice

To be appointed as a consultant in the United Kingdom, a candidate must be on the Specialist Register of the General Medical Council. In order to qualify, a trainee in the UK will have to obtain the Certificate of Completion of Specialist Training (CCST). Overseas candidates and graduates from recognised training schemes within the EEC can sometimes be appointed to the Specialist Register after scrutiny by the Vetting Committee of the GMC. Further details can be obtained from the Intercollegiate Joint Committee on Higher Surgical Training (JCHST- **www.jchst.org**)

It is generally accepted by the SAC, Royal Colleges and the Postgraduate deans that a broad range of skills/competencies are required to practice as a consultant urologist. These skills are 75% interpersonal and academic and 25% technical. This ratio broadly reflects the areas identified as problematic in cases referred to the GMC's 'Fitness to Practice Committee'.

Higher surgical training in urology is a six year programme comprising five years in clinical training and one year in flexible training. In general the first four years comprise training in 'core urology' (see yearly curriculum). The flexible year may be spent in full time research, but counting research time towards the flexible year is not compulsory and many trainees will prefer to use it to develop a particular interest or visit units abroad. The final two years of the programme include exposure to more complex aspects of urology and would often include the trainee becoming exposed to a particular sub-specialist interest. The joint Intercollegiate Examination (FRCS [Urol]) is taken after four years of training.

THE FRCS (UROL) EXAMINATION

Award of the CCST in urology depends in part upon successful completion of the Intercollegiate specialty examination. The FRCS (Urol) examination can only be taken by those trainees who have completed their fourth year assessment (RITA C) to the satisfaction (supported in writing) of their Programme Director. The examination has five parts, an MCQ test, a spot test and three paired oral examinations.

The precise details of the exam structure and the thinking behind the testing format are noted in section 4 (the syllabus) on page 13. Success in the exam should not be regarded as a licence to practice but more a passport to further honing of skills and the development of a suitable subspeciality interest within the last 2 years of training. The operating and competence summary sheets for the final years will reflect this diversity of interest.

CERTIFICATION OF COMPLETION OF SPECIALIST TRAINING (CCST)

Finally, the award of a CCST in urology indicates that a surgeon is competent to practise as part of a team in core urology as defined by the SAC curriculum and certified logbooks. The surgeon will have the required skills, knowledge, attitudes and work practices that will enable him/her to practice within a defined clinical structure that will allow him/her to develop in future years as the speciality itself develops.

In addition, as noted above, most SpRs awarded the CCST will have acquired some expertise in sub-specialist areas of urology. It is incumbent on the trainee that the levels of competence achieved are recorded in the operative logbooks, together with relevant research, records of training courses attended and an audit of personal cases performed. This portfolio will in essence define the level of sub-specialist activity at which an individual will be competent to perform and the typical documentation required to support such practice is outlined in this manual. The portfolio will continue to develop in consultant practice.

It is anticipated that in some sub-specialist areas, newly appointed consultants will need to continue to develop their expertise with the help and guidance of colleagues, particularly in the management of complex and rare disorders. Newly appointed consultants to such posts will need to have attained a high level of technical skills during sub-specialist training and shown the necessary aptitude and ability to function effectively as part of a consultant team.

Summarising, it is no longer realistic to consider a consultant as an independent clinical practitioner, capable of undertaking all facets of urology. Increasingly, most newly appointed consultants work in teams and frequently have a nominated sub-specialist interest. Successful trainees who have obtained their CCST in urology might therefore be defined as *'competent to practice within a defined clinical structure.'*

SECTION 4

A

SYLLABUS FOR UROLOGY

SAC in Urology

INTRODUCTION

The syllabus for urology is - urology. The Intercollegiate Speciality Examination is part of the preparation for consultant practice. There is no syllabus for urology outpatients. The syllabus, as written, should be interpreted in this light. Its aim is to state explicitly what a candidate would be expected to know and what an examiner might ask in the Intercollegiate Speciality examination, emphasising particularly those subjects of which a fairly comprehensive knowledge is expected.

A comprehensive urological knowledge requires regular reading, both of textbooks and journals. Teaching as part of training programmes can supplement, but not replace, regular planned study throughout training. Campbell's "**Urology**", Gillenwater's "**Adult and Paediatric Urology**", Whitfield and Hendry's "**Textbook of Genito-Urinary Surgery**", Blandy and Fowler's "**Urology**", Mundy, Fitzpatrick, Neal and George: "**Basic Science in Urology**", Isis Publications,1999, and Krane, Siroki and Fitzpatrick's **"Clinical Urology"** are the best known texts, and other more specialised texts may be consulted about specific topics. A candidate will be expected to have a knowledge of the important publications on a subject and their authors, particularly in recent editions of important journals such as the BJU International and the Journal of Urology. Urologic Clinics of North America provide good regular reviews of the literature, and Urology and European Urology also publish important papers. The Update series of the BJUI International provides good educational reviews.

The Intercollegiate Specialty Examination in Urology has five parts, an MCQ, a spot test and three paired oral examinations which currently cover the topics shown. The purpose of the examination is to define the border of safe and effective practice. In other words, the examination is a "criterion referenced" examination to determine "pass" and "fail".

1a Oncology	1b Paediatric urology
2a Stone disease, endourology and infection	2b Applied patho-physiology; nephrology, transplantation and principles of urology
3a Trauma, female urology and reconstruction	3b BPH, andrology and bladder dysfunction

(The content of the orals is reviewed periodically)

MCQ, Spot Tests and Orals

The MCQ and spot test will be based on essential or "core" knowledge without which safe and effective urological practice is impossible. The oral examinations will provide an opportunity to explore topics in greater depth, allowing the better candidate to add to his marks (and perhaps aspire to the Keith Yeates medal which is awarded for an outstanding performance) and help the borderline candidate to improve his/her position. However, it should be noted that at each stage (until the final adjudication) the examiners are not aware of the candiates' performance in other parts of the examination. Although the syllabus does coincide approximately with the topics covered in each oral as listed above, it should not be read as a series of "mini-syllabi" for the orals, as some overlap (eg urodynamics) in assessment of BPH and in female urology is inevitable.

The following detailed listings should not be regarded as exclusive. As practice evolves new subject matter will inevitably enter the urological sphere and this will be reflected in appropriate updates of the syllabus. Those looking for an absolute definition will find it in the first sentence of this section.

BENIGN PROSTATIC HYPERPLASIA

- The anatomy of the prostate with particular reference to "zones" and to glandular/stromal tissue
- The embryology of the prostate
- Growth factors in the prostate
- The function of prostate and its role in ejaculation and fertility
- The endocrine control of the prostate
- The aetiology and pathogenesis of BPH
- The pathology of BPH
- The clinical features of BPH - understanding of the concepts of benign prostatic hyperplasia, prostatic enlargement, bladder outflow obstruction and lower urinary tract symptoms; their interrelationship and correlation
- The role and value of symptom scores in the assessment of patients with lower urinary tract symptoms
- The appropriate use of investigations and their pitfalls, particularly in relation to flow rate studies and urodynamics
- Interpretation of flow rates and urodynamic studies in relation to the diagnosis of outflow obstruction
- The urodynamic nature and pathophysiology of outflow obstruction
- A familiarity with the urodynamic literature on the relationship between detrusor instability and outflow obstruction. The urodynamic definition of outflow obstruction
- The inter-relationship between BPH, detrusor instability, detrusor failure and ageing
- The management of BPH and of bladder outflow obstruction
- The management of acute and chronic retention of urine and other complications of BPH
- Standard surgical treatments, particularly transurethral resection of the prostate, and their complications
- The follow up and the assessment of the results of treatment of bladder outflow obstruction
- An appreciation of the literature concerning the results of TUR
- Alternatives to prostatectomy in the treatment of BPH
- The physiological basis of alpha blockers and 5 alpha reductase inhibitors showing an understanding of the indications for their use and their value.
- Catheterisation
- The role of lasers, stents, and other new technology

ANDROLOGY

- Spermatogenesis, sexual behaviour, erection and ejaculation and their endocrine control
- Age related changes in erectile dysfunction and fertility
- The effect of urological disease and its treatment on erectile function, ejaculation and fertility
- The causes of erectile dysfunction

- The investigation of erectile dysfunction with an appreciation of sources of error in their interpretation
- An understanding of the role of penile prosthesis in the treatment of erectile dysfunction
- Peyronie's disease - its nature, clinical features and treatment
- Priapism - its causes and their differentiation and the treatments available
- The causes and treatment of retrograde ejaculation
- The causes of infertility
- The controversy surrounding varicocoele and its effect on fertility; the technique, pitfalls and interpretation of semen analysis and the use of hormone assays
- The role of scrotal exploration, vasography and testicular biopsy
- The treatment of infertility including the appropriate use of surgery and non-surgical treatments
- Vasectomy including counselling prior to vasectomy, techniques, early and late complications
- Vasectomy reversal including counselling patients pre-operatively, technique and results
- The various types of artificial conception and the principles of such treatments

BLADDER DYSFUNCTION

- The anatomy, physiology and pharmacology of the lower urinary tract
- The physiology and hydrodynamics of bladder filling and emptying and the higher centres involved in their control. The effect of various pharmacological agents on these activities and their mechanism of action
- Clinical assessment of bladder dysfunction and its pitfalls
- Urodynamic evaluation of lower urinary tract function
- The distinction between disorders of contractility and disorders of compliance
- Detrusor instability - its nature, causes, diagnosis and treatment
- Impaired detrusor contractility - its nature, causes, clinical features, diagnosis and treatment and particularly its association with ageing and with bladder outflow obstruction
- Clean intermittent self catheterisation and a detailed appreciation of its use, value and complications
- Drugs used in the treatment of bladder dysfunction and the details of their pharmacological action and side effects
- An appreciation of the contributions of the ISC Standardisation Committee
- The role of electrical stimulation in the treatment of bladder dysfunction
- Neuro-urology, management of spinal injuries with respect to disordered bladder function.
- Surgical management of neurogenic bladder dysfunction

TRAUMA

- The assessment and general management of a patient following injury
- Hypovolemic shock - its patho-physiology, clinical features, diagnosis and management
- The nature, presentation and distinction between different types of blunt and penetrating injury
- The inter-relationship between urological and other types of injury and their relative importance

- Renal injury - types, classification, investigation, management and indications for surgery
- The causes, presentation, investigation and management of ureteric injury with particular reference to gynaecological and urological iatrogenic trauma
- The causes, presentation, investigation and management of bladder trauma
- The causes, presentation, investigation and management of urethral trauma with particular reference to pelvic fracture injuries and straddle injuries
- The causes, presentation, assessment and management of genital injury including fractured penis and domestic injuries

FEMALE UROLOGY

- Hormonal influences on female bladder function, the effects of pregnancy (infection and ureteric obstruction)
- Hormonal influences on female bladder function
- The correct use of antibiotics, including use in pregnancy and in patients taking oral contraception
- The nature, presentation, diagnosis and management of urethral syndrome
- The nature, presentation, diagnosis and management of interstitial cystitis and related sensory disorders
- The causes, presentation, diagnosis and management of urinary fistulae to the female genital tract
- The nature, presentation and effect of vaginal prolapse and its inter-relationship with urinary and ano-rectal dysfunction
- The assessment and management of women with genuine stress incontinence alone and when combined with detrusor instability, voiding dysfunction or prolapse
- The causes, pathophysiology, clinical features, investigation and treatment of genuine stress incontinence including non-surgical and surgical treatments
- The roles of transvaginal and open surgery; techniques, success rates and complications both short and long-term
- The artificial urinary sphincter and its role in genuine stress incontinence
- The role of periurethral injections and other minimally invasive treatments in genuine stress incontinence
- Urethral diverticulum - causes, presentation, diagnosis and management
- Other cystic/mass lesions palpable through the anterior vaginal wall

RECONSTRUCTIVE UROLOGY

- The general appreciation of the role of reconstructive surgery in the treatment of patients with congenital anomalies of the urinary tract
- A general appreciation of the indications for and techniques of augmentation and substitution cystoplasty and continent diversion
- The long-term complications of enterocystoplasty with particular reference to acid base balance and its consequences, bacteriuria and malignant change
- A general appreciation of the role of urethroplasty in the treatment of patients with urethral strictures
- A general appreciation of the techniques used in the management of ureteric injury
- A general appreciation of the medico-legal aspect of iatrogenic and traumatic injury and their implications in the management of such patients
- Urological problems in adolescence with urological problems particularly as a result of congenital anomalies, and their sexual connotation

ONCOLOGICAL UROLOGY

- The general pathology of cancer - its causes, development, invasion and spread; clinical features and diagnosis; tumour markers and related diagnostic and prognostic factors; the role of surgery, radiotherapy, chemotherapy and immunotherapy and its treatment; the care of the terminally ill patient
- The genetic basis of urological malignancies
- The histopathology, presentation, investigation, assessment and management of a patient with renal cell carcinoma including the results of surgical treatment and an appreciation of the role of radiotherapy, chemotherapy, immunotherapy, endocrine therapy and embolisation
- The technique of radical nephrectomy
- Tumours which simulate renal cell carcinoma, their distinction and management
- The role of partial nephrectomy in managing renal tumours
- Von Hippel-Lindau disease and other conditions with which renal cell carcinoma is associated
- Transitional cell carcinoma - its aetiology, pathology, staging, grading and progression including its presentation as an industrial disease
- The chromosomal and molecular biological factors involved in the progression from normal urothelium to malignancy and on to invasiveness and metastases
- The clinical presentation, assessment and management of transitional cell carcinoma
- Invasive potential of superficial bladder cancer; its incidence, determination and prognostic factors
- The surgical treatment of superficial bladder cancer and the role of intravesical
- chemotherapy
- Industrial bladder cancer, occupations at risk and an appreciation of the principles of case control studies and other methods of investigation
- The management of carcinoma in situ of the bladder
- The surgical treatment of advanced bladder cancer and the role of radiotherapy
- A general appreciation of the role of systemic chemotherapy in the patient with locally advanced or metastatic bladder cancer
- A general appreciation of the techniques of orthotopic bladder substitution or continent urinary diversion as an alternative to ileal conduit diversion after cystectomy
- The presentation, diagnosis and management of transitional cell carcinoma of renal pelvis and ureter
- A general understanding of the aetiology, prognosis and management of squamous cell carcinoma and adenocarcinoma of the bladder
- The aetiology, pathology, staging, grading, invasion and spread of prostate cancer
- The epidemiology of prostate cancer, including geographical and racial variations in incidence, familial prostate cancer and an appreciation of current understanding of aetiological factors
- The clinical features and presentation of carcinoma of the prostate
- PSA; its role in screening, diagnosis and follow up of prostate cancer
- T1 prostate cancer, with reference to incidental disease found at TURP and T1c disease
- The investigation of prostate cancer including the appropriate use of PSA and a bone scan and other staging investigations
- The management of early prostate cancer, selection of patients for radical prostatectomy, radiotherapy and watchful waiting

- The role of watchful waiting, hormonal treatment and radiotherapy in patients with advanced prostate cancer
- The principles of endocrine therapy of prostate cancer
- The treatment of metastatic prostate cancer
- Appreciation of the inter-relationship between gynaecological and colo-rectal
- malignancy and the urinary tract
- Pre-malignant lesions of the penis, the aetiology, histopathology, development, spread, diagnosis and management of squamous cell carcinoma of the penis
- The aetiology and classification of tumours of the testis with particular reference to seminoma and non-seminomatous germ cell tumours of the testis
- The nature of tumour markers and their role in the diagnosis, management and follow up of patients with testicular tumours
- The significance of carcinoma in situ of the testis and the role of contralateral testicular biopsy
- Classification of and understanding of the management of testicular tumours other than adult germ cell tumours
- The presentation, assessment and diagnosis and treatment of these testicular tumours including the role of surgery, chemotherapy and radiotherapy
- The principles of statistics with particular reference to trial design and studies of cancer treatment

PAEDIATRIC UROLOGY

- Peri-natal urology - embryology of renal tract, anatomy and physiology.
- Assessment of renal function in the neonate
- Antenatal diagnosis and management of anomalies. Management in neonate
- The foreskin, its anomalies and complications. Circumcision - its history, indications, techniques, results and complications. Relationship to penile cancer
- The undescended testis - the current views on aetiology, presentation, diagnosis, management and its association with infertility and testicular tumours. The acute scrotum in childhood. Torsion of testis and torsion of Hydatid. Scrotal swellings in childhood, congenital hydrocoele and its management.
- Penile abnormalities; hypospadias - clinical assessment and principles of surgical correction. Chordee, epispadias and micropenis - general principles.
- The diagnosis and rational; approach to investigation of urinary tract infection in neonates and in childhood. The significance of urinary tract infection in boys and in girls
- Vesico-ureteric reflux; its pathophysiology, grades of severity, implications for renal function, assessment and management. Principles and rationale of surgical treatment
- Renal masses and their differential diagnosis. Pathology and management of Wilms' tumour
- The assessment and management of urinary incontinence in childhood
- Pelvi-ureteric junction obstruction - its nature, pathophysiology, presentation, diagnosis and treatment including an appreciation of the diagnostic problems and the relative roles of the available investigational modalities. Duplications of the upper urinary tract and ectopia; understanding of basic anatomy and of clinical relevance
- The "wide ureter" classification, diagnosis and management
- The clinical diagnosis of posterior urethral valves
- A general understanding of other congenital conditions (eg prune belly syndrome) which can be associated with urological abnormalities
- Intersex - basic overview including clinical diagnosis and principles of surgical management of common conditions such as congenital adrenal hyperplasia

- Imaging techniques in children; differences to investigation of adults. The role and interpretation of antenatal ultrasound detection of urinary tract abnormalities in the foetus

STONES AND ENDOUROLOGY

- The aetiology, presentation, investigation and management of the patient with stone disease
- The biochemical and biophysical factors involved in the generation of urinary stone disease with particular reference to calcium oxalate, urate and triple phosphate stone disease
- The biochemical investigation of patients with recurrent urinary stone disease
- The surgical treatment of renal calculi including PCNL and open surgery
- The mode of action of extracorporeal energy sources used in the treatment of stone disease and their application to patients with renal and ureteric calculi
- The significance and management of infective staghorn calculi
- Ureteric calculi and their endoscopic treatment
- The assessment and management of bladder stones
- PCNL, ureteroscopy and other aspects of endourology
- Endourological treatment of upper tract malignancy
- Principles of laparoscopy
- Laparoscopic procedures applied to urology

URINARY TRACT INFECTION

- The bacteriology of acute pyogenic upper and lower urinary tract infection
- The aetiology, presentation, clinical features, investigation, diagnosis and treatment of upper and lower urinary tract infection
- The general principles of antibiotic chemotherapy and chemoprophylaxis with particular reference to the urinary tract
- Diagnosis and management of gram negative septicaemia
- The aetiology, clinical features, investigation, diagnosis and treatment of prostatitis and its various sub-types
- Viral diseases of the genital tract including urethral condylomata, AIDS and herpes
- The aetiology, clinical features, investigation, diagnosis, surgical and non-surgical treatment of tuberculosis of the urinary tract
- Management of radiation induced cystitis
- The aetiology, clinical features, investigation, diagnosis, non-surgical and surgical treatment of schistosomiasis affecting the urinary tract
- Drug and chemical induced cystitis and its management & prophylaxis

NEPHROLOGY AND TRANSPLANTATION

- The structure and function of the kidney including glomerular and tubular physiology
- Obstructive nephropathy with particular reference to pelvi-ureteric junction obstruction, its pathophysiology, investigation and treatment
- The aetiology, pathophysiology, diagnosis and treatment of acute renal failure with particular reference to hypovolemic shock, septicaemic shock and obstructive nephropathy

- The causes, investigation and management of a chronic renal failure from a surgical perspective
- A general knowledge of the inter-relationship between hypertension and renal disease. The consequences of analgesic nephropathy
- A general appreciation of glomerular and tubular disease of the kidney and its manifestations and investigation
- The role of peritoneal dialysis, haemodialysis and haemofiltration in the management of acute and chronic renal failure
- The general principles of access surgery for such treatments
- A general knowledge of the techniques of renal retrieval and renal transplantation, including an appreciation of the ethical issues involved, and selection of organ donors
- The principles of immunology and immuno-supression
- The results and complications of renal transplantation with particular reference to the urological complications of transplantation

APPLIED PATHO-PHYSIOLOGY, NEPHROLOGY, TRANSPLANTATION AND PRINCIPLES OF UROLOGY

At entry into the SpR grade, trainees should have knowledge of the principles of basic sciences (anatomy, biochemistry physiology, pharmacology, and pathology). This knowledge would include basic sciences relevant to assessment of critically ill and peri-operative patients. The Senate of Surgery has particularly emphasised the need for a knowledge of applied anatomy. The core knowledge would include:

- Principles of anaesthesia and local anaesthesia
- Pain control
- Applied cardio-respiratory patho-physiology relevant to clinical examination and surgery
- Patho-physiology in children, the elderly and those with intercurrent disease
- Knowledge specific to the specialty including regional anatomy, molecular biology, laboratory based scientific research and relevant systemic pathology. Some of these points are outlined in the individual sections above with particular reference to:

- Normal structure (macroscopic and microscopic), physiology and function, including relevant neurology, neuropharmacology, biochemistry, and cellular and molecular biology
- Disordered function - aetiology, pathophysiological response (at macroscopic, microscopic and molecular level) and local, distant and systemic consequences
- In addition, a knowledge of statistics and trial design, and the scientific principles of surgical and non surgical treatment of urological disorders
- Basic principles of cell biology, cell structure and biochemistry
- Principles of renal physiology, effects of disease, renal failure
- Common metabolic problems seen in urological patients
- Principles of stone formation
- Structure and function of the lower urinary tract
- Male sexual function, androgen receptor, prostate physiology
- Embryology
- Energy sources
- General principles of tumour biology applied to urology
- Embryology and intersex
- Principles of immunology
- Clinical trials and screening
- Principles of wound healing, inflammation and coagulation

INVESTIGATIVE& TECHNICAL ASPECTS

- An understanding of the biochemical, haematological and bacteriological tests used in urology
- The measurement of renal function by biochemical means
- A general appreciation of the methods used in histopathology with specific reference to biopsy techniques and the initial handling of surgical specimens
- A general understanding of the principles of urological investigations with particular emphasis on the safe use of X-rays, radioisotopes and lasers
- Imaging the urinary tract radiologically and by ultrasound; the use of nuclear medicine techniques
- Principles of sterilisation and asepsis, particularly as applied to endoscopes
- Radiobiology and the principles of therapeutic use of external beam radiotherapy and radioisotopes
- Principles of diathermy and associated hazards

SAC in Urology 2000

SECTION 5

Urology Curriculum

The SAC in Urology

October 2001

Introduction

Urology is a relatively small surgical specialty with about 500 urologists in the whole of the British Isles. There are about 220 trainees. Each of the training programmes within a given Deanery, houses 12 to 16 approved training "slots" with the exception of the Thames Region where there are in the order of 30 in South Thames and 45 in North Thames. In common with a number of other small surgical specialties we have held the view that within a Deanery, it might be difficult for an individual trainee to acquire skills defined in the curriculum for any given specific year. We have always recognised the critical importance of defining the curriculum for "core" urology and more advanced training in complex urology. The following curriculum is defined as Level 1 (years 1 and 2); Level 2 (years 3 and 4) and Level 3 (years 5 and 6).

Generic skills

These are skills that will be gradually taught and learned over the whole of the curriculum. The programme director will target each of these to best benefit individual trainees.

Epidemiology, Research, Statistics and Audit

Objectives

The trainee should be able to:

1. understand epidemiological techniques (e.g. cohort studies and case control studies, cumulative rates, calculation and assessment of bias)

2. understand population parameters and sampling techniques

3. compute and interpret measures of comparisons of means and variations

4. understand randomised control trials and techniques of meta-analysis

5. analyse a presented experiment and construct a hypothetical experiment with respect to the question examined, the hypothesis, the sampling technique including sampling bias and sample calculations, the expression and correlation of raw data and simple eg log transformations, the selection and application of appropriate statistical tests, the significance of the results and conclusions, the appropriate inferences which can be obtained.

6. apply the following statistical tests:

a. parametric tests such as unpaired, paired t tests, analysis of variance
b. non parametric tests
c. correlation and regression
d. multivariate analysis
e. chi squared analysis
f. define the term significance, confidence interval, type 1 error, type 2 error
g. perform statistical analysis of assay data and evaluation of quality control
h. understand the value of discussion and collaboration with statistical advisers
i. understand disease surveillance systems and disease registries
j. understand the need for organisation of and implementation of screening programmes

7. The trainee should be familiar with:

a. experimental design (e.g. laboratory, epidemiology)

b. data acquisition, storage, interpretation and statistical analysis

c. scientific writing and presentational skills including the formation of a grant application

d. conducting clinical audit and feedback and to be able to utilise data collection systems

8. The trainee should attend appropriate National and, where possible, International meetings relevant to their interest.

9. The trainee should build up a log of research training that might include:

a. Thesis

b. Papers published

c. Papers presented

d. Presentations at local or national meetings or courses

e. Papers reviewed at local training meetings

Teaching

Objectives

The trainee should gain experience in teaching that must include:

1. some responsibility for teaching junior staff in their area
2. full participation in the unit's postgraduate programme with some administrative responsibility for the organisation of teaching in their area
3. participation in the undergraduate teaching programme
4. gain experience of appraisal and assessment techniques
5. attendance at a "teaching the teachers" course
6. attendance at an "assessment and appraisal" course

Ethical and Legal Aspects

Objectives

The trainee should be able to discuss the ethical and legal aspects of their clinical practice and should have particular knowledge of the relevant areas listed below;

1 legislation particularly recent relevant to their practice
2. ethics of health care provision and resource allocation
3. medical confidentiality

4. consent
5. nature of consent, knowledge, capacity, voluntariness
6. treatment of minors
7. treatment of the incapacitated patient
8. medical negligence, role and relevance of ethics committees
9. involvement in clinical trials
10 the impact of new biology applied to their decision making, treatment option and clinical management.

Administration and management

Objectives

The trainee should be given some administrative experience and responsibility which will allow the development of skills relevant to the future provision and organisation of clinical services. Types of relevant knowledge and experience are listed below:

1. attendance at a management course
2. attendance at a "time management" course
3. an understanding of health service organisation and administrative and advisory structures
4. an understanding of the mechanisms of health care purchasing, provision of care, resource allocation and contractual issues relevant to the clinical service
5. be cognisant of the need for regional referral systems and the role of tertiary service in health care provision
6. the system of managing hospital complaints
7. know how to review a service and formulate a business plan.

Level 1 - Years 1 and 2

Basic science and nephrology knowledge

- Statistics and principles of epidemiology.
- Anatomy and embyrology of the urinary tract.
- The physiology of the kidney in relation to urine production.
- Control of blood pressure.
- The endocrine control of the genital tract.
- Physiology of bladder function, the effects of obstruction to the upper and lower urinary tract.
- The pharmacology of commonly used drugs, the pharmacology of drugs affecting renal function.
- Basic principles of radiological and isotope imaging.
- Use of tumour markers in urology.
- Effects of anticoagulants and immunosuppressants.
- Principles of urinary infection

Theoretical and Practical Clinical Skills

Thoretical

- Management of septicaemia.
- Cardio-respiratory resuscitation.
- Fitness for anaesthesia.
- Pain control.
- Fluid balance.
- Deep vein thrombosis prophylaxis.
- Management of common associated medical conditions, e.g. diabetes, hypertension, anticoagulants, immunosuppressants, respiratory disease, chronic renal failure.
- Nutritional support.

Clinical Skills

- Insertion of urethral and suprapubic catheters.
- Penile injection and aspiration.
- Chest drain.
- Transrectal ultrasound scanning.
- Basic urodynamics.
- Central line insertion and management.
- Timing of images and position of patients undergoing intravenous urography.
- Urethrography.
- Urinalysis.

Decision Making, Treatment Option and Clinical Management

- The importance of decision-making in relation to the patient' s age and general well being.
- Guidelines and evidence based medicine: the development and use of protocols.
- Lower urinary tract symptoms, decisions and management based on fluid input/output charts, urodynamics and an understanding of the pharmacology of the lower urinary tract.
- The management of acute and chronic retention.
- Stones: management of ureteric colic based on knowledge of the anatomy, physiology of urinary tract obstruction and related pharmacology.
- Knowledge of treatment options including percutaneous nephrostomy, JJ stent insertion, lithotripsy in situ, push bang.
- The interpretation of the intravenous urogram and need for urgent upper tract drainage.
- Oncology: understanding of aetiological mechanisms of cancer and particularly the industrial causes of bladder cancer. TNM and other relevant staging systems. Investigation (including screening procedures) principals of cancer treatment. .
- Paediatric: the differential diagnosis and investigation of acute scrotum.
- Consent: obtain informed consent for common urological procedures.

- Inter-personal skills, communication, team-working, self motivation, commitment to self-directed learning. .
- Demonstrate communication with patients, colleagues and other members of the clinical team.
- Delivering "bad news". Bereavement counseling

Surgical skills and manual dexterity

- Skin preparation
- Suture materials
- Diathermy
- Tissue handling

Dextrous skills - endoscopic

- Flexible cystoscopy
- Rigid endoscopy
- Retrograde pyelography.
- Stent removal
- Bladder biopsy.
- Bladder diathermy.
- Bladder neck incision
- Transurethral resection under supervision completing small resections
- Optical urethrotomy

Open skills

- Circumcision.
- Hydrocoele.
- Epididymal cysts.
- Scrotal exploration for torsion.
- Inguinal orchidectomy.
- Vasectomy.
- Under supervision: laparotomy, small bowel resection and anastomosis, simple nephrectomy, cystolithotomy, suprapubic approaches to the bladder and prostate, opening and closing standard abdominal loin and suprapubic incisions.

Postoperative Management

- Pain control.
- Recognition and treatment of TUR syndrome.
- Respiratory failure; recognition and treatment.
- Assessment and maintenance of fluid balance.
- Blood transfusion.
- Postoperative monitoring.
- Surgical sepsis.

Level 2 - Years 3 and 4

At this level the trainees should be able to provide a safe opinion and carry out procedures in the generality of urology.

Basic science and nephrology knowledge.

- Principals and application of surgical diathermy, lasers and lithotripsy.
- Principals of dialysis, renal preservation and immunosuppression.
- Immunotherapy.
- Knowledge of oncogenes, growth factors and angiogenesis factors in relation to urological tumours.
- Hepatitis B, C.
- HIV. Theoretical and practical clinical skills.

Theoretical and practical clinical skills

- The interpretation and investigation of disorders of cardio-respiratory function and renal function.
- Urinary tract and genital dysfunction caused by disease, injury and surgical intervention.
- Pathophysiological differences in children, the elderly and patients with intercurrent disease.
- Uses and pitfalls of ionising radiation.
- Principles of epidemiology and screening.
- Principles involved in the treatment of male reproductive dysfunction (IVF, ICSI). Decision making treatment option and clinical management.

Decision making treatment option and clinical management

- Stones: Treatment plans for stones in the upper and lower urinary tract.
- Lower urinary tract dysfunction: Treatment plans for patients with lower urinary tract symptoms taking into account age, fitness, urodynamic findings, size of prostate, management of TUR syndrome, post obstructive diuresis.
- Assessment and treatment options of patients with urinary incontinence.
- Assessment and basic management of patients with neuropathic bladder.
- Oncology: Current standards for the treatment of all urological cancers.
- Treatment options for the management of localised prostate cancer.
- Treatment options including intravesical and adjuvant treatments for bladder cancer
- Treatment options for testicular cancer
- Investigation and treatment options for men with infertility.
- Paediatrics: Aetiology and management of antenatally diagnosed hydronephrosis, enuresis and bladder disorders.
- The management of vesicoureteric reflux.
- The management of urinary tract infection.
- The management of ureterocoeles, duplex systems.
- The principals of management of urethral valves and hypospadias repair.

Clinical skills

- Transrectal ultrasound and biopsy.

- Uses and dangers and complications of ionising radiation including radiation protection of patients and users.
- More advanced urodynamics.

Surgical skills and manual dexterity

- Paediatric cystoscopy.
- Ureteroscopy.
- Bladder neck incision.
- Transurethral resection of tumours and prostate.
- Insertion of JJ stent.
- Urethrotomy.

Open procedures

- Orchidopexy.
- Ligation of varicocoele.
- Vasovasotomy.
- Colposuspension / TVT
- Retropubic prostatectomy.
- Ileal conduit diversion.
- Pyeloplasty.
- Simple and radical nephrectomy.
- Insertion of peritoneal dialysis catheter.

Postoperative Management

- Indications for ITU, HDU
- Blood product usage
- Antibiotic usage
- Sterilisation

Level 3: Advanced Training in More Complex Urology ; Years 5 and 6

General urology

The trainee will continue to consolidate their skills in general urology, but will be attached the two years to a training attachment that can provide exposure to more complex urology. These areas will include:

1. Andrology
2. Endourology
3. Female urology
4. General urology
5. Oncology
6. Paediatric urology
7. Reconstruction
8. Transplantation

Curricula available **www.jchst.org**

Section 6

STANDARDS OF HIGHER UROLOGICAL TRAINING

SAC IN UROLOGY

This document gives an overview of urological training and sets standards against which training will be assessed in the two areas for which the SAC has responsibility.

Higher surgical training programmes
Training standards for individual hospital units

Introduction

This paper summates work done over the past few years to define standards against which programmes and their component units can be assessed to promote good practice and indicate the process of securing remedial action. This document assumes the General Medical Council guidance on good medical practice and the Royal College of Surgeons of England guidance on good surgical practice, September 2002, has been read and applied.

Basic Surgical Training (BST)

Surgical training commences during Basic Surgical Training (BST) during which the trainee is exposed to various aspects of surgery including Accident and Emergency, General Surgery, Orthopaedics and Trauma, and of course Urology. At the end of BST, the trainee will take the MRCS. Specific assessment of competence to proceed from BST to HST is under discussion by the Colleges at the present time.

HIGHER SURGICAL TRAINING PROGRAMMES

This document needs to be read in conjunction with the document ***"A syllabus for Urology"*** and the ***Urology Curriculum*** published by the SAC in Urology (sections 4 and 5).

1. Organisation of training

Higher training and subsequent recognition by the GMC is currently under the aegis of the Specialist Training Authority (STA). The final CCST is awarded by the STA. The authority is delegated to the JCHST and then to the relevant Specialist Advisory Committee (SAC).

2. The SAC

Who is on the SAC?

BAUS nominated

Mr. G. Williams – Chairman, Mr. FJ Bramble*, Mr. DD Fawcett, Mr. KK Sethia, Mr. PD Ramsden, Professor F Hamdy, Mr. M Harrison, Mr M Bailey Mr. G Conn* (Chairman of Intercollegiate Examination Board), Mr. I. Eardley* (Director of the BAUS Office of Education),

Joint College Representatives

Mr. NJR George, Mr. K. Baxby, Professor D. Kirk, Mr K O'Flynn

Society of Academic Urologists, UEAMS Representative and Trainee Representative

Professor JK Mellon, Mr. P. Whelan*, Mr. M. Johnson

Invited member from The Irish Society of Urology

Mr. J. Thornhill * Ex officio

The Lead Dean for Urology

Professor S. McPherson

Future members will be elected by BAUS members taking into account candidates' College affiliation, geographical location and sub-secialty interest.

2.1 The role of the SAC

The SAC is responsible and accountable to the Joint Committee on Higher Surgical Training (JCHST: Chairman Mr. J. Smith). The JCHST reports to the Intercollegiate Senate of Surgery and the STA.

The main role of the SAC is to ensure that we produce competent urologists to take up posts as Consultants within the NHS. At present we have the clear view that such a person should have a sound training in "core urology" and may have acquired some expertise in a special interest. They also should have skills, knowledge, attitudes and work practices that will allow them to develop in the coming years – as urology itself will develop.

2.2 Detailed roles of the SAC

Together with the Postgraduate Deans, the SAC jointly approves and appoints Programme Directors.

Every five years or so, the SAC inspects Regional Programmes of Training. These visits usually take place over 2 days and involve at least two visitors (sometimes more if visits are large or complex). More frequent visits are made if training problems have been identified or when a unit has had a trainee for the first time. These may be made by the regional liaison SAC member.

2.3 What does the SAC look for on visits of inspection?

- The minimum size is a two-urologist unit.
- The timetable would usually involve:
  Three sessions in theatre, two sessions in outpatients, other sessions (haematuria clinics, urodynamics, TRUS etc), one session for administration, x-ray meetings, pathology meetings etc, one session for personal research, one session for the formal regional teaching session
- The teaching session should involve all regional trainees and the timetable should be structured to cover the whole curriculum over a period of two to three years
- A supportive environment in which trainees achieve progressive delegated training.
- Good supervision and time available in theatre and out-patients for training.
- Twenty-four hour access to computer data-bases and core urology texts and journals with a regular journal review.
- Dedicated office space for the trainee.
- System in place to ensure that trainees maintain an up-to-date personal portfolio containing the items defined by the JCHST and any statutory bodies such as the GMC or STA.
- Within the general portfolio, a system should be in place to ensure that trainees maintain an up-to-date research portfolio containing the items suggested by the SAC.
- Regular appraisal by designated trainers.

3. The Postgraduate Dean and the Programme Director

The local Regional Postgraduate Dean is the person directly responsible for the educational content of the post. They are responsible for looking after appointments, the annual Record of In-service Training Assessment (RITA) and together with the SAC appoint the Programme Director.

The Programme Director in association with the Postgraduate Dean is responsible for the allocation of trainees to particular training units within a rotation. They will organise (or delegate the organisation of) the weekly regional teaching programme, regular reviews of the trainees and the six-monthly in-service examination (usually the AUA, the Institute of Urology or the EBU MCQs). They should check that trainees have appropriate educational and practical training and have time off for educational activities.

After each attachment the Programme Director will organise completion of the JCHST yellow and green assessment forms (the one to assess the trainee, the other the trainer(s)). The structure of these forms is evolving and may be further refined.

4. Appointment to a Specialist Registrar Post (SpR)

4.1. Type I programme

Most UK trainees will apply for a type I training post and be appointed in open full competition by the appropriate committee. The trainee will be appointed for six years and will be allocated a National Training Number (NTN). EC nationals and overseas applicants with right of residence will also be allocated an NTN, though some more senior EC nationals can be allocated a Fixed Term Training Appointment (FTTA). Overseas nationals with no right of residence will be allocated a Visiting Training Number (VTN).

The trainee will be allocated an expected date of completion of training and should be registered by the Postgraduate Dean and with the SAC who will ratify the expected date of completion of training.

4.2. LAT and LAS appointments.

Short term locum appointments can be recognised for some training. Locum appointment for training (LAT) are appointed in open competition and can be recognised for a minimum of 3 months up to a maximum of one year. As long as the LAT appointment was registered with

the SAC it might count for up to a maximum of two years of training if the trainee subsequently obtains a type I training post.

Short term LAS appointments fill a gap for a few days to up to 3 months. They are **not** recognised for training and do not count towards CCST.

4.*3. Fixed Term Training Appointments (FTTA).*

Type 2 FTTA appointments are available to overseas applicants without rights of residence in the UK, and in some circumstances to nationals with EC rights of residence. Candidates should be of similar standard to type I appointments. The candidate should have completed the equivalent of BST and may have an MRCS. It does not lead to CCST, but candidates who are subsequently appointed to a type I programme can apply to have their time in FTTA posts counted towards CCST. On appointment a FTTA training number (FTA) is allocated.

5. Role of Research

Training in critical analysis and research method is critical. This can be achieved in a number of ways.

- Research experience during the flexible year.
- Carrying out specific courses such as research methodology *e.g* MSc courses or the Diploma in Urology.
- Carrying out a period of full time research.

In the past this has often been achieved through a period of time in full time research carried out before HST. Many trainees continue to do this and often will want to work towards a higher degree (MD or PhD). It is a somewhat regrettable fact that a large number of trainees continue to do this largely for career reasons as there is an apparent benefit when applying for SpR posts.

5.1 Full time research

The SAC is very supportive of trainees who really want to do research. However, the trainee must ensure that full time research is properly structured. There should be an experienced supervisor with a good track record, a proper research plan with clear aims, clear methodology and goals that are achievable. There should be appropriate basic science and clinical supervisors if laboratory research is being done. The trainee should aim to write up within a year of completion.

The SAC will agree to up to one year of retrospective recognition for time spent in full time research provided it can be shown to have been productive (with an MD/PhD or a portfolio of peer-reviewed publications).

5.2 Academic Urology.

The number of academic departments of urology continues to be small. Trainees who want to carry out training in academic urology should talk to one of the Urological Professors. There are a small number of academic training posts (Lecturer or First Assistant) that are approved for HST. Such posts are structured to allow a greater amount of time available for research and the university will expect results in terms of grants and papers. Such posts are challenging to carry out, but rewarding for the right person. It *may* be that the SAC will recommend a slightly longer period of training to take into account the extra time in research. This will be based on discussion between the Programme Director, the Academic Department and the SAC.

5.3 Urological training in more detail

Training will consist of a mixture of types of exposure including:

- Clinical and technical training 'on the job'
- In house educational activities (X-ray and pathological meetings)
- The weekly teaching programme
- Personal study, research and audit
- Occasional attendance at external courses. All trainees should expect to go to the annual meeting of BAUS (or if this is not possible to another large meeting such as the AUA or EAU) and the Urological Research Society. Attendance at one Basic Science Course **is required**. On site training in spinal injuries and management skills is not found on every rotation and if this is not available the trainee must plan to go to an approved external course. Training in renal transplantation is not compulsory but recommended. Training in paediatric urology will involve attending 12 operating sessions, 12 out-patient sessions and 12 clinical sessions during the course of that training segment. Attendance at these courses should be spread out over the course of four years.

6. Clinical Training

The quality of clinical hands-on training is paramount. The principle is one of progressive and more delegated, but supervised training.

Each post on the rotation should have a training profile. Some posts will be recognised towards core training. Other posts will be approved for training in more complex urology as indicated below. The trainee rotations should be planned to:

(i) Meet an individual trainee's needs

(ii) Provide each trainee with structured progressive training

(iii) Include subspecialty training to meet the curriculum requirements for the Intercollegiate Specialty Examination in Urology

(iv) Encourage the development of appropriate special interests and advanced training.

(v) Trainees should be encouraged to plan a period of advanced training or research outside of the programme at other units, either in the UK or abroad in order to broaden outlook and develop a special interest. Prospective SAC approval must be given.

7 Current Core Curriculum

7.1 *General points.*

This will be carried out in the first three to four years of training, depending on progress. The year on year curriculum is summarised in section 5 and specific competences are described in section 10.

8 Training in Complex Urology (Years 5 to 6).

Clear targets have been set by the SAC, which has now defined these curricula, logbooks and assessment of competencies. These are available at **www.jchst.org**

All trainees will be expected to have a broad based knowledge of general urology. The trainee with a special interest would have taken a greater interest and therefore have a wider and deeper knowledge and understanding of their particular subject and would normally have written papers, presented research work and attended meetings related to their sphere of interest. The would-be specialist will need to work with urologists whose chief interest and predominant activity is within that sub-specialty. They would normally work in a tertiary referral unit, which would typically have a multi-disciplinary approach to the specialty. There would be facilities for investigation and other clinical support service peculiar to that sub-specialty.

In addition to consolidating expertise in general urology, it is intended that trainees will spend their final two years gaining expertise in one or more of the following areas.

8.1 General urology

The trainee wanting further exposure to general urology will carry out an attachment that has been approved for this purpose. Further exposure to the conditions outlined above will be acquired. The trainee may also want to gain exposure in more detail to one or more areas.

8.2 Urological cancer

This will involved gaining expertise in the care of complex cancer cases involving multi-disciplinary teams of urologists, radiologists, pathologists and oncologists. Practical expertise will be gained in cystectomy and radical prostatectomy. There will be some exposure to the care of patients with large renal cell carcinomas with IVC thrombus and the surgical management of testis cancer.

8.3 Urinary diversion, undiversion and reconstruction.

The curriculum will include theoretical and practical aspects of urinary diversions, undiversion and bladder reconstruction. Experience of more complex surgery including AUS placement, bladder neck reconstructive procedures and urethroplasty will be provided. Operations to correct ureteric injuries and fistulae will be included.

8.4 Stone, disease, endourology and laparoscopy.

This will include expertise in basic procedures such as ureteroscopy plus operations such as PCNL, endo-luminal treatment of PUJ obstruction. More complex procedures such as laparoscopic operations will require a more prolonged attachment to specialised units carrying out larger numbers of cases.

8.5 Female Urology

This will include competence in basic procedures such as colposuspension and a good working knowledge of urodynamics. Other procedures includes will be AUS placement, sling procedures and cystoplasty.

8.6 Renal failure and transplantation.

This will involve attachments to a major transplantation unit. Sessions will involve organ transplantation and 3 sessions of urology. If the urologist is actively to carry out renal transplantation then a period of 18 months attachment will be required.

8.7 Complex andrology.

The procedures will include microscopic vasectomy reversal, epididymo-vasostomy and experience in modern infertility management (ICSI etc). Other penile procedures will be penile prostheses and phalloplasty.

8.8 Neuro-urology and spinal injuries.

Experience will include attachments to spinal injury units and the general management of the spinal injured. Operative procedures will include cystoplasty, AUS placement and electro-ejaculation procedures.

8.9 Paediatric urology.

There are a number of 6 month training posts in paediatric urology available to urological trainees who wish to pursue a sub-speciality career in urological reconstruction and very, very rarely to those who wish to pursue a career in paediatric urology. Exposure to paediatric urology will now consist of attendance at 12 out-patient sessions, 12 operating lists and 12 clinical sessions during the course of training. Trainees who spend 6 months in a paediatric unit will have this counted towards their CCST.

9. Practical aspects of training in complex urology

The units in which training in more complex urology will be carried out are currently being identified by the SAC through the Programme Directors. In each training programme there will be some units able to offer training in more complex aspects of urology. Some units will be able to offer training in several sub-specialty areas. Such units will also have other trainees having general urological training. In general and sub-specialist training operative experience should be recorded as indicated on the attached record form(s). A “portfolio” of experience should be developed showing the general, clinical and practical experience that the trainee has developed during the course of training including the courses attended, the presentation given and the papers published.

10. Record of operative experience and assessment of competence

This record complements and does not replace the RCS Logbook that should be completed by the trainee and be reviewed and signed by the trainer each month. It does not duplicate information because of the component that addresses competence. The logbook is available in electronic form.

10.1 Trainee

On appointment indicate the extent of your experience of the listed operations with numbers. At the end of your attachment enter details of your experience. This must include numbers taken from your logbook.

10.2 Trainer

On appointment, review with the trainee where he/she is and where he/she hopes to be in 6 or 12 months taking into account both your expectations (formative assessment). At the end of 6 or 12 months review with the trainee operative achievements and indicate on the record the level of competence reached for each procedure (summative assessment). Detailed instructions are in Appendix 5. Trainees should be seen with their logbooks monthly to ensure that appropriate exposure is being gained.

10.3 Levels of competence

These are defined for both trainers and trainees on the operative experience and competence summary sheet and in appendix 5.

TRAINING STANDARDS FOR INDIVIDUAL TRAINING UNITS

1. Facilities

There **MUST** be

1.1 Appropriate facilities consistent with good clinical practice, patient care and training

1.2 A sufficient number of patients seen in the outpatients and a sufficient number of operations done for the trainees to gain adequate clinical exposure appropriate to the number of trainees.

1.3 Sufficient beds and sufficient operating lists for the number of trainees in the unit (the training experience must not be regularly curtailed by cancelled admissions).

1.4 Specific lists and outpatients designated specifically for training.

1.5 Access to appropriate diagnostic imaging facilities within a reasonable time so that the trainee is able to review the outcome of tests which were ordered.

1.6 Two to three theatre sessions directly supervised by a consultant.

1.7 A secure room for the exclusive use of the higher surgical trainees.

1.8 Ready access to core urology, reference and surgical techniques text books and journals 24 hours a day.

1.9 Regular documented audit meetings and a consultant on-call with a trainee.

1.10 The trainee must not cover two inpatient sites.

1.11 The trainee should, as part of his/her on-call, be exposed to urological emergencies. There should be an ITU/HDU.

1.12 Access to MRI and CT with a waiting list of no greater than 3 months.

1.13 Adequate secretarial support for the clinical activity and staff.

1.14 An IT system for accurate retrieval of data for the purposes of audit and research and provides accurate activity figures for completion of SAC application forms.

1.15 Access to computers with appropriate software for word processing and data processing.

1.16 Audit staff assistance

2. **Staffing and firm/team structure**.

There **MUST** be:

2.1 A ratio of Consultant to Middle Grade staff which is no less than 1:1.2. (Middle Grade staff includes associate specialist, staff grades, Fellows or Trust Doctors taking part in a registrar rota as well as SpRs).

2.2. A designated supervising consultant for each higher surgical trainee.

2.3. A team structure which involves a PRHO or SHO as well as a higher surgical trainee.

2.4. A time table such as the HST has continuity of care of patients both in relation to outpatient activity and operating lists.

2.5. A team or firm structured to which each trainee is primarily attached and responsible.

2.6. One session for research/study each week.

2.7. One session for core curriculum teaching each week.

3. **In Service Training**.

There **MUST** be:

3.1 At least two ward rounds with the responsible consultant with whom there is discussion and teaching on the cases reviewed as well as clinical review of the patients.

3.2 Operating lists in which trainees under supervision do a high proportion of the operating judged by the inspection of log books. The amount of supervision will vary according to the seniority and experience of the trainee.

3.3 Outpatient clinics in which the trainee sees new patients as well as review patients and where there is adequate time for teaching and discussion.

3.4 No regularly scheduled unsupervised operating lists or outpatient clinics, i.e. where the consultant supervisor is scheduled to be elsewhere when the trainee is timetabled for the particular activity.

3.5 At least one elective outpatient clinic per week at which the higher surgical trainee sees some new patients and discusses the findings and management plan with his/her consultant. The size of the clinic must reflect this need.

3.6 At least one elective operating list per week at which the trainee receives progressive personal supervised operative skills training.

There **SHOULD** be

3.7 A pre-operative ward round or pre-admission clinic at which the trainee is able to discuss, with the consultant, those patients scheduled for operation.

3.8 Continuity of trainee involvement with patients admitted when on-call.

3.9. An additional special interest clinic appropriate to the trainee's stage of training in which the trainee is supernumerary.

4. Education

There **MUST** be:

4.1 Freedom for all higher surgical trainees to attend the Postgraduate Core Curriculum weekly meetings.

4.2 At least one hour per week of designated departmental teaching (x-ray, pathology, Journal Club) attended by at least one consultant.

4.3 A regular audit session attended by the majority of the department with minutes and records of attendance, all deaths must be discussed.

4.4 Reasonable and assured access to study leave and funding.

4.5 Regular appraisals of each trainee by his trainer with a meeting at the beginning of the placement to agree needs and aims (completion of the **educational contract**, Appendix 2) and then monthly meetings to review progress and a final conclusion meeting supported by written prospective training targets.

4.6 Availability of the consultant trainer to attend, when requested, the trainee's formal programme RITA and to contribute to that assessment and future training targets (on-going education contract).

There **SHOULD** be:

4.7 A well stocked library which is accessible to the higher surgical trainees 24 hours a day and contains contemporary urology texts and major journals or electronic alternatives.

4.8 The library should provide access to Medline, Cochrane database and Internet searches, interlibrary loan facilities should be available.

4.9 A Journal Club either in the individual unit or as part of the overall training programme.

4.10 Research facilities supported by research/audit assistants with designated projects for trainees.

4.11 Basic science research facilities on the rotation in one of the larger teaching units.

4.12 A clinical skills teaching facility within each training programme.

4.13 Evidence of access to and encouragement of clinical research and basic science projects.

Section 7

THE TRAINING PORTFOLIO

The training portfolio is a collection of documents that records a SpR's progress on the higher surgical training scheme. The Joint Committee on Higher Surgical Training (JCHST) has defined a portfolio that all trainees are exected to keep (see below). It is the specialist registrar's responsibility to maintain the portfolio in good order and to ensure that it is kept up-to-date as required by the General Medical Council. Trainees will be expected to produce their portfolios for their RITA meeting and SAC visits of inspection.

The training portfolio is particularly important for trainees who wish to sub-specialise in one or more facets of Urology during years 5 and 6 of the training programme. Trainees will need to keep an accurate log of their sub-specialty experience, including an operative log, out-patient exposure, procedure experience and evidence of continuing medical education relevant to the sub-specialty. It is likely that in the future, SpRs who have obtained their CCST and apply for a substantive position will be asked to provide documentary evidence of their sub-specialist interest.

The table below reflects the general construction of the typical portfolio ***to which trainees should adhere*** for ease of peer review and external assessment.

Contents of Training Portfolio

Section 1.	**Organisation and Structure of Higher Surgical Training in Urology**	1. A Syllabus for Urology 2. The Urology Curriculum 3. The SAC in Urology: mechanisms and standards
***Note**: This section duplicates sections 4, 5 and 6 of the manual. Trainees may choose whether or not for completeness to transfer these sections from the manual to their training portfolio.*		
Section 2.	**Certification**	1. Current GMC certificate. 2. FRCS/MRCS documentation 3. BST assessments to show satisfactory completion of BST* 4. Contracts of appointment to training post (include NTN/VTN confirmation form). 5. ATLS/APLS certificates 6. Basic surgical skills course – details that candidate passed (not merely attended) 7. CCST documentation 8. Updated curriculum vitae 9. Details of other courses, certificates etc
****BST competence assessment in development at present.*		

Contents of Training Portfolio continued;

Section 3	**Personal Literature Archive** (see section 8)	1 Reprints of • Publications • Abstracts 2 Records of audit projects undertaken 3. Research portfolio
Section 4	**Annual Training Records**	**Each to include** 1. Educational contracts for training as a whole 2. Timetable for each post 2. Attendance at regional training programme 3. Log book summary sheets (validated for each post and each year) 4. Cumulative operative competency progress charts 5. Yellow trainee assessment form 6. Green training reporting form 7. Absence from training. a. study leave b. research c. sickness d. maternity leave 8. Certification of attending /passing management skills course

Section 8

THE RESEARCH PORTFOLIO

The JCHST has stipulated that a trainee going into routine practice a consultant surgeon should

- Be able to read and critically appraise a paper.
- Be conversant with core statistical methods such that they might seek detailed advice from a statistician
- Be able to carry out an audit of outcome and process, as part of routine clinical practice within a team context
- Retain an attitude of enquiry tempered by healthy criticism
- Be able to present simple research work coherently

In order to meet these aspirations, the JCHST require all trainees to keep a record of research and audit activities. It is expected that the Programme Director will review and appraise the record and use it to develop a programme of goals and milestones for a developing trainee leading towards independent practice. In terms of core standards, the portfolio must show evidence of reflection and insight. It is reasonable to expect trainees to have presented something annually on the teaching programme. In addition a trainee should have presented some audit or small research project annually to the local group. Research leading to peer review papers and presentations at national meetings is to be expected, but would not in itself be an essential requirement as evidence of satisfactory training. In the absence of such peer review recognition, the overall make up of the research portfolio must be otherwise strong enough to reassure programme directors and SAC inspectors that the skills of the individual trainee meet the aims and objectives laid out. Ongoing commitment to audit is also essential and clear documentation of those projects should be present in the portfolio.

Contents of the Research Portfolio

- At least one review of a component of the literature
- A demonstration of statistical knowledge in the form of an analysis of a piece of literature
- A diary of papers read or perhaps a portfoio of papers reviewed
- A list of talks given locally on training programmes
- A list of local papers read to the trainees research forum within a region –perhaps four over six years
- A list of national level publications
- A list and copies of papers published
- At least one audit of outcome and one audit of process project

Section 9

APPRAISAL AND ASSESSMENT

The RITA process for specialist registrars

INTRODUCTION

The process of annual appraisal with five yearly external review is now an established part of the performance monitoring of all doctors as a result of the changes in professional regulation introduced by the General Medical Council. As of April 2001, participation in appraisal was a contractual requirement of all consultants employed in the NHS. For specialist registrars, this process has been delegated to the Post Graduate Deans and through them to the relevant Specialist Training Subcommittees (STSC). In practice most appraisal of specialist registrars is done by the supervising consultant or educational supervisor. The process aims to provide a constructive and regular dialogue between the trainer and trainee, with feedback on performance and assistance in career progression. Appraisal is a confidential process and not part of assessment. However the appraisals may be formed by other assessments which are applied during the year in preparation for the annual RITA review. On-going assessment and appraisal of trainees is an integral part of the higher surgical training programme.

The ability to communicate clearly and effectively is a key component of a trainee's development. Communication is the bedrock on which a sound clinical career is based and trainers are urged to ensure that a trainee's ability to communicate with patients, colleagues and other staff is developed during their training. Formative assessment of a trainee's ability to communicate is not currently a mandatory component of the curriculum, but trainers are encouraged to ensure that the trainee's skills in this area develop during their attachment. Specific competencies for communication skills are detailed in the yearly curriculum and in the notes, which accompany these documents.

The features of the 'Calman' training system were first set out in 'A guide to Specialist Registrar Training' (the 'Orange Book'). The principle aims of the system were to give greater career security for those entering a specialist registrar grade, a move to an exit exam mechanism for determining specific vocational knowledge and skills, and a reduction in the length of time taken to achieve a level of training consistent with consultant practice.

A trainee's progress is documented in the Record of In-Training Assessment or RITA review. Since its inception the RITA review has taken the form of a compulsory annual interview at which the progress of the trainee over the previous year is assessed and the overall level and

satisfaction of that individual's training is reviewed. Trainees have to meet an agreed standard to be able to proceed from year to year to achieve a CCST (Certificate of Completion of Specialist Training). The assessment procedure should provide both the trainer and trainee with a regular picture of the trainee's progress. Over time the RITA interview has gradually become more rigorous.

The RITA Panel

The interview panel typically consists of the Chairman of the Regional Higher Specialist Training Committee, the Regional Speciality Advisor and the Post-Graduate Dean or representative. A member of the SAC, with responsibility for the region should attend. Other consultants, typically those involved in the training programme, may also be invited to sit on the review panel. The aims of the panel are to ensure that the trainee has reached a degree of competency in relation to his year of training and can satisfactorily progress to the next year. In addition, the interview panel will want to ensure that the trainee's post is of sufficient educational merit to warrant continuing educational approval.

Having made its assessment, the RITA panel recommends to the Regional Post Graduate Dean's department either that the trainee can progress to the next year of training or that specific targeted training is required. The panel, again through the Post Graduate Dean, also recommend to the Specialist Advisory Committee (SAC) and through them to the Specialist Training Authority (STA) that a specialist registrar should be awarded the CCST (Certificate of Completion of Specialist Training). This allows the surgeon's name to be considered for the specialist register of the General Medical Council. Clearly the RITA panel has a pivotal role in ensuring that a trainee has achieved a level of competence which will enable him/her to practice as a consultant urologist within the National Health service. ***It is very clear that Trainers and RITA assessors who sign off a trainee to a particular level of competence are directly responsible for the objective accuracy of the training record.***

The RITA review process endeavours to make an objective and unbiased assessment of a trainee's progress over the preceding year. The RITA review panel should have access to all relevant information affecting a trainee's progress (see appendix 1).

Preparation for RITA

Each hospital / training post should have a nominated Educational Lead Clinician, who will with the other consultant trainers in the department be responsible for the trainee(s) in the

department and ensure that the trainee receives regular assessment and appraisal. Preparation for the annual RITA appraisal should start at the time a SpR takes up a new appointment. The Calman system envisages that each SpR should receive proper induction at the start of each new placement, with set *educational objectives* (relevant to their experience and stage in training), outlined in a training agreement with their supervising consultant and the programme director. An important priority of a newly appointed or rotating SpR is to meet with the Educational Lead Clinician to decide on the working timetable, responsibilities and educational objectives for the forthcoming attachment (for example, see appendix 2). It is essential that **both** parties have a good idea about what can be reasonably accomplished during the attachment and there should be a clear undertaking on both sides about the trainees and trainers responsibilities. The educational targets should broadly reflect the competencies and training expectations for a particular year of the training programme. Depending on the education experience offered by a particular unit, many trainees may exceed the training expectations for a particular year on the programme. Conversely some trainees through no fault of their own, may not gain sufficient exposure to a particular competency which may need to be incorporated into the educational contract for the following year.

In the month prior to the RITA interview the specialist registrar and the educational lead clinician should meet so as carefully to review the yellow trainee assessment form (appendix 7). Sufficient time should be aside for this meeting. The educational contract is a good starting point as it provides a template to assess a trainee's progress in the post. A yellow trainee assessment form needs to be completed by <u>each</u> consultant with whom a trainee has worked. At the end of the form is a section for a pen picture of the trainee's accomplishments to be written by the trainer. The form is then signed by both the trainee and the trainer and returned to the Postgraduate Deans office, along with the other documentation, as detailed in appendix 1. In exceptional circumstances, where a trainee disagrees with the assessment, the trainee may decline to countersign the form, which should nevertheless be returned to the Postgraduate Dean's office with the other documentation for consideration.

The RITA interview

The RITA panel's duty is to make an objective and unbiased assessment a trainee's progress over the preceding year. The committee will want to ensure that a trainee is making satisfactory progress towards CCST and that the training slot is giving sufficient support to realise that ambition.

The annual assessment committee should comprise a minimum of four members from:

- the training programme director
- the regional SAC representative*
- a representative of the consultant trainers
- the chairman of the Urology STSC
- the regional specialty advisor
- the post graduate dean or his representative: and
- a university representative

throughout the UK.

Each member of the RITA panel should be given a particular topic to cover during the assessment interview. The process should also identify and highlight particular needs of the trainee, especially exposure to sub-specialist areas, during the final phase of training. As much as 45 minutes may be required for each interview.

The structure of the RITA interview is at the discretion of the Programme Director. The interview may start by the SpR being asked to give a short presentation (typically two overheads and lasting five minutes) on what has been achieved (as measured against the previously agreed educational contract) and what plans are in place for the forthcoming year. The presentation can then be followed by a structured interview (see below). Alternatively some committees favour an interview with members of the panel asking questions on set topics, referring to information that has been supplied previously. During the interview the Chairman (Programme Director) should make objective notes and a helpful form for this purpose is included as appendix 10.

Towards the end of the interview, it is common practise to ask the trainee about the high and low points of the current training slot and how it could be improved. However some Deans feel that this is not part of the RITA assessment and should be undertaken separately by the Programme Director. If a trainee has genuine concerns about the suitability of his post and /or trainers for training, it is probably better that these issues are addressed with the Programme director in advance of the RITA meeting. At the end of the interview, the trainee should be asked to leave the room temporarily while the RITA committee deliberates. Following the RITA interview, the Programme Director should write to each trainee with a synopsis of the

interview, specifically detailing the educational goals for the forthcoming year. Where appropriate, a copy should be sent to the trainee's new educational supervisor.

At the culmination of the process, provided sufficient progress has been made, the SpR can be issued with a RITA C form. If a RITA D is awarded the trainee will usually have a further appraisal at six months to assess his progress in the interim.

Suggested topics for discussion at the annual RITA assessments

- Overview of progress during last clinical attachment
- Timetable for latest post (on call, research sessions, operative sessions etc)
- Review of educational contract from current placement
- Review of operative competencies and log book summary sheets
- Review of yellow JCHST form
- Research portfolio e.g. publications, abstracts, audit etc
- Details of courses, certificates etc
- Personal development (initiative, professional responsibility, decision making, team skills, reflection/Insight, coping strategies, flexibility)
- Career plan, dates for forthcoming examinations etc
- Trainee feedback on current placement (optional)
- Setting of agreed objectives and training plan for following year
- Requirements of next post.

RITA Grading

Most trainees are issued with a RITA C indicating satisfactory progress and continue to the next phase of training. Failure to achieve a C grading at the annual RITA assessment would mean that either there was either an issue with the trainee's progress or the ability of that placement to provide appropriate training. Those SpRs deemed to need 'targeted training' receive a RITA D form with explicit goals to be achieved during their next rotation. Issue of a RITA D form does not imply that part of the training programme has to be repeated. 'Targeted training' is usually suggested and the trainee should be given adequate opportunity to discuss the issue in some detail with the Programme Director. Explicit written criteria should be agreed between the trainee and the Programme Director against which the trainee's progress can be objectively assessed at the time of the next appraisal. If there is an issue about competency (e.g ability to do an appropriate procedure), it is important to ensure that the trainee will get adequate clinical exposure in the new attachment.

RITA forms at a glance

- RITA A Core information on the trainee
- RITA B Changes to core information
- RITA C Record of satisfactory progress. Continue to next year
- RITA D Recommendation for training; a further C will be required at the end of this period for progression
- RITA E Recommendation for intensified supervision/repeated experience
- RITA F Record of out-of-programme experience
- RITA G Final record of satisfactory progress

Unsatisfactory progress in the preceding year results in a RITA E form, which requires the SpR to repeat that year of the training programme. Following the E, a further period of satisfactory training is required before a completion RITA G can be issued, i.e., a trainee cannot be finally signed off immediately after a repeated training year.

As outlined above, the trainee will need to be given a clear indication as to why his progress has been unsatisfactory. Clear documentation is important. Written criteria should be agreed between the trainee and the Programme Director against which the trainee's progress can be objectively assessed at the time of the next appraisal. Ideally the SpR will need to meet the Programme Director every three months, with clear cut and specific educational goals. The RITA panel should meet six monthly to discuss those trainees on RITA D or E grades.

On completion of training, the SpR is issued with a RITA G and is entitled to apply for inclusion on the specialist register of the General Medical Council.

Section 10

ASSESSMENT OF COMPETENCY AND TRAINING EXPECTATIONS

Preface

Much research has been conducted (in non-medical fields) into the technique and efficacy of the assessment process. From this research certain truisms have become clear:

1. The assessment process may become overwhelming.
2. Too many items may be assessed.
   It has been shown that this approach does **not** lead to improved competence (i.e. keep it simple).
3. If possible use the real thing (ie simulators).
4. Make sure it is feasible (ie cost).
5. Single handed assessors are usually very poor.

Taking these points into account, the assessment of competence and training expectations in urology has been formulated to achieve the best balance between theoretical desirability and practical possibility. The skills in question are both **generic** and **specific**.

TRAINING IN UROLOGY

Generic skills

Throughout training, in addition to the specific academic, theoretical and practical skills detailed within the annual intervals described below, each trainee will be required to demonstrate fundamental generic skills which (hopefully) have been present since qualification and which should develop continuously with time and personal experience.

Objective assessment of such "non clinical" skills is notoriously difficult but recently a number of authorities, notably the RCS Curriculum Development Group, have attempted to quantify this difficult area which is acknowledged as being ultimately responsible for most clinical complaints and professional suspensions at the present time. Some of this work is derived from the Canadian Royal College Working Party report CanMEDS 2000 and other work has been performed by the sub-specialities associations – notably BAUS – themselves.

Generic skill assessment

Assement techniques are being trialed in the following areas:

Communication	-	patients		
	-	staff	-	professional clerical
	-	colleagues		

Professional conduct and probity

Dexterity

Communication is acknowledged as an extremely important facet of consultant practice which is very poorly – if at all – assessed at the present time.

Assessing communication with patients	-	video with actors
	-	video with real patients
	-	post consultation questionnaires
	-	"sitting in" with consultant

Each of these techniques can be very helpful but most have major drawbacks. Video studies of the doctor/patient interaction have proved to be very illuminating but are very expensive and time consuming. The presence of the consultant in the interview room may be counter-productive. Validated questionnaires may be the way forward. Such communication exercises may profitably be based on issues of **consent,** or **breaking bad news**.

Assessing communication with Staff - **360° review**

A rounded and robust view of the trainee's communication skills may be obtained with the "360°" technique whereby colleagues, nursing sisters, secretaries, ancillary workers etc are, for example, asked to comment on 3 strengths and 3 weaknesses of the person in question. The record obtained may be usefully incorporated into the RITA process.

- **clerical skills**

Notoriously poor communication skills with clerical staff (eg dictation) are unfortunately common in the medical profession. Blinded assessments (appendix 11) by senior secretarial staff can be extremely revealing about trainee performance and subsequent remedial action can be undertaken.

Professional conduct and probity remain difficult areas both to define and assess. Nevertheless appropriate personal behaviour and attitude remains an important facet of professional life.

Dexterity is more easily tested in some specialities than others. Emerging laproscopic expertise may lend itself to simulation. Operative checklists are tedious and become less relevant the more senior the trainee – hence the flexible construction of the year 5/6 operative experience summaries (see below).

Mechanisms for assessment of these skills are being developed at the present time.

****

Specific Expectations and Skills

Training in the SpR grade in Urology requires steady progress through a planned programme designed to meet the curricular requirements of the speciality.
Following a trainee's appointment as a new SpR, arrangements should be made for the trainee to meet the Programme Director and plan for the forthcoming year. An educational contract should be drawn up in association with the SpR's Educational Lead and arrangements made for the trainee to have an early appraisal.

The first RITA assessment for a new SpR should ideally occur within six months of appointment. The summative assessments at the end of six months and one year are in many ways the most important for the newly appointed registrar. The RITA Committee will want to ensure that the trainee has achieved some core competencies and demonstrates the necessary skills and abilities ultimately to achieve independent clinical practice.

Competencies/Training Expectations - at six months (Year 1)

Knowledge Base

Basic Sciences/Nephrology

- Surgical anatomy of the urinary tract and inguino-scrotal region
- Basic bladder physiology

Urinary tract function/obstruction

- Investigation of the patient with LUTs
- Causes of upper and lower tract obstruction

Oncology

- Principles of investigation of patients with cancer
- TNM classification of common urological tumours

Stones

- Management of ureteric colic
- The role of IVU/USS and simple renography
- Management of simple urinary tract infection

Paediatrics

- Basic management of hydrocele, phimosis and undescended testis
- Management of the acute scrotum

Clinical skills

- Be able to present a urological history, examination and develop a basic differential diagnosis
- Understand the basics of urinalysis
- Develop experience in digital rectal examination
- Interpret basic uroflowmetry
- Learn how to do an I.V.U. and renogram
- Learn principles of abdominal ultrasound
- Pass a catheter

Dextrous skills

Endoscopic

- Flexible cystoscopy with minimal supervision
- Rigid endoscopy, retrograde pyelography, biopsy and diathermy, and stent removal with supervision
- Initiate resections/BNI under supervision

Open Procedures

Perform the following procedures with supervision

- Circumcision
- Hydrocele/Epididymal cyst excision
- Scrotal exploration for torsion
- Inguinal orchidectomy
- Laparotomy, approaches to the kidney

Competencies/Training expectations - at six months continued

Personal Development

- Register with SAC and document proposed CCST date
- Join BAUS
- Establish study routine; 2-3 hours per week outside work
- Establish regular feedback sessions with supervisor
- Understand the principles of appraisal and assessment
- Identify a mentor (anonymous to training committee)
- Become a team player
- Audit - background reading and project development

Suggested Courses

- Basic Sciences
- Basic Computing

Suggested Reading

Books

- Scientific Foundations of Urology, Mundy, Fitzpatrick et al
- Comprehensive Urology, Weiss, George and O'Reilly

Reference Texts

- Urology, Whitfield and Hendry
- Cambell's Urology
- Atlas of Urological Surgery, Hinman

Journals

- British Journal of Urology International
- EBU update series
- Journal of Urology
- Urological Clinics of North America

Opposite– JCHST urological operative experience and competence summary sheet. The indexed procedures are for general guidance only – please see appendix 5 for completion details.

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure** Core Urology first 6 months	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*
				Flexible cystoscopy					
				Rigid cystoscopy					
				Cysto: Biopsy: diathermy					
				Cysto: Retrograde					
				Optical urethrotomy					
				Stent removal					
				TUR BT small					
				TUR bladder neck					
				TUR P < 40 gm					
				Urodynamic studies					
				TRUS + Biopsy					
				Circumcision					
				Epididymal cyst					
				Hydrocoele					
				Vasectomy					

(*Where trainers disagree on the level of competence, the lowest level should be accepted)
I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Full instructions for completion of form on reverse side

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the directon of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervision but may need help occasionally

C Able to perform the procedure under supervision

D Unable to perform the entire procedure under supervision

U Unknown (not assessed) during this training period

Competencies/Training expectations - Year one

Knowledge Base

Basic Sciences/Nephrology

- Surgical anatomy relevant to urological surgery
- Physiology of urine production
- Basic bladder physiology
- Renal physiology/effects of obstruction

Urinary tract function/obstruction

- Investigation of the patient with LUTs
- Basic lower tract urodynamics
- Cause of upper tract obstruction

Oncology

- Investigation of patients with urological cancer
- TNM classification of common urological tumours
- Aetiological factors in bladder/prostatic cancer

Stones / Infection

- Management of ureteric colic
- The role of IVU/USS and simple renography
- Management of urinary tract infection

Paediatrics

- Basic management of hydrocele of hydrocele, phimosis and undescended testis
- Management of the acute scrotum

Technical skills

- Be able to present a urological history,
  examination and develop a detailed differential diagnosis
  Understand the principles of urinalysis
- Be competent in digital rectal examination
- Interpret uroflowmetry
- Assess residual urine with ultrasound
- Insert a suprapubic catheter under LA
- Undertake basic urodynamics under supervision
- Undertake transrectal ultrasound and biopsy under supervision

Competencies/Training expectations - Year one (continued)

Dextrous skills

Endoscopic

- Flexible cystoscopy, rigid endoscopy and retrograde pyelography, biopsy and diathermy and stent removal competently with minimal supervision
- Initiate resections/BNI under supervision

Open

- Circumcision competently with minimal supervision
- Hydrocele repair competently with minimal supervision
- Epididymal cyst competently with minimal supervision
- Scrotal exploration for torsion with minimal supervision
- Inguinal orchidectomy competently with minimal supervision
- Laparotomy with supervision
- Open and close a loin wound with supervision

Personal Development

- Evolve career plan
- Understand the benefits of appraisal
- Appreciate your limitations and responsibilities as part of a team
- Originate and complete an audit project
- Develop a basic research project

Suggested Courses

- Basic Sciences

Suggested Reading

Books

- Scientific Foundations of Urology, Mundy, Fitzpatrick et al
- Comprehensive Urology, Weiss, George and O'Reilly

Reference Texts

- Urology, Whitfield and Hendry
- Cambell's Urology
- Atlas of Urological Surgery, Hinman

Journals

- British Journal of Urology International
- EBU update series
- Journal of Urology
- Urological Clinics of North America

Opposite – JCHST urological operative experience and competence summary sheet. The indexed procedures are for general guidance only – please see appendix 5 for completion details.

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure** Core Urology Year One	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*
				Rigid cystoscopy					
				Cysto: Biopsy: Diathermy					
				Cysto: Retrograde					
				Cysto: insert JJ Stent					
				Optical urethrotomy					
				TUR BT small					
				TUR B neck (BNI)					
				TUR P <40 gm					
				Cystolithalapaxy					
				Simple ureteroscopy					
				Urodynamic studies					
				TRUS + Biopsy					
				Circumcision					
				Epididymal cyst					
				Hydrocoele					
				Varicocoele					
				Inguinal orchidectomy					

(*Where trainers disagree on the level of competence, the lowest level should be accepted)

I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the direction of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervision but may need help occasionally

C Able to perform the procedure under supervision

D Unable to perform the entire procedure under supervision

U Unknown (not assessed) during this training period

Competencies/Training expectations - Year two

Knowledge Base

Basic Sciences/Nephrology

- Theories of bacterial adherence
- Basic microbiology
- Pharmacology of antibiotics in urology
- Assessment of acute and chronic renal failure

Urinary tract function/obstruction

- Basic pharmacology relevant to lower urinary tract function
- Management of acute upper tract obstruction
- Management of renal trauma

Incontinence

- Classification and principles of management of incontinence

Oncology

- Aetiological factors in testicular/renal cancer
- Principles of histopathology

Stones

- Aetiological factors in urolithiasis
- The roles of CT and DMSA scanning

Andrology

- Interpretation of basic semen analysis
- Principles in management of male factor infertility
- Assessment of men with erectile dysfunction

Paediatrics

- Management of vesico-ureteric reflux and its complications
- Common congenital urological anomalies

Clinical Skills

- Be able to initiate management from the differential diagnosis
- Undertake simple ultrasound under supervision
- Use a catheter introducer unsupervised
- Undertake urodynamics without supervision
- Be able to interpret renographic images

Competencies/Training expectations - Year two (continued)

Dextrous Skills

Endoscopic

- Perform flexibly and rigid cystoscopy with manipulation without supervision
- Undertake optical urethrotomy and cystolithopaxy
- Initiate trans-urethral ureteroscopy
- Complete small resections under supervision

Open

- Simple peno-scrotal surgery without direct supervision
- Infantile circumcision
- Epididymectomy
- Small bowel resection and re-anastomosis with supervision
- Simple nephrectomy under supervision
- Supra-pubic approaches to the bladder/prostate

Personal Development

- Consolidate the career plan
- Be able to competently manage a ward round
- Function efficiently as a composite part of the team
- Originate and complete an audit project
- Complete a basic research project and submit for publication/presentation

Suggested Courses

- Andrology
- Paediatrics

Opposite – JCHST urological operative experience and competence summary sheet. The indexed procedures are for general guidance only – please see appendix 5 for completion details.

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure** Core Urology Year 2	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*
				Rigid cystoscopy					
				Cysto: Retrograde					
				Cysto: insert JJ stent					
				TUR BT small					
				TUR BT large					
				Cystolithalapaxy					
				TUR P < 40 gm					
				TUR P > 40 gm					
				Simple ureteroscopy					
				Hydrocoele					
				Varicocoele					
				Torsion exploration					
				Epididymectomy					
				Simple Nephrectomy					
				Colposuspension					
				Ileal conduit diversion					

(*Where trainers disagree on the level of competence, the lowest level should be accepted)
I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Full instructions for completion of form on reverse side

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the direction of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervision but may need help occasionally

C Able to perform the procedure under supervision

D Unable to perform the entire procedure under supervision

U Unknown (not assessed) during this training period

Competencies/Training expectations - Year three

Introduction

These are the 'core' years of training leading up to the 'exit' exam. There is great emphasis on assimilation of factual knowledge and the requisite dextrous and technical skills necessary to provide a urological service as a consultant. The evolution of a systematic reading plan is an essential component to the satisfactory achievement of this phase of training with intermittent supervisor-based testing. The use of mock viva and spot test practice are other important aids to success in this phase of training.

Knowledge Base

Basic Sciences/Nephrology

- Principles and application of surgical diathermy
- Embryology of the urinary tract
- Principles of dialysis
- Immunosuppression

Urinary tract function/obstruction

- Epidemiology of benign prostatic hypertrophy
- Detailed medical and surgical therapy for BPH
- Management of post-obstructive diuresis
- Interpretation of renographic parameters
- Indications for pyeloplasty/ureteric reimplantation

Incontinence

- Assessment and basic management of the patient with a neuropathic bladder
- Detailed urodynamics, interpretation of normograms
- The use of intermittent self-catherisation

Oncology

- Principles of screening
- Current standards for the treatment of all urological cancers
- Principles and application of radiotherapy
- Intra-vesical and adjuvant treatments for bladder cancer
- Management of localised prostate cancer

Stones

- Theories of crystal and stone formation
- Theory and application of ESWL
- Surgical management of stones in the upper/lower urinary tract

Andrology

- The management of varicocele
- The surgical management of obstructive azoospermia

Competencies/Training expectations - Year three (continued)

Paediatrics

- Aetiology and management of hydronephrosis and neuropathic bladder in children
- Surgical treatment of vesico-ureteric reflux
- Management of ureterocele, duplex anomalies of the ureter and their complications
- Principles of hypospadias repair
- Embryology of the urinary tract

Clinical Skills

- Undertake trans-rectal ultrasound and biopsy under supervision
- Be able to co-ordinate the urological management of the complex or multiply injured patient
- Urodynamics and TRUS without supervision

Dextrous Skills

Endoscopic

- Paediatric cystoscopy
- Carry out simple ureteroscopic manipulations with minimal supervision
- Complete small resections of bladder tumours and prostate without direct supervision

Open

- Orchidopexy/Ligation of PPV
- Simple Nephrectomy with minimal supervision
- Pyelo/uretero/cystolithotomy with minimal supervision
- Radical nephrectomy under supervision
- Pyeloplasty under supervision
- Colposuspension under supervision
- Retro-pubic prostatectomy under supervision
- Ileal conduit diversion under supervision

Personal development

- Consolidate the career plan
- Be able to competently manage an outpatient clinic
- Know the limitations of others in your team
- Consolidate factual base for FRCS (Urol)
- Originate a further basic research and audit project

Suggested Courses

- Transplantation
- Spinal Injuries

Competencies/Training expectations - Year four

Knowledge Base

Basic Sciences/Nephrology

- Basic understanding of molecular biology
- Growth factors in BPH
- Renal replacement therapy, indications for transplantation
- Principles of tissue typing
- Factors influencing outcome in transplantation

Urinary tract function/obstruction

- Controversies in diagnosis and management
- Management of ureteric stricture and RPF
- Management of the fractured pelvis
- Urethral stricture and urethroplasty

Incontinence

- Management of refractory incontinence
- Bladder reconstruction

Oncology

- Controversies in population screening for cancer
- Controversies in management of urological cancers (conservative surgery)
- Neo-adjuvant versus adjuvant therapy
- Management of the complications of radiotherapy

Stones

- The role of metabolic screening

Andrology

- Assisted conception and the infertile male
- Recent advances in the management of erectile dysfunction

Paediatrics

- Management of intersex and posterior urethral valves
- Long-term management of the epispadias/extrophy complex
- Genetics of urological abnormality

Competencies/Training expectations - Year four (continued)

Technical Skills

- Undertake trans-rectal ultrasound and biopsy
- Competently co-ordinate the urological management of the complex or multiply injured patient
- Initiate referral to an appropriate sub-specialist

Dextrous Skills

Endoscopic

- Complete non-complex ureteroscopic surgery
- Complete most resections without direct supervision
- Perform PCNL under supervision
- Perform needle suspension procedures

Open

- Vasectomy LA
- Epidydimo-vasostomy under supervision
- Corporoplasty
- Procedures for peritoneal dialysis access
- Simple renal surgery without direct supervision
- Radical nephrectomy/nephro-ureterectomy under minimal supervision
- Pyeloplasty under minimal supervision
- Colposuspension without direct supervision
- Cystoplasty with supervision
- Cystoprostatectomy with supervision

Personal development

- Sit the FRCS (Urol) and pass!
- Be able to competently manage an operating list
- Motivate yourself and build your team
- Reassess the reality of your career objectives
- Identify a mentor for consultant practice
- Complete the further basic research, or audit, project and submit for publication/presentation

Suggested Courses

- Reconstructive urology

Opposite – JCHST urological operative experience and competence summary sheet. The indexed procedures are for general guidance only – please see appendix 5 for completion details.

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure** Core Urology Years 3&4	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*
				Cysto; insert JJ stent					
				Optical urethrotomy					
				TUR BT small (< 6 cm)					
				TUR BT large > 6 cm					
				TUR P < 40 gm					
				TUR P > 40 gm					
				Ureteroscopy simple					
				Ureteroscopy – stone extract					
				Inguinal orchidectomy					
				Simple nephrectomy					
				Radical nephrectomy					
				Nephro ureterectomy					
				colposuspension					
				pyeloplasty					
				RRP					
				Radical cystectomy					
				Ileal loop diversion					

(*Where trainers disagree on the level of competence, the lowest level should be accepted)
I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Full instructions for completion of form on reverse side

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the directon of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervision but may need help occasionally

C Able to perform the procedure under supervision

D Unable to perform the entire procedure under supervision

U Unknown (not assessed) during this training period

Competencies/Training expectations – Year five/six

Vocational skills

Management

- Time management
- The realities of clinical governance
- Structure and function of the NHS
- Healthcare planning
- Responsibilities of Consultant practice
- Service activity
- Teaching
- Training
- Personnel management

Research/Audit

- Rationale and benefits of clinical audit
- Evidence based practice
- How to set up a trial
- Critical evaluation of the literature

Vocational Attributes

- Presentational skills
- Chairmanship
- Writing a CV for Consultant appointment
- Managing colleagues junior/senior, team play
- Handling conflict
- Motivating oneself
- Coping with stress
- CME/CPD
- Appraisal and appraising

Technical Skills

- Co-ordinate the urological management of all patients

Competencies/Training expectations - Year five/six (continued)

Dextrous Skills

Endoscopic

- Complete most ureteroscopic procedures
- Complete large resections without supervision
- Perform PCNL under minimal supervision

Open

- Undertake complex revision scrotal surgery
- Radical nephrectomy/nephro-ureterectomy with junior support
- Most renal surgery without supervision
- Conservative renal surgery with supervision
- Cystoplasty with minimal supervision
- Cystoprostatectomy with minimal supervision
- Radical prostatectomy with supervision

Personal development

- Be able to competently manage the unit in the absence of a senior colleague
- Understand the dynamics of interaction with Colleagues and hospital managers
- Prepare for consultant appointment
- Lead, under supervision, in regional audit
- Have developed time management and coping strategies

Suggested Courses

- Management
- Training the trainer

Opposite – JCHST urological operative experience and competence summary sheet. The indexed procedures will be appropriate for the sub-specialist firm concerned – please see appendix 5 for completion details.

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure** Post Exam Urology Years 5&6 subspecialisation	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*
				Appropriate					
				indexed					
				procedures					
				See appendix 5					

(*Where trainers disagree on the level of competence, the lowest level should be accepted)

I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Full instructions for completion of form on reverse side

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the directon of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervison but may need help occasionally

C Able to perform the procedure under supervison

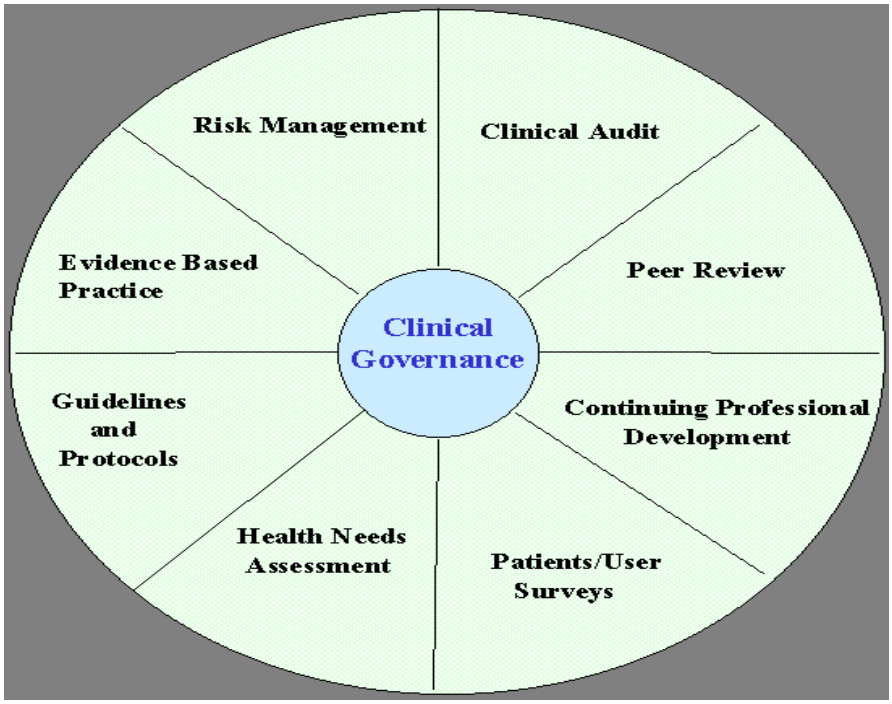
D Unable to perform the entire procedure under supervison

U Unknown (not assessed) during this training period

Section 11

CLINICAL GOVERNANCE IN TRAINING

Clinical Governance can be defined as a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish. "The principles of clinical governance apply to all those who provide or manage patient care services in the NHS"…." effective clinical governance will make it clear that quality is everybody's business"(Secretary of State for Health, 1998. A First Class Service: Quality in the New NHS. Department of Health). It is a statutory requirement of health service trusts. Clinical Governance is about reducing risk, continuously improving quality and increasing public confidence in the health service. Although there is a new emphasis on accountability, many of the components of clinical governance are familiar and are already used in clinical practice (see figure).



As doctors, we have always had an ethical responsibility for delivering the best quality care to our patients. Clinical governance insists on a culture of continually striving to identify and implement opportunities to improve that care. The principles apply at all levels in the health service, including consultants, those in training grades, nurses, managers, students and support staff.

The key components of the Clinical Governance framework include:

- Comprehensive quality improvement activity, e.g. clinical audit, evidence based practice, peer review etc
- Policies to manage risk which will enable staff to identify and tackle poor performance,
- Clear lines of responsibility and accountability for the overall quality of clinical care.

It is anticipated that each Trust will be able to adopt their own approach to clinical governance, based on the framework, but suited to the needs of their patients and staff. For clinical governance to flourish, it needs to be underpinned by a culture that encourages staff to develop and fulfil their potential to meet the needs of patients. Patients are demanding to be better informed in order that they can become genuine partners in decisions about their care. Surgeons in training must take seriously the need to communicate carefully and compassionately with their patients and demonstrate up to date clinical knowledge and competence to practice. To ensure that staff meet their professional responsibilities, the government has included modernising professional self regulation as part of their overall plan. An integral part of this process for SpRs is the maintenance of a personal portfolio. This portfolio will form part of the RITA assessment and in later years will conveniently demonstrate the maintenance of knowledge and skills (and indirectly competence) in consultant practice.

Appendices

Appendix 1: Information each trainee must provide to a RITA review meeting

Appendix 2: Educational Contract for current training post

Appendix 3: Record of appraisals

Appendix 4: Timetable and CME activity

Appendix 5: Operative experience and competency summary with notes

Appendix 6: Audit and research log

Appendix 7: Yellow JCHST form

Appendix 8: Green JCHST form

Appendix 9: Hospital preference form

Appendix 10: Annual RITA record

Appendix 11: Clerical Communication Trial Evaluation

Appendix 12 BAUS Office of Education

Appendix 1

Information each trainee must provide prior to a RITA review meeting

1. Awareness of position within training scheme
2. Proposed date of FRCS (Urol) (year 3 & 4)
3. Proposed date of CCST
4. Copy of current educational contract (appendix 2)
5. Record of appraisals (appendix 3)
6. Weekly timetable (appendix 4)
7. Operative experience and competence summary (appendix 5)
8. Progress with individual audit project (appendix 6)
9. Progress with research projects (appendix 6)
10. Record of CME activity (appendix 4)
11. Completed yellow JCHST form (appendix 7) – one for each trainer
12. Trainees assessment of current post (green JCHST form) (appendix 8)
13. Hospital Preference Form (appendix 9)

Appendix 2

…….**Higher Urological Training Scheme**

Educational Contract

Name of trainee_____ Date of CCST _____

Educational

Supervisors_____

Hospital(s)_____ Date_____

1. Trainee's assessment of progress and achievement in previous posts

2. Trainers assessment of progress and achievement (based on previous RITA review and subsequent programme directors feedback)

Appendix 2 cont'd;

3. Agreed educational targets

Knowledge base	refer to appropriate year in training manual
Clinical skills	e.g history taking, clinical examination, physical examination, investigations, diagnosis, judgement (refer to appropriate year in training manual)
Technical skills	refer to appropriate year in training manual e.g undertake urodynamics, transrectal ultrasound and biopsy, co-ordinate complex management etc
Dextrous skills	refer to appropriate year in training manual
	Open Endoscopic
Personal Development	e.g motivation, time management, organisational skills, teaching, lecturing, research, audit, NHS structure and function, clinical governance etc
	Research Audit Project Courses Other

Supervisor's comments;

Signed_____ _____Date;_____
Supervisor(s) Trainee

Appendix 3

Higher Urological Training Scheme

Record of Appraisal*

(to be completed at the RITA assessment)

Name of Trainee……... Year……

Hospital /Post/Specialty	Trainer(s)	Start date	End date
……..	…….	……	……..

Date of appraisal	Trainee signature	Trainer signature	Action required (required)
……..	……	……	……..
……..	……	……...	……..
……..	……	……...	……
……..	……	……...	……
……..	……	……...	……
……..	……	……...	……..
……..	……	……...	……
……..	……	……...	……
……..	……	……...	……
……..	……	……...	……

- During your attachment , you should met with your trainer(s) on a regular basis to discuss your progress and training needs. Please record the dates of your appraisal meetings, although they do not form part of your assessment

Unresolved concerns by either party require a meeting with the Programme Director. This meeting will be documented and may form part of the RITA assessment

Appendix 4. Annual Assessment form between / / and / /

Name **Hospital**

Year of training Date of CCST Proposed date of FRCS (Urol)

Weekly timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
Am					
Lunchtime					
Pm					

CME Activity

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
CME Programme													
Radiology													
Pathology													
Journal Club													
Other													
In-House Audit													
Regional Audit													
Meetings attended													
Courses attended													

Appendix 5

Operative experience and competence summary

Notes for trainer and trainee

The operative summary is an extremely important part of the objective assessment of the urologist in training. Above all, it is these documents that are scrutinised for evidence of satisfactory progression if problems were to occur in later consultant practice**. For this reason it is essential that both the trainee and two trainers should sign off the record as an accurate and verifiable document which may later withstand detailed scrutiny if necessary.**

The indexed procedures shown in the example sheets (derived from Saridge 85, Darke 2000) within the manual are for broad guidance only. Listed are the typical procedures that might be performed by the trainee in a typical DGH unit. Naturally the spectrum of operative activity offered by any urological firm will vary and thus for each training slot the 10 – 15 commonest procedures performed will be inserted in the central column. The blank form can be downloaded or photocopied from this appendix. If these procedures are inappropriate for the trainee's experience, this will be a matter for the Programme Director who would need to locate a more appropriate trainee into that particular training slot. Such problems should not occur as the Programme Director will be familiar with the experience offered by the units within his rotation. Whatever the variation in training experience offered by the various slots, by the end of year 4 the trainee should have experienced a broad range of core urology sufficient to allow him to take the FRCS (Urol) with confidence. Clearly, the indexed procedures on the report forms for the first 4 years should reflect this broad exposure to core urology.

The radical nephrectomy benchmark. The average population covered by a typical urological unit usually generates approximately 20 (or greater) cases for radical nephrectomy per year and these cases should be available for the appropriate trainees. Failure to identify this benchmark procedure within the trainee's operative experience and competence summary sheets by year 4 raises serious questions about either individual training posts or the training rotation as a whole. A trainee passed fit to sit the FRCS (Urol) by the Programme Director should be able to undertake this procedure without direct supervision (P) and to competency level A – i.e. the trainee can deal with any complications that might arise from the procedure. NB: this only applies to "simple" radical nephrectomy for tumour and excludes cases with venous spread and other complexities.

The operative experience sheet for trainees in year 5 and 6 will be flexible according to the core/sub-speciality profile of the training slot. Despite this flexibility, accuracy of assessment is even more important during these final 2 years. The indexed procedures in the central column will reflect the sub-speciality interest of the training slots and as before, the Programme Director will ensure that these constitute an appropriate programme for the trainee's intended career path.

Naturally, the trainee will undertake many more procedures during his 6 year programme than appear on the competence summary sheet. These will, as before, be recorded in the paper or electronic personal logbook.

••

The College Curriculum Committee has provided the following checklist of core skills to help trainers when making their operative assessments. Clearly not all of these apply to every procedure but taken as a whole the list offers helpful guidelines.

- Documents possible complications when obtaining consent
- Thorough preparation (marking, catheter, antibiotics etc)
- Good scrub and aseptic technique
- Positions patient correctly on operating table
- Makes appropriate incision(s)
- Purposeful dissection in correct tissue planes
- Demonstrates sound knowledge of anatomy
- Familiar with all the steps of the procedure
- Uses the correct instruments efficiently
- Handles dangerous instruments safely
- Uses assistant(s) to the best advantage
- Possesses good hand-eye co-ordination
- Handles tissues gently and dextrously
- Reliable suturing and knotting techniques
- Sound repair of anastomosis
- Uses diathermy appropriately and safely
- Able to control bleeding by suction, clips or sutures
- Closes wound neatly and securely
- Procedure unhurried with no unnecessary delay
- Good documentation (operation note and postop. instructions)
- Regular involvement with postoperative care

Appendix 5

J C H S T

Urological Operative Experience and Competence Summary

TRAINEE _____ NTN/VTN/LAT/other

HOSPITAL POST _____ Year ½ 1 2 3 4 5 6

TRAINERS _____ CCST date -----/-----/-----

Form covers period -----/-----/----- to -----/-----/-----

Total Experience to date			comp. Level	**Procedure**	**Experience this post**			**Competence Level**	
A	PA	P			A	PA	P	Tr 1*	Tr 2*

(*Where trainers disagree on the level of competence, the lowest level should be accepted)
I confirm that this is an accurate record of my operative experience

Signature of Trainee: _____ Date: -----/-----/-----

I/We confirm that this summary is an accurate record of this trainee's ability as defined by the operative competence grading overleaf.

Signature of Trainer 1: _____ Date: ----/-----/-----

Signature of Trainer 2: _____ Date: -----/----/-----

Full instructions for completion of form on reverse side

Operative Experience

Trainee: Enter your logbook totals for the total number of procedures that you have performed since you began surgical training in the first three columns.

Enter your logbook totals for the number of procedures that you have performed during this training period in the three 'Experience this period' columns.

A Assisting a senior trainee or consultant

PA Performed with supervision by a senior trainee or consultant (supervisor at the table or in the theatre)

P Performed without direct supervision (or supervising a junior trainee)

(Note: Regardless of their level of competence, trainers are reminded that trainees can only operate under the directon of a named consultant.)

Operative Competence Grading

Trainer(s): Rate the trainee's competence to perform each procedure at the end of this training period according to the following scale:

A Competent to perform the procedure unsupervised (can deal with complications)

B Does not usually require supervison but may need help occasionally

C Able to perform the procedure under supervison

D Unable to perform the entire procedure under supervison

U Unknown (not assessed) during this training period

Appendix 6

Higher Urological Training Scheme

Audit and Research Log

Name of trainee_____Date of CCST _____

Educational Supervisors_____

Hospital(s)_____Date_____

Audit	**Project(s)** **Recommendations**
Research	**Project(s)** **Publications / Presentations / Submissions**

Supervisor's comments;

Signed_____ _____ **Date;**_____
Supervisor(s) Trainee

JOINT COMMITTEE ON HIGHER SURGICAL TRAINING

TRAINEE ASSESSMENT FORM

This is an official document. A separate form is to be completed at the end of a placement by each trainer (forms are to be completed every 6 months and must be completed within a month of finishing the placement). The original is the property of the JCHST. Signed and completed forms are to be returned to the JCHST offices with a copy going to the Programme Director and Postgraduate Dean.

Guidance notes on the completion of this form are available on the JCHST web site, www.jchst.org from the Postgraduate Dean or Programme Director.

General Information

(to be completed in block capitals by trainee before handing to trainer for completion)

Form completed by (Name of trainer) _____

Name of trainee _____

Programme Director _____

Specialty _____

Training Number (NTN/VTN/FTN or LAT) _____

Expected CCST date (if applicable) _____

GMC Number _____

Post and Trust/Hospital (Number if known) _____

Assessment period From: _____ To: _____

Sick Leave
Duration of absence due to sick leave during this period _____

Duration of sick leave since entering SpR training _____

Trainer Signature _____ Date_____

Trainee Signature _____ Date_____

To be completed by trainer

Year of SpR training (please circle) 6 mths 1 2 3 4 5 6

CRITERIA	unsatisfactory needs to repeat training in this area RITA E	needs targeted training in this area RITA D	satisfactory RITA C	COMMENTS
A. Clinical Skills				
History Taking				
Physical Exam				
Investigations				
Diagnosis				
Judgement				
Operative skill				
After care				

B Knowledge				
Basic Science				
Clinical				

C. Postgraduate Activities				
Teaching				
Lecturing				
Case presentation				
Publications				
Learning skills				
Research				
Audit				

CRITERIA	unsatisfactory needs to repeat training in this area RITA E	needs targeted training in this area RITA D	Satisfactory RITA C	COMMENTS
D. Attitudes				
Reliability				
Self Motivation				
Leadership				
Team working				
Administration				
Relationships & Communication With:				
a) Colleagues				
b) Patients				
c) Other staff				
Communication skills:-				
a) informed consent				
b) Bereavement				
c) Breaking bad news				

Comments from trainer (please extend to an attached sheet if necessary – each attached sheet must be signed and dated by trainer and trainee)

_____

_____

_____

_____

_____

_____

Summary conclusion

☐ Satisfactory in all respects to proceed

☐ Satisfactory to proceed, but the following areas for improvement have been identified and must be addressed in the next placement (detail areas for improvement-please extend to an attached sheet if necessary-attached sheets must be signed and dated by trainer and trainee

_____

_____

_____

_____

_____

_____

_____

_____

☐ Unsatisfactory to proceed and the training placement needs to be repeated

☐ Unsatisfactory and should be referred for advice to Postgraduate Dean / Programme Director about choosing an alternative career pathway

Comments from Trainee (please extend to an attached sheet if necessary – each attached sheet must be signed and dated by trainer and trainee)

CONFIDENTIAL

JOINT COMMITTEE ON HIGHER SURGICAL TRAINING
TRAINING POST ASSESSMENT FORM

(FOR COMPLETION BY HIGHER SURGICAL TRAINEES)

This is an official document. The original is the property of the JCHST. After completion it should be passed to the Training Programme Director/Chair of the Regional Training Committee who will collate and scrutinise all reports relating to the programme, before making them available to the Regional Postgraduate Dean. The Training Programme Director/Chair of the Regional Training Committee will retain copies, submitting originals to the JCHST Office at The Royal College of Surgeons of England, 35/43 Lincoln's Inn Fields, London WC2A 3PE for scrutiny by the SACs.

TRAINEE NAME: ..... DATE: .....

HOSPITAL BEING ASSESSED: ..... DATE STARTED: .....

REGION: ..... NTN/VTN/FTN or LAT .....

CONSULTANTS: ..... FROM: ..... TO: .....

SPECIALTY: ..... SPECIAL INTEREST(S): .....

CLINICAL TRAINING	Deficient	Satisfactory	Good	Comments
Out Patients				
Special Clinics				
Ward Rounds				
Surgical Meeting				
Audit				
Journal Review				
OPERATIVE TEACHING				
Adequate Opportunity to Operate				
Demonstration of Techniques				
Supervision in Theatre				
Communication / Rapport with Consultant				
RESEARCH				
Opportunity				
(Detail Sessions.....)				
Encouragement				
CAREER ADVICE				
CLINICAL MANAGEMENT				
1) Did the consultants allow adequate responsibility for patient management?				
2) Did you have adequate support with Emergency cases?				
a) in theatre				
b) advice				
FEEDBACK				
Did the Consultant provide you with appropriate feedback of your performance?				

GENERAL				

1) Strengths of firm:

2) Weaknesses of firm:

3) Suggestions for improvement:

4) Did this placement fulfil your expectations?

Deficient	Satisfactory	Good

OVERALL RATING

TRAINEE'S TIMETABLE

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
Timetable (current)						

On Call – ROTA **Tiers e.g. HST**
ADH's **SHO**
PRHO

COURSES & MEETINGS ATTENDED IN LAST 12 MONTHS

Title	**Date**	**Location**

Number of days Study Leave granted .....

Course/meeting fee paid? YES/NO

Incidental expenses paid? YES/NO

These forms are strictly confidential. Completion and return will greatly facilitate the Department's activities.

NOTES TO ACCOMPANY JCHST TRAINING POST ASSESSMENT FORM

1. Assessment Form is **CONFIDENTIAL** once completed, and must be handled accordingly**.**

1. The following guidelines are for trainees completing the form.

    a. Complete as fully as possible the post details at the top of the form.

    b. Complete assessment by placing an **'X'** in one box only against each criterion, with comments if desired. The following guidelines are offered for use in grading criteria.

	DEFICIENT	**SATISFACTORY**	**GOOD**
CLINICAL TRAINING			
Out patients	Do not see new patients. No time for / interest in discussion with consultant. Large number of patients. Poor organisation.	⟷	See new & old patients. Time for discussion with consultant. Reasonable time with patient. Well organised.
Special Clinics	As above. Do not learn / use any special investigations / techniques. Often work alone.	⟷	As above. Opportunity to learn special investigations / techniques. Often work with consultant. Multi disciplinary.
Ward Rounds	Rarely consultant led. Rapid decisions, little discussion. Junior views not listened to.	⟷	Usually consultant led. In-depth presentation / discussion of patients. Adequate time allowed.
Surgical Meetings	Poor consultant support. Badly attended. Rigid non-innovative programme. Not multi-disciplinary. Held outside normal working hours. Little input from consultants.	⟷	Consultant led. Well attended by all grades. Varied programme. Often multi-disciplinary. Regularly held in normal session time. Juniors encouraged to present / take part.
Audit	Morbidity / mortality only. No in-depth review of clinical practice / problems. Does not lead to change in clinical practice. Retrospective data. Juniors expected to collect all data. Non constructive / threatening atmosphere.	⟷	Proper audit cycle utilised. Leads to change in clinical practice. Prospective data collection. Juniors assisted with data collection. Friendly, non-confrontational atmosphere.
Journal Review	Juniors expected to do all reviewing. Poor consultant attendance. Didactic discussion?	⟷	Equal consultant / junior participation. Articles precied and discussed.
OPERATIVE TEACHING			
Opportunity	Usually left to do minor surgery. More than 5 elective sessions / week. Only assists and rarely performs more major cases.	⟷	Mix of Major & minor elective surgery. At least 3 elective sessions / week. Exposure to day surgery, and minimal invasive surgery.

Teaching	Works on own. Poor senior support. Not shown / taught new or more advanced techniques.	⟷	Taken through procedures. Shares cases with consultant. Video teaching films. Anastomotic and new technique workshops / courses encouraged.
Supervision	Consultant rarely present in same or adjoining theatre. Own lists. Cannot readily summon senior assistance if in difficulty. No clear guidelines.	⟷	Consultant usually present in same or adjoining theatre. Assistance at senior level readily available. Given clear guidelines as to when to call / inform / discuss with consultant.
RESEARCH			
Opportunity	No fixed time allowed. Any identified time often not taken due to other pressures. Clinical work precludes time for research.	⟷	Fixed session / protected time allocated. Arrangements made to free trainee of some clinical work to allow research activity.
Encouragement	No interest shown by consultants. No ideas or stimulation.	⟷	Able to discuss / plan ideas with consultants. Directed to appropriate sources for information / opportunities / funding.
CAREER ADVICE			
	Consultant not interested in trainee or his career.	⟷	Consultant offers advice / help. Directs trainee to source of advice / help.
CLINICAL MANAGEMENT			
Patient Management	No guidelines. No trust. Consultant questions all decisions. Consultant does not back trainee.	⟷	Consultant readily offers help / advice. Trainee given guidelines. Trusted to use own initiative / judgement. Consultant backs trainee.
Emergency Operating	Advice / help not easy to obtain. Consultant difficult to find / contact. Also not keen to come in / assist.	⟷	Advice / help readily available. Consultant always happy to be phoned / consulted / give advice.
Feedback	Poor or absent appraisal. No specified protected time for discussion of trainee's performance. Consultant not frank about performance. Mainly critical. Rarely praises.	⟷	Regular appraisals sessions in clearly specified time. Consultants open about strengths / weaknesses / areas for improvement.
GENERAL			
	No objectives. All clinical work. Poor education / learning.	⟷	Clear objectives for trainee. Good balance / clinical / teaching / learning / research.

Appendix 9

Higher Urological Training Scheme

Hospital Preference form for Year Beginning……...

Name:……..

Current Year:…… **CCST date**…….

Proposed date of FRCS(Uol):…….

Sub-speciality Interests:……...

Order of Preference for forthcoming year:

First six months	Second six months
1……	……..
2……	……..
3……	……..

Order of Preference for year after next:

First six months	Second six months
1……	……..
2……	……..
3……	……..

Appendix 10

Higher Urological Training Scheme

RITA Review Record

(to be completed at the RITA assessment by Programme Director or STSC Chairman)

Name of Trainee……... Year……

Hospital /Post/Specialty	Trainer(s)	Start date	End date
……..	…….	…….	……..

Proposed date FRCS(Urol)…… Estimated date CCST……

Previous RITA assessments	
SpRs own assessment of progress with educational contract and training plan for next year	
Trainers assessment of progress **(yellow JCHST form)**	
In service examinations **Mock MCQ** **Mock FRCS(Urol)**	
Review of logbook of operative procedures	
Research and Publications	
Audit	

Generic training (experience in teaching, management and leadership)	
Training Portfolio including updated curriculum vitae	
Weekly timetable (in house CME and educational programme attendance)	
Feedback on training post by SpR	

Conclusions/ comments of panel:
Feedback given to SpR **SMART objectives** **Priorities for study leave:**

Signed _____ Date _____
Chairman of STSC or Programme Director

Appendix 11

Clerical Communication Evaluation

TRAINEE _____ CLINIC _____

SECRETARIAL ASSESSOR _____ DATE _____

Place a cross on the 10 point scale by each question

Is tape clear in relation to clinic performed and person speaking?
Yes — No

Is the voice clear and crisp?
Yes — No

Is the letter construction (sentences, paragraphs etc) understandable?
Yes — No

Are the instructions (investigations, copy letter etc) appropriate and understandable?
Yes — No

Overall, do you think you have been able to deal with this tape to your own satisfaction
Yes — No

Written comment (not obligatory) _____

_____

Average Score		
	<20	satisfactory
	<50	remedial work may be required
	<70	identify and correct problem
	>70	targeted training required

Signed _____
Secretarial Assessor

Appendix 12

BAUS OFFICE OF EDUCATION

Ian Eardley (Director)

Adrian Joyce (Assistant Director)

Jill Field (Secretarial Assistant)

Board of Advisors:

C R Charig	(Epsom)	College of Surgeons of England Tutor in Urology
N J R George	(Manchester)	Particular responsibility for CME
A R Mundy	(London)	Organiser of Biannual in-service MCQ examination
J G Noble	(Oxford)	
K J O'Flynn	(Manchester)	
N Oakley	(Sheffield)	Particular responsibility for Skills Courses

Contact Details:

Pyrah Department of Urology
2nd Floor, Lincoln Wing
St James's University Hospital
Beckett Street
Leeds
LS9 7TF

Telephone: 0113 206 4167
Facsimile: 0113 206 4920
E-mail: jill.field@leedsth.nhs.uk

The Office of Education was created by BAUS in January 1997 in response to increasing demand by trainees and Urologists to have structured educational material delivered to them on a regular basis. Whilst the role of the Specialist Advisory Committee (SAC) in Urology is to set the necessary standards to become a qualified urological surgeon in the UK and it is the responsibility of the Intercollegiate Board to test those standards through the FRCS (Urol) Examination, it is aim of the Office of Education to ensure that adequate teaching is delivered to maintain these standards.

The focus of these efforts, has thus far, been the trainee urological surgeon. However, the remit of the Office of Education is to provide educational opportunities for all urologists, and many of the ctivities listed below are open to all urologists.

Current on-going projects include the following:

- The production of an bi-annual self assessment exercise in booklet form, containing MCQs and stem questions with appropriate answers, references and explanations
- Delivery of a biannual in-service MCQ exam for urological trainees throughout the UK and Ireland
- A bi-annual revision course for candidates taking the FRCS (Urol)
- Help and advice for FRCS (Urol) candidates to improve their performance in these examinations
- Organisation of Educational Courses at BAUS Annual Meetings (22 courses in 2003)
- Organisation of Practical Skills Courses at the BAUS Annual meetings (6 courses in 2003)
- Co-ordination of training courses conjunction with the BAUS sections of Oncology, Endourology, Female and Reconstructive Urology and Andrology
- A dedicated section of the BAUS website with regularly updated news, a calendar of events, interesting links and on-line self-assessment exercises