

Joint Surgical Colleges Fellowship Examinations

Syllabus

Urology

May 2014

The Joint Surgical Colleges Fellowship Examination (JSCFE) syllabus defines the breadth and depth of knowledge, professionalism and clinical skills to be attained by surgeons in training. It specifies the levels of expertise to be anticipated at entry and at the various stages in training and defines the standards of competence expected on completion of the training programmes. The JSCFE adopts this standard as the one against which assessment will be made. The examination will assess various elements of applied knowledge, diagnostic skills, clinical judgment and professionalism.

Clinical Management

The examination is set at the level of knowledge and standard required of a recognised specialist (day one NHS UK/Ireland consultant standard) in the generality of the specialty. Given the range of cases, the spectrum of complexity and the ability to deal with variations and complications within the practice of this specialty, a candidate should be able to demonstrate that their training / experience is such that they can safely manage both common and more complex clinical problems.

Operative skills

While the examination does not formally assess technical operating ability the JSCFE considers it inappropriate to admit a candidate to the examination if there is any doubt as to their technical skills.

Professionalism and Probity

The development of a mature and professional approach in clinical practice is essential for safe and successful patient care. Attitudes towards patients and colleagues, work ethic, ability to deal with stressful issues and the effectiveness of communication skills in providing supportive care for patients and their families are the professional qualities expected of successful candidates in this examination.

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Introduction

The Intercollegiate Surgical Curriculum Programme (ISCP) provides the framework for systematic training from completion of the foundation years through to consultant level in the UK. It achieves this through a syllabus that lays down the standards of specialty-based knowledge, clinical judgement, technical and operative skills and professional skills and behaviour, which must be acquired at each stage in order to progress. The curriculum is web based and is accessed through www.iscp.ac.uk. The website contains the most up to date version of the curriculum and each of the ten surgical specialty syllabuses. The ten specialities include General Surgery, Vascular surgery, Urology, Paediatric surgery, Cardiothoracic Surgery, Trauma and Orthopaedic surgery, Oral and Maxillofacial surgery (OMFS), Plastic surgery, Neurosurgery and Otolaryngology (ENT). They all share many aspects of the early years of surgical training in common, but naturally become increasingly singular as training in each discipline becomes more advanced. Each syllabus will emphasise the commonalities and elucidate in detail the requirements for training in the different specialities.

This syllabus is designed for candidates who have declared urology as their specialty interest. The standard expected is that of a Day 1 Consultant in UK General Surgical practice.

Prior to sitting this examination it will be expected that the candidate will have gained competence in a wide range of knowledge and skills including the basic sciences which are common to all surgical specialities. These topics are defined in the syllabus for the MRCS examination (<http://www.intercollegiatemrcs.org.uk/new/guide.html>). This must be supplemented by the topics from the Urology Specialty syllabus as outlined below.

Eligibility Criteria

Candidates would normally have passed the MRCS examination of one of the four Surgical Royal Colleges

Alternatively, candidates would have successfully completed a locally registered *and higher* surgical training programme

It is expected that candidates will produce documentary evidence of having completed a minimum of 4 years surgical training following award of MRCS or equivalent.

The final decision on eligibility for admission to the examination will lie with the JSCFE Specialty Board

Surgeons applying for this examination would be expected to demonstrate:

- Theoretical and practical knowledge related to urology and to their specialty practice;
- Technical and operative skills;
- Clinical skills and judgement
- Generic professional and leadership skills;
- An understanding of the values that underpin the profession of surgery and the responsibilities that come with being a member of the profession;
- The special attributes needed to be a surgeon;
- A commitment to their ongoing personal and professional development and practice using reflective practice and other educational processes;
- An understanding and respect for the multi-professional nature of healthcare and their role within it

The syllabus is modular in format, with content that covers the major areas of highly specialised practice that are relevant to a urological practice. Each syllabus is intended to allow the successful candidate to develop an area of clinical interest and expertise upon appointment to a consultant post. Some will require further training in order to achieve the competences necessary for some of the rarer complex procedures.

SYLLABUS STRUCTURE

The syllabus lays down the standards of specialty-based knowledge, clinical judgement, technical and operative skills and professional skills and behaviour that must be acquired at each stage in order to progress. The syllabus comprises the following components:

- Specialty overview outlines which describe the following:
 - Details of the specialty
 - The scope of practice within the specialty
 - The key topics that a trainee will be expected to cover by the end of training
- Key topics that all trainees will cover and will be able to manage independently, including complications. These are also referred to as essential topics.
- Index procedures that refer to some of the more commonly performed clinical interventions and operations in the specialty. They represent evidence of technical competence across the whole range of specialty procedures in supervised settings. .

The Professional Behaviour and Leadership Skills syllabus is mapped to the Leadership framework as laid out by the Academy of Medical Royal Colleges and the Framework for Appraisal and Assessment derived from Good Medical Practice. The Professional Behaviour and Leadership skills section of the syllabus is common to all surgical specialties and is based on Good Medical Practice

- Leadership Framework - http://aomrc.org.uk/publications/statements/doc_download/132-medical-leadership-competency-framework.html
- Appraisal Framework - http://www.gmc-uk.org/static/documents/content/GMP_framework_for_appraisal_and_revalidation.pdf_41326960.pdf

The Scope and Practice of Urology

Trained specialists in urology will be competent to manage selected emergency surgical patients and will have a developed interest in one of the areas of special interest associated within urology.

This list of Key Topics defines, in general terms the essential skills and levels of clinical expertise expected of a surgeon completing their training. It is unlikely that the expertise will be confined to the descriptions that follow as surgeons may also develop additional special interests by the time they emerge from training. As it is used here, the term 'manage' equates to diagnosis, assessment and treatment or referral as appropriate.

As it is used here, the term 'manage' equates to diagnosis, assessment and treatment or referral as appropriate. The levels of expertise expected are further expressed within the detail of the syllabus.

At the end of training it is expected that all Urologists will be able to:

1. Manage the patient presenting with stone disease
 - Be familiar with the presentation of stone disease
 - Recognise the patient presenting with acute ureteric colic, urinary obstruction and sepsis and manage appropriately
 - Manage appropriate investigation (CT, IVU and ultrasound) in such situations, involving other specialists as appropriate.
 - Treat straightforward ureteric stones safely and appropriately, referring more complicated cases to specialist colleagues as appropriate
 - Treat straightforward bladder stones safely and effectively referring more complicated cases to specialist colleagues as appropriate.

- Treat straightforward renal stones, by means of extracorporeal shock wave lithotripsy referring more complicated cases to specialist colleagues as appropriate
- Undertake appropriate metabolic assessment and treatment of straightforward urinary tract calculi
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- 2. Manage the patient presenting with acute or chronic abdominal pain referable to the urinary tract
 - Diagnose the underlying cause of renal pain
 - Manage the patient presenting with acute or chronic loin pain
 - Refer onwards to other specialists if appropriate.
 - Manage the patient presenting with upper urinary tract obstruction
 - Be familiar with the modes of presentation of upper tract obstruction (retroperitoneal fibrosis, ureteric stricture) and manage appropriately, involving other specialists as appropriate.
 - Undertake cystoscopy and stenting when appropriate
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- 3. Manage patients presenting with lower urinary tract symptoms (LUTS)
 - Manage the patient presenting with LUTS from presentation to completion
 - Manage the patient presenting with acute or chronic retention from presentation to completion
 - Competently perform diagnostic cystoscopy, urodynamics, bladder neck incision and TURP in patients with bladder outflow obstruction.
 - Competently insert a suprapubic catheter, with ultrasound guidance as appropriate
- 4. Manage the patient presenting with haematuria
 - Diagnose and manage the common causes of haematuria using appropriate radiological and endoscopic techniques and supervise effective resuscitation.
 - Competently perform diagnostic cystoscopy, bladder biopsy and TURBT in patients with bladder lesions.
 - Competently evaluate and manage of patients with ureteric obstruction
 - Be familiar with the indications for referral to specialist units and other colleagues for patients with muscle invasive bladder cancer.
- 5. Manage the patient presenting with urethral stricture
 - Evaluate and manage patients with urethral stricture and refer onwards to other specialists as appropriate
 - Competently perform urethral dilatation and optical urethrotomy in patients with urethral stricture
 - Competently insert a suprapubic catheter, with ultrasound guidance as appropriate
- 6. Manage urinary tract infections
 - Manage pyelonephritis, renal and peri-renal abscess from presentation to completion
 - Manage patients presenting with recurrent UTI from presentation to completion
 - Competently diagnose, assess and manage patients with different forms of cystitis (interstitial cystitis etc) and to refer onward where appropriate
 - Competently diagnose, assess and manage men with different forms of prostatitis and epididymitis
 - Competently diagnose, assess and manage men with different forms of gonococcal and non-gonococcal urethritis and other STDs seeking advice and onward referral as and when appropriate.
- 7. Manage benign & malignant lesions of male genitalia skin
 - Recognise the common malignant and potentially malignant conditions of the penis, including phimosis, paraphimosis, viral lesions, squamous carcinoma and be familiar with current management protocols and their implications for early management.
 - Diagnose and excise, biopsy or treat conservatively common swellings of the skin and subcutaneous tissues of the penis and genitalia
 - Apply straightforward plastic surgical techniques for primary wound closure.

- Recognise the indications for and to perform a circumcision
8. Manage patients presenting with a scrotal swelling
- Diagnose and manage patients presenting with scrotal symptoms such as hydrocele, epididymal cyst, varicocele, post vasectomy pain, testicular torsion, abscess etc, involving other specialist colleagues appropriately.
 - Diagnose and manage initially, neoplastic conditions of the testis and refer onwards to other specialists as appropriate
 - Diagnose, assess and manage serious infections such as acute necrotising fasciitis, seeking advice and onward referral as and when appropriate.
 - Competently undertake surgery for benign and malignant scrotal conditions including hydrocele repair, excision of an epididymal cyst, ligation of a varicocele, treatment of testicular torsion, and to perform an orchidectomy for benign and malignant indications
9. Manage the patient presenting with urinary incontinence
- Competently diagnose investigate and manage patients presenting of urinary incontinence
 - Be able to undertake urodynamic studies, where needed, to investigate patients with urinary incontinence
 - Treat straightforward patients with urinary incontinence including the provision of operative intervention including Botulinum toxin and mid-urethral tape insertion while referring more complex cases onward as and when appropriate.
 - Be familiar with the presentation of voiding dysfunction and incontinence in patients with neurological disease
10. Manage the patient with prostate cancer
- Be competent to diagnose and manage patients presenting with an elevated PSA including the provision of trans-rectal ultrasound and biopsy
 - Be competent in the evaluation and management of patients with organ confined, locally advanced and metastatic prostate cancer
 - Be familiar with the indications for referral to specialist units and other colleagues for patients with prostate cancer
 - Be competent in performing diagnostic cystoscopy, urodynamics and TURP in patients with prostate cancer.
11. Manage the patient with bladder cancer
- Competently diagnose, investigate and manage patients presenting with bladder cancer including the provision of cystoscopy, TURBT, intra-vesical chemotherapy etc
 - Be familiar with the indications for referral to specialist units and other colleagues for patients with locally advanced bladder cancer
12. Manage the patient with renal cancer
- Competently diagnose and initially manage patients presenting with renal cancer
 - Manage appropriate investigation (CT, MRI etc) in such situations, involving other specialists as appropriate.
 - Be familiar with the indications for referral to specialist units and other colleagues for patients
13. Manage the patient presenting with infertility, ejaculatory disorders etc
- Competently diagnose, assess and manage couples with infertility appropriately and refer on to other specialist colleagues as appropriate.
14. Manage the patient presenting with erectile dysfunction
- Competently diagnose, assess and manage men with erectile dysfunction appropriately and refer on to other specialist colleagues as appropriate.

15. Manage the patient presenting with penile deformity, priapism, penile fracture etc
 - Competently diagnose, assess and manage benign penile problems (including priapism and fracture) appropriately and refer on to other specialist colleagues as required
16. Manage the common urological conditions of childhood
 - Competently diagnose, assess and manage appropriately children presenting with urinary tract infections and involving other specialist colleagues as the situation requires.
 - Competently diagnose, assess and manage appropriately patients presenting with the common inguinoscrotal conditions of childhood (torsion of the testis, hernia, undescended testis), phimosis, referring and involving other specialist colleagues as the situation requires.
 - Be aware of the important surgical conditions of childhood, their presentation as elective and emergency cases and the indications for urgent assessment and diagnosis by specialist colleagues (e.g. acute appendicitis, intussusception, volvulus)
17. Manage the patient presenting with renal failure
 - Competently diagnose, assess and initially manage appropriately patients presenting with renal failure / anuria, involving other specialist colleagues as the situation requires
 - Understand the indications for treatment with haemodialysis or peritoneal dialysis
 - Competently assess bladder function in those patients under consideration for renal transplantation
18. Manage the patient with multiple injuries
 - Assess and resuscitate the patient with multiple injuries in accordance with the ATLS standards current at the time.
 - Work appropriately as part of the trauma team, participating at a level appropriate to the situation either as member or leader.
 - Conduct the initial management of gun-shot and other penetrating wounds involving the urinary tract, calling in other expertise as necessary.
 - Participate as an effective member of the major incident team as required.
19. Manage trauma of the renal tract according to accepted protocols
 - Diagnose and manage the patient with possible injury to the urogenital tract from blunt and penetrating renal trauma
 - Diagnose, resuscitate and transfer to specialist units patients suffering from renal and other trauma calling in other expertise as necessary

Key topics

Candidates sitting this examination would be expected to be competent in the management of the conditions outlined below. This represents the minimum standard that would be expected.

- * Manage the severely septic patient
- * Be able to comprehensively manage the patient presenting with loin pain
- * Treat a patient with acute ureteric obstruction from start to finish
- * Assess and manage patients with acute and chronic urinary retention
- * Diagnose, and manage urinary tract bleeding and clot retention
- * Diagnose and manage acute and chronic renal failure including the principles of renal transplantation.
- * Recognise and manage severe and complex urinary tract infection
- * Manage testicular torsion and other causes of acute testicular pain and swelling
- * Manage a patient with low flow priapism
- * Safely assess the multiply injured patient (includes ATLS certification)
- * Identify and manage the majority of blunt and penetrating urinary tract injuries
- * Competently manage operative ureteric and bladder injuries

- * Recognise congenital anomalies of the urinary tract and understand the principles of their pre and post-natal diagnosis, medical and surgical management
- * Be able to manage patients with spinal cord injury and other acute, or chronic, neurological conditions affecting urinary tract function
- * Manage the patient with the reconstructed urinary tract
- * Manage the incontinent patient
- * Provide all options in the management of a man with benign prostatic hypertrophy
- * Be able to offer all options in the management of men with sexual dysfunction, penile deformity and male-factor infertility
- * Recognise benign lesions of the genital skin, and subcutaneous tissues, and treat these where appropriate.
- * Recognise and appropriately treat malignant lesions of the penis, testes, kidney, adrenal, ureter, bladder, prostate and urethra
- * Demonstrate a detailed knowledge of the principles of diagnostic and therapeutic technology used in the practice of urology
- * Have the ability to assess published evidence in relation to clinical practice.

Index Procedures

In urology there are procedures which are common and represent important areas of clinical experience. Candidates will be expected to be familiar with the groups of procedures outlined below which may either be accomplished as an open procedure or laparoscopically. The level of knowledge expected is further described in the Topic Overview outlined in the relevant section of the Syllabus. These include:

General

- Diagnostic ultrasound
- Nephrostomy
- Catheterisation
- Stent placement
- Vascular access surgery

Kidney

- Simple nephrectomy
- Nephrectomy for tumour
- Donor nephrectomy
- Partial nephrectomy
- Nephro-ureterectomy
- Pyeloplasty

Ureter

- Diagnostic and therapeutic rigid uretero-renaloscopy and stone manipulation
- Flexible uretero-renaloscopy
- Ureterectomy
- Ureterolysis
- Ureteric reimplantation
- Urinary diversion

Bladder

- Diagnostic and therapeutic cystoscopy, including cystolithopaxy
- Radical cystectomy
- Cystodiathermy
- Trans-urethral resection of bladder tumour (TURBT)
- Partial cystectomy
- Cystolithotomy
- Augmentation cystoplasty
- Continent diversion

Prostate

- Trans-urethral prostatectomy (TURP)
- Bladder neck incision
- Open prostatectomy for benign disease
- Radical prostatectomy for cancer

Urethra

- Urethral dilatation
- Optical urethrotomy
- Surgery for hypospadias

- Anastomotic and augmentation urethroplasty
- Trans-vaginal and trans-obturator tape placement (TVT and TOT)
- Urethral sling placement
- Insertion of an artificial urinary sphincter (AUS)

Penis

- Frenuloplasty
- Circumcision
- Corporoplasty
- Penectomy for cancer
- Penis conserving surgery for cancer
- Penile prosthesis placement

Testicles

- Scrotal exploration for the acute scrotum
- Orchidopexy
- Management of hydrocele
- Epididymal cystectomy and epididymectomy
- Insertion of testicular prosthesis
- Radical orchidectomy
- Surgical sperm retrieval

STANDARDS FOR DEPTH OF KNOWLEDGE.

In the intermediate and final stages of surgical training the following methodology is used to define the relevant depth of knowledge required of the surgical trainee. Each topic within a stage has a competence level ascribed to it for knowledge ranging from 1 to 4:

1. knows of
2. knows basic concepts
3. knows generally
4. knows specifically and broadly

The appropriate depth and level of knowledge required for the early years of training is also defined where possible in exemplar texts and it is expected that trainees will achieve mastery to the depth within the texts.

STANDARDS FOR CLINICAL AND TECHNICAL SKILLS

The practical application of knowledge is evidenced through clinical and technical skills. Each topic within a stage has a competence level ascribed to it in the areas of clinical and technical skills ranging from 1 to 4:

1. has observed

Exit descriptor; at this level the trainee:

- Has adequate knowledge of the steps through direct observation.
- Demonstrates that he/she can handle instruments relevant to the procedure appropriately and safely.
- Can perform some parts of the procedure with reasonable fluency.

2. can do with assistance

Exit descriptor; at this level the trainee:

- Knows all the steps - and the reasons that lie behind the methodology.
- Can carry out a straightforward procedure fluently from start to finish.
- Knows and demonstrates when to call for assistance/advice from the supervisor (knows personal limitations).

3. can do whole but may need assistance

Exit descriptor; at this level the trainee:

- Can adapt to well-known variations in the procedure encountered, without direct input from the trainer.
- Recognises and makes a correct assessment of common problems that are encountered.
- Is able to deal with most of the common problems.
- Knows and demonstrates when he/she needs help.
- Requires advice rather than help that requires the trainer to scrub.

4. competent to do without assistance, including complications

Exit descriptor, at this level the trainee:

- With regard to the common clinical situations in the specialty, can deal with straightforward and difficult cases to a satisfactory level and without the requirement for external input.
- The level at which one would expect a UK consultant surgeon to function.
- Is capable of supervising trainees.

TOPIC OVERVIEW

Topic	Basic science	
Objective	<p><i>The candidate should understand the basic anatomy that urologists will encounter during the daily management of urological patients, and basic embryology relevant to clinical practice</i></p> <p><i>To understand and apply physiological principles in the management of patient with urological problems.</i></p> <p><i>To understand normal physiological processes at different ages and understand the effects of disease and trauma on these processes</i></p> <p><i>To understand the pharmacological principles relevant to the genitourinary tract</i></p> <p><i>To understand pathological processes as applied to the organs of the urogenital system</i></p>	
Knowledge		
	Anatomy	
	Macro anatomy and Micro anatomy of the urinary tract	4
	Vascular anatomy of the urinary tract	4
	Neurological supply including central connections	4
	3-dimensional relationship to other organs	4
	General knowledge of intra abdominal operative anatomy	4
	Embryological development in relation to disorders affecting the urinary tract	4
	Pathways of pain	
	Physiology	
	Mechanism of endocrine homeostasis	4
	Control of blood pressure	4
	Mechanism of urine production	4
	Mechanism of peristalsis initiation	4
	Mechanisms of neuromuscular transmission	4
	Anti-reflux mechanisms	4
	Neuro-physiological control of filling/voiding cycles	4
	Physiological properties of bladder musculature	4
	Physiological properties of bladder mucosa	4
	Bladder sensation	4
	Neurophysiology of sphincter mechanisms in male and female	4
	Physiology and molecular biology of prostate cell	4
	Physiology of prostate secretion	3
	Prostate specific antigen and related markers	4
	Physiology of erection and ejaculation	4
	Urological endocrinology	3
	Interpretation of semen analysis	4
	Mechanisms of spermatogenesis and mechanism of spermatic transport	4
	Function of accessory genital organs	3
	Effect of disease and drugs on normal genital function	4
	Physiology of pain	3
	Pharmacology	
	Mechanisms of action of commonly used drugs in urology	4
	Nephro-pharmacology	3
	Cholinergic and Adrenergic mechanisms	4
	Non-adrenergic, non-cholinergic (NANC) mechanisms	4
	Pharmacology of coagulation	3
	Pharmacology of inflammation	4
	Pharmacology of neoplastic disease	3
	Pathology	
	Basic genetics of uro-pathological conditions	3
	Common congenital disorders affecting the urinary tract (eg undescended testis and urinary tract reflux)	4
	Changes related to congenital abnormalities	4
	Basic principles of microbiology, resistance, cross infection relevant to the GU tract	4

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	Antibiotics including mechanism of action	4
	Acute and chronic inflammatory response	4
	Chronic inflammatory mechanisms and diseases	4
	Role of genetic and environmental factors in urological cancer	3
	Mechanisms of tumour initiation/growth	4
	TNM classification of common urological tumours	4
	Oncogenes, growth factors and angiogenesis	3
	Mechanisms of action of chemotherapy, immunotherapy and radiotherapy	3
	Familial prostate cancer and renal oncology	4
	Abnormalities resulting from trauma	4
	Primary and secondary wound healing by anatomical site	4
Clinical skills		
	Anatomy	
	Application of anatomical knowledge in clinical and operative setting	4
	Physiology	
	To understand the indications and theory of urodynamic studies	4
	To understand the indications and theory of urodynamic studies in the neuropathic patient	4
	Assessment of the normo-volaemic patient	4
	Assessment of the anuric patient	4
	Assessment and management of the patient in renal failure	4
	Management of post obstructive diuresis	4
	Application of knowledge in clinical and operative setting	4
	Assessment and early management of the infertile male	4
	Investigation and management of chronic inflammatory diseases affecting the urinary tract	4
	Utilisation of PSA in the clinical setting	4
	Understanding of PSA density and velocity	4
	Pharmacology	
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	4
	Pathology	
	Recognition of possible genetic component to specified condition	4
	Investigation and basic management of patients with congenital disorders of the GU tract	4
	Appropriate investigation and management of urinary tract infection	4
	Management of SIRS and systemic sepsis	4
	Understand and apply principles of infection control	4
	Management of multi-resistant organisms	4
	Investigation and management of chronic inflammatory diseases affecting the urinary tract	4
Technical Skills and Procedures		
	Application of knowledge in operative setting	4
	Urodynamic assessment	4
	Urodynamic assessment of the neuropathic bladder	4

Topic	Clinical Pharmacology	
Objective	<i>To understand and apply pharmacological principles in the management of patients with urological disease.</i>	
Knowledge	Clinical pharmacology of commonly used drugs including side-effects and complications of commonly used drugs for the following conditions: Acute and chronic infection	4
	Lower urinary tract dysfunction	4
	Erectile dysfunction	4
	Urinary incontinence	4

Urology

	Systemic chemotherapy for urological malignancy	3
	Intra-vesical chemotherapy for urological malignancy	4
	Anticoagulants	4
	Drugs used for pain relief including post-operative pain relief	4
	Immuno-suppressants	3
	DVT prophylaxis in Urological surgery	4
	Side effects upon the genitourinary tract of drugs used to treat common conditions (eg cardiovascular and respiratory disease)	4
Clinical Skills		
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	4

Topic	Common research methodology	
Objective	<i>To understand statistical mechanisms and be able to critically assess evidence in the literature</i> <i>To understand the principles and practice of audit</i>	
Knowledge		
	Understanding of statistical significance, relative risk, odds ratio, weighted mean difference and confidence intervals	4
	Application of tests e.g. Parametric, Non-parametric, Multivariate and Chi-squared analysis	4
	Principles of screening	4
	Principles of audit	4
	Hierarchy of evidence	4
	Principles (including theory and design), applications and limitations of randomised controlled trials, observational studies and retrospective series	4
	Methodology that underpins phase 1, 2, 3 and 4 trials	4
	Understanding of the importance of ethics in research and research governance	4
	Basics of meta-analysis, systematic review and narrative review	4
	Basics of qualitative research	4
Clinical skills		
	Critical appraisal of scientific publications including quality assessment	4
	Ability to interpret the relevance of trial / study outcomes to the care of patients	4
	Application of research methodology to clinical setting	4
	Audit	4
	Systematic review	4
	Observational study	4

Topic	Principles of urological oncology	
Objective	<i>To assess and manage patient with suspected urological cancer.</i> <i>To manage patients with a proven urological cancer including onward referral where necessary</i> <i>To treat the patient with empathy</i>	
Knowledge	Aetiology, epidemiology and patho-physiology	
	Epidemiology of urological cancer	4
	Role of genetic and environmental and factors in pathogenesis	3
	Basic understanding of molecular biology of urological cancer	3
	Knowledge of Oncogenes, growth factors and angiogenesis factors in relation to tumours	3
	Screening	
	Principles of screening	4
	PSA and other markers as screening tools	4
	Application of urine cytology to screening	4
	Controversies in screening for urological cancers	4
	Clinical features	
	Symptom complexes arising from urological malignancies kidney, ureter,	

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	bladder, prostate, testis and penis	4
	Current standards for the investigation of common urological cancers	4
	TNM classification of common urological tumours	4
	Treatment	
	Current standards of treatment for common urological cancers	4
	Principles of neo-adjuvant versus adjuvant therapy	4
	Principles and application of radiotherapy	3
	Principles of use of combination chemotherapy	3
	Terminal care	3
	Pharmacology	
	Pharmacology of pain prevention and relief	4
	Use of local anaesthetic and regional techniques	4
Clinical skills		
	High level empathetic and communication skills	4
	Rapid and appropriate assessment of patient with possible malignancy	4
	Role of PSA and other markers, urine cytology etc	4
	Correct interpretation of tests	4
	Appropriate liaison with multidisciplinary team	4
	Appropriate management of urological malignancies	4
	Appropriate referral for sub-specialist management and surgery	4
	Care of the dying patient	4

Topic	Oncology of the kidney and bladder	
Knowledge	Renal cancer and upper tract urothelial cancer	
	Anatomy	
	Embryology and anatomy of the urinary tract	4
	Physiology	
	Physiology of urine production	4
	Endocrine function of the adrenal gland	3
	Pharmacology	
	Pharmacology of agents used for systemic therapy in men with renal cancer	3
	Pharmacology of immunological agents used for therapy in renal cancer	3
	Pharmacology of biological agents used in the treatment of renal cancer	3
	Pathology	
	Pathology of the differing types of renal cancer and other benign and malignant tumours affecting the kidney	4
	Role of genetics in renal cancer and upper tract TCC	3
	Role of oncogenes and growth factors in renal cancer and upper tract TCC	3
	Role of environmental factors in upper tract TCC	4
	Current theories of tumour initiation and growth	3
	Thorough understanding of current and previous systems for the staging and grading of renal cancer and upper tract TCC	4
	Immune response and its relevance to the therapy of renal cancer and upper tract TCC	3
	Understanding of the theoretical basis and techniques of radiological and nuclear medicine imaging	4
	Treatment	
	Rationale for, indications, results, and complications of different therapies for localised renal cancer and upper tract TCC including:	
	-Radical surgery	4
	-Nephron sparing surgery	4
	-Endoscopic surgery	4

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	-Minimally invasive therapies	3
	-Biological therapy	2
	-Immunotherapy	2
	-Hormone therapy	2
	-Novel therapies	2
	The rationale, role and limitations of new technology in the diagnosis and therapy of renal cancer and upper tract TCC	4
	Understanding of the extent and relevance of co-morbidity in the choice of therapy	4
	Entry into the relevant clinical trial	4
	Practical treatment of localised renal cancer	4
	Bladder cancer	
	Anatomy	
	Embryology and anatomy of the urinary tract	4
	Lymphatic drainage of the pelvic organs	4
	Physiology	
	Physiology of micturition and continence	4
	Physiology of erection	4
	Pharmacology	
	Pharmacology of agents used for intravesical chemotherapy in men with bladder cancer	4
	Agents used for intravesical therapy in bladder cancer	4
	Pharmacology of cytotoxic drugs used in the treatment of bladder and other urothelial cancers	3
	Pathology	
	Pathology of the differing types of bladder cancer	4
	Relevance of congenital anomalies to subsequent malignant pre-disposition	4
	Understanding of the biology of bladder cancer	4
	Role of genetics, oncogenes and growth factors in bladder cancer	3
	Role of environmental factors in bladder cancer	4
	Current theories of tumour initiation and growth	3
	Thorough understanding of current and previous systems for the staging and grading of bladder cancer	4
	The immunology of bladder cancer and bladder cancer therapy	4
	Treatment	
	Rationale for, indications, results, and complications of different therapies for superficial, muscle invasive and metastatic bladder cancer including:	
	-Endoscopic therapy	4
	-Intravesical chemotherapy	4
	-Intravesical immunotherapy	4
	-Radical surgery	4
	-Radical radiotherapy	3
	-Palliative radiotherapy	3
	-Systemic chemotherapy	3
	-Novel therapies	3
	The rationale, role and limitations of new technology in the diagnosis and therapy of superficial bladder cancer	4
	Understanding of the extent and relevance of co-morbidity in the choice of therapy	4
	Practical surgery of muscle invasive bladder cancer including indications, techniques, results, consequences and complications	4
	Entry into the relevant clinical trial	4
	Practical treatment of superficial bladder cancer	4
Clinical skills		
	Renal cancer and upper tract urothelial cancer	

Urology

	Appropriate use of pharmacological, immunological and biological agents in men with focal, advanced and metastatic renal, or urothelial, cancer	4
	Application of the indications, contraindications and side effects of these agents	4
	Appropriate use of stage, grade and molecular markers in the management of an individual with renal or urothelial cancer	4
	Indication of the relevant radiological and pathological investigations	4
	Formulation of a best fit management policy following discussion at an MDT meeting	4
	Obtaining informed consent for the relevant therapy following discussion of alternative therapies	4
	Indication of likely response, duration of that response and survival in the individual patient	4
	Liaison with other specialties (e.g. radiotherapy, medical oncology)	4
	Co-ordinating the role of non-medical professionals in the management of treatment	4
	Formulation of a relevant follow up plan	4
	Ability to choose appropriate therapeutic approach for the treatment of renal and upper tract urothelial cancer	4
	Management of patient with metastatic cancer	4
	Bladder cancer	
	Assessment of patients with bladder cancer.	4
	Indications for radiological and pathological investigations	4
	Appropriate use of pharmacological and biological agents in men with bladder cancer either for peri-operative, therapeutic or palliative reasons	4
	Application of the indications, contraindications and side effects	4
	Appropriate use of stage, grade and molecular markers in the management of an individual with bladder cancer	4
	Appropriate use of radiotherapy in the treatment of men with bladder cancer	4
	Obtaining informed consent for the relevant urinary diversion following cystectomy	4
	Liaison with reconstructive surgeon, where appropriate	4
	Appropriate imaging of men with bladder cancer for diagnosis and follow-up	4
	Formulation of a best fit management policy following discussion at an MDT meeting	4
	Obtaining informed consent for the relevant therapy following discussion of alternative therapies	4
	Co-ordinating the role of non-medical professionals in the management of treatment	4
	Formulation of a relevant follow up plan	4
Technical Skills and Procedures		
	Cystoscopy and biopsy	4
	Cystoscopy and retrograde pyelogram	4
	Cystoscopy and diathermy bladder lesion	4
	TURBT	4
	TURP	4
	Cystoscopy and JJ stent insertion	4
	Ureteroscopy	4
	Radical nephrectomy	3
	Partial nephrectomy	2
	Laparoscopic nephrectomy	3
	Laparoscopic partial nephrectomy	2
	Radical nephroureterectomy	3
	Segmental ureterectomy and reconstruction	2
	Laparoscopic nephroureterectomy	2
	Rigid Ureteroscopy and endoscopic therapy to TCC	3
	Radical cystectomy, cystoprostatectomy, cystourethrectomy etc	2
	Urethrectomy	2
	Ileal conduit diversion	3
	Orthotopic bladder reconstruction	2

Construction of a continent urinary diversion	1
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Topic	Oncology of the Prostate, Testis and Penis	
Knowledge	Prostate cancer	
	Anatomy	
	Embryology and anatomy of the prostate and bladder and male genital sphincters	4
	Lymphatic drainage of the pelvic organs	4
	Physiology	
	Physiology of the prostate	4
	Physiology of micturition	4
	Physiology of erection	4
	Pharmacology	
	Pharmacology of endocrine drugs used in the treatment of prostate cancer	4
	Pharmacology of cytotoxic drugs used in the treatment of prostate cancer	3
	Pharmacology of other agents used in the treatment of men with prostate cancer	4
	Pathology	
	Relevance of congenital anomalies to subsequent malignant pre-disposition	4
	Role of genetics in prostate cancer	3
	Role of oncogenes and growth factors in the pathogenesis of prostate cancer	3
	Role of environmental factors in malignancies	2
	Current theories of tumour initiation and growth	3
	Understanding of the biology of prostate cancer	4
	Thorough understanding of current and previous systems for the staging and grading of prostate cancer	4
	Treatment	
	Understanding of the theoretical basis and techniques of radiotherapy for prostate cancer	3
	Understanding of the theoretical basis and techniques of radiological and nuclear medicine imaging	4
	Understanding of the relevance of co-morbidity in the choice of therapy	4
	Rationale for, indications, complications of different therapies for locally confined, locally advanced, metastatic and hormone refractory prostate cancer including:	
	-Radical prostatectomy	4
	-Radical radiotherapy	4
	-Radical brachytherapy	4
	-Adjuvant and neo-adjuvant hormones	4
	-Active surveillance	4
	The rationale, role and limitations of new technology (eg cryotherapy and high intensity focussed ultrasound)	3
	Palliation with hormones, radiotherapy, chemotherapy and novel treatments	3
	Indication of likely response, duration of that response and survival in the individual patient with advanced disease	4
	Entry into the relevant clinical trial	4
	Penile cancer	
	Embryology and anatomy of the male genitalia including lymphatic drainage	4
	Anatomy of the femoral triangle and upper thigh	4
	Physiology of erection	4
	Pharmacology of agents used for chemotherapy in men with penile cancer	3
	Understanding of the biology of penile cancer	4
	Pathology of the differing types of penile cancer and pre-malignant conditions	3

Urology

	Role of genetics, oncogenes and growth factors in penile cancer	3
	Role of environmental factors in penile cancer	4
	Thorough understanding of current and previous systems for the staging and grading of penile	4
	Understanding of the theoretical basis and techniques of radiological and nuclear medicine imaging	4
	Understanding of the theoretical basis and techniques of radiotherapy for penile cancer	3
	Rationale for, indications, results, and complications of surgery, radiotherapy and novel therapies for the treatment of localised, advanced and metastatic penile cancer	4
	The rationale, role and limitations of new technology in the diagnosis and therapy of penile cancer	4
	Understanding of the extent and relevance of co-morbidity in the choice of therapy	4
	Entry into the relevant clinical trial	4
	Practical surgery of the primary tumour in penile cancer	3
	Rationale for, indications, results, and complications of surgery, chemotherapy and radiotherapy the treatment of lymphatic involvement	3
	Testicular cancer	
	Embryology and anatomy of male genitalia including Lymphatic drainage	4
	Anatomy of the retro-peritoneum	4
	Reproductive physiology	4
	Pharmacology of cytotoxic agents used in men with testis cancer	3
	Pathology of the differing types of testis cancer and pre-malignant conditions	4
	Role of genetics, oncogenes and growth factors in testis cancer	3
	Role of environmental factors in testis cancer	3
	Understanding of past and current systems for the staging and grading of testis cancer	4
	Understanding of the theoretical basis and techniques of radiological and nuclear medicine imaging	4
	Understanding of the theoretical basis and techniques of radiotherapy for testis cancer	4
	Rationale for, indications, results, and complications of surgery in the treatment of testis cancer	4
	Rationale for, indications, results, and complications of surgery, chemotherapy and radiotherapy in the treatment of metastatic testis cancer	3
	Understanding of the extent and relevance of co-morbidity in the choice of therapy	4
	Practical aspects of surgery for metastatic disease	2
Clinical Skills	Prostate cancer	
	Indications for relevant radiological and pathological investigations	4
	Appropriate use of pharmacological agents in men with prostate cancer either for peri-operative, therapeutic or palliative reasons	4
	Application of the indications, contraindications and side effects of these drugs	4
	Appropriate use of stage, grade and molecular markers in the management of an individual with prostate cancer	4
	Appropriate use or radiotherapy in the treatment of men with prostate cancer	4
	Appropriate imaging of men with prostate cancer	4
	Assessment of patients with locally confined, locally advanced, metastatic and hormone refractory prostate cancer	4
	Appropriate liaison with other specialties (radiation oncology, medical oncology etc)	4
	Formulation of management policy after discussion at an MDT meeting	4
	Obtaining informed consent for the relevant procedure offering patient the options of discussion of other therapies	4
	Co-ordinating the role of non-medical professionals in patient management	4
	Formulation of a relevant follow up plan including location of follow-up	4

Urology

	Ability to choose appropriate therapeutic approach for the treatment of prostate cancer	3
	Penile cancer	
	Appropriate use of pharmacological, immunological and biological agents in men with penile cancer	3
	Application of the indications, contraindications and side effects	4
	Appropriate use of stage, grade and molecular markers in the management of an individual with penile cancer	4
	Appropriate imaging of men with penile cancer	4
	Appropriate use of radiotherapy in the treatment of men with penile cancer	4
	Appropriate assessment of patients with penile cancer including radiological assessment	4
	Formulation of a best fit management policy following discussion at an MDT meeting	4
	Obtaining informed consent for the relevant therapy	4
	Liaison with other specialties (e.g. plastic surgery, radiotherapy etc)	4
	Formulation of a relevant follow up plan	4
	Ability to choose appropriate therapeutic approach for the treatment of penile cancer	4
	Testicular cancer	
	Appropriate use of pharmacological agents in men with testis cancer	3
	Application of the indications, contraindications and side effects	4
	Appropriate use of stage, grade and molecular markers in the management of an individual with testis cancer	4
	Appropriate imaging of men with localised, advanced and metastatic testis cancer	4
	Show appropriate regard to future fertility prospects	4
	Liaison with other specialties (eg medical oncology, radiotherapy etc)	4
	Formulation of a relevant follow up plan	4
	Appropriate use of radiotherapy in the treatment of men with testis cancer	3
Technical Skills and Procedures		
	TURP	4
	Radical Prostatectomy (retro-pubic, perineal, laparoscopic procedure or robotic)	2
	Brachytherapy	2
	Circumcision and penile biopsy	4
	Partial penectomy	3
	Glansectomy and skin grafting	2
	Total penectomy	2
	Block dissection inguinal lymph nodes	2
	Block dissection external iliac lymph nodes	1
	Laparoscopic pelvic node dissection	2
	Inguinal Orchiectomy	4
	Retroperitoneal lymph node dissection	2

Topic	Urinary Tract Infections and inflammatory conditions	
Objective	<i>To understand the pathogenesis, natural history and complications of urinary tract infection.</i> <i>To be able to assess and manage patients presenting with common urinary tract infections,</i> <i>To be able to assess and manage patients presenting with genital infections</i>	
Knowledge		
	Basic Mechanisms	
	Biological mechanisms of upper and lower urinary tract infection – virulence	4
	Host defence	4
	Antibiotics - Mechanisms of action	4

Urology

	Appropriate microbiological tests	4
	Pyelonephritis	
	Predisposing causes	4
	Clinical presentation and management	4
	Renal and peri-renal abscess	
	Pathogenesis predisposing causes	4
	Clinical presentation and management	4
	Genito-urinary tuberculosis	
	Pathogenesis, natural history and complications	4
	Clinical presentation and management	4
	Prostatitis	
	Classification, pathogenesis, natural history and complications	4
	Diagnosis and management	4
	Role of segmented culture	4
	Epididymitis	
	Pathogenesis, natural history and complications	4
	Clinical presentation and differential diagnosis	4
	Treatment	4
	Scrotal abscess	
	Pathogenesis, natural history and complications	4
	Classification	4
	Diagnosis and management	4
	Fournier's gangrene	
	Patho-physiology and clinical features of Fournier's gangrene	4
	Sexually transmitted diseases including Chlamydia trachomatis, Gonococcal and non-Gonococcal urethritis	
	Pathogenesis, natural history and complications	4
	Clinical presentation, differential diagnosis and management	4
	Interstitial cystitis	
	Pathogenesis, natural history and complications	4
	Clinical Understand the various types of pain syndrome and underlying possible aetiologies and current terminology.	4
	NIH criteria for diagnosis presentation	4
	An understanding of the investigation, diagnosis and management	4
	Clinical The role of urodynamics, imaging, endoscopy and other investigations assessment techniques according to ICS standards	4
	Knowledge of conservative management techniques	4
	Knowledge of surgical management techniques including indications, results and complications	4
	Practical intervention for painful bladder syndrome	4
Clinical Skills		
	General	
	Identification of significant infection and asymptomatic bacteriuria	4
	Correct antibiotic Management of specific patient groups e.g adult females, children selection	4
	Collection of appropriate samples and interpretation of results	4
	Pyelonephritis	
	Rapid and appropriate assessment of patient	4
	Correct interpretation of tests	4
	Appropriate diagnostic and microbiological requests	4
	Indications for nephrostomy	4

Urology

	Renal and peri-renal abscess	
	Rapid and appropriate assessment	4
	Correct interpretation of tests	4
	Appropriate diagnostic and microbiological requests	4
	Appropriate treatment	4
	Genitourinary tuberculosis	
	Rapid and appropriate assessment	4
	Correct interpretation of tests	4
	Appropriate diagnostic and microbiological requests	4
	Prostatitis	
	Appropriate assessment	4
	Correct interpretation of tests	4
	Appropriate Medical management diagnostic and microbiological requests	4
	Epididymitis	
	Appropriate assessment of patient	4
	Correct interpretation of tests	4
	Appropriate diagnostic and microbiological requests	4
	Medical and surgical management of patient	4
	Scrotal abscess	
	Appropriate assessment of patient	4
	Correct interpretation of tests	4
	Appropriate diagnostic and microbiological requests	4
	Medical and surgical management of patient	4
	Fournier's gangrene	
	Appropriate management of Fournier's gangrene	4
	Liaison with other teams as appropriate e.g. plastic and colorectal surgeons	4
	Sexually transmitted diseases including Chlamydia trachomatis, Gonococcal and non-Gonococcal urethritis	
	Appropriate assessment of patient	4
	Correct interpretation Appropriate diagnostic and microbiological requests of tests	4
	Liaison with other teams as appropriate e.g Gynaecology, GUM	4
	Interstitial cystitis	
	Counsel patients for a range of therapeutic options	4
	Plan investigation and treatment	4
	Conservative management	4
	Appropriate liaison with the multidisciplinary team	4
	Ability to determine appropriate management of patient with resistant painful bladder syndrome	4
Technical Skills and Procedures		
	Rigid and flexible cystoscopy	4
	Cystoscopy and retrograde ureterogram	4
	Cystoscopy and JJ stent insertion	4
	Epididymectomy	4
	Surgical management of scrotal abscess	4
	Cystoscopic assessment painful bladder	4
	Augmentation and substitution cystoplasty	2
	Simple cystectomy	2
	Ileal conduit diversion	3
	Continent Urinary Diversion	1

Urology

Objective	<i>To assess a patient presenting with a urinary stone in kidney, ureter or bladder</i> <i>To treat a patient presenting with a urinary stone in kidney, ureter or bladder including onward referral when appropriate</i>	
Knowledge		
	Anatomy	
	To understand the detailed anatomy that will be encountered during the management of patients with urinary tract stone disease	4
	Embryology, macro and micro-anatomy with specific reference to vascular anatomy and neurological anatomy, and its anomalies	4
	Physiology	
	Mechanism of urine production	4
	Mechanism of Mechanisms of neuromuscular transmission peristalsis initiation	4
	Anti-reflux mechanisms	4
	Principles of isotope and isotope imaging	4
	Pharmacology	
	Pharmacology of commonly used drugs in the medical management of ureteric colic	4
	Pharmacology of commonly used drugs in metabolic stone disease	4
	Pharmacology of pain prevention and relief	4
	Use of local anaesthetic and regional techniques	4
	Pharmacology of commonly used drugs for sepsis of the urinary tract	4
	Indications, contraindications and side effects of these drugs	4
	Pathology	
	Mechanisms of stone formation	4
	Natural history and patho-physiology	4
	Variable symptom complexes according to site of stone	4
	Complications of stone formation	4
	Metabolic management of urinary stone disease	4
	Renal calculi	
	Assessment and investigation patients with renal calculi	4
	Indications for different treatment modalities	4
	Mechanisms of extracorporeal lithotripsy	4
	Mechanisms of intra-corporal lithotripsy	4
	Complications of treatments including lithotripsy	4
	Results of stone treatment in different locations	4
	Outcomes of treatment	4
	Understanding of normal post-operative progress	4
	Post treatment care	4
	Imaging and access techniques for percutaneous access including supra-costal access	3
	Operative management of renal calculi including choice of approach according to size, position etc	4
	Ureteric calculi	
	Mechanisms of ureteric colic	4
	Renal adaptation to ureteric obstruction	4
	Assessment and investigations of patients with ureteric calculi	4
	Indications for different treatment modalities	4
	Mechanisms of extracorporeal lithotripsy	4
	Mechanisms of intra-corporal lithotripsy	4
	Complications of treatment including lithotripsy	4
	Results of stone treatment in different locations	4
	Understanding of normal post-operative progress	4
	Outcomes of treatment	4
	The role of stents	4
	Post treatment care and follow up planning	4
	Aware of range and appropriate use of different instruments	4

Urology

	Operative management of ureteric calculi including choice of approach depending upon stone position, size etc	4
	Bladder calculi	
	Understanding the patho-physiology of bladder stone formation	4
	Assessment and investigations of patients with bladder calculi	4
	Indications for different treatment modalities	4
	Mechanisms of intra-corporal lithotripsy and lithopaxy	4
	Complications of treatment	4
	Results of treatment	4
	Outcomes of treatment	4
	Understanding of normal post-operative progress	4
Clinical Skills	Appropriate multidisciplinary assessment and management	4
	Requirements for emergency therapy	4
	Selection of appropriate isotopic investigations	4
	Interpretation of renograms	4
	Assessment of the normovolaemic patient	4
	Assessment of Assessment and management of the patient in renal failure the anuric patient	4
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	4
	Appropriate use of imaging and other investigations	4
	Appropriate management choices and operative skills	4
	Prevention, diagnosis and management of urinary sepsis	4
	Appropriate investigation and management of urinary tract infection	4
	Recognition of risks and early diagnosis of sepsis	4
	Renal calculi	
	Assessment of obstruction / sepsis	4
	Assessment and investigation of patients with renal calculi	4
	MDT management of stones and ability to formulate management plan including issues of complications	4
	Ability to take informed consent and explain procedures and outcomes to patients	4
	Team working with theatre staff	4
	Post-op assessment and communication	4
	Prioritisation of further investigation	4
	Post-operative assessment	4
	Able to vary access dependent on stone location	3
	Appropriate use of intra-corporal fragmentation devices including laser, EHL, lithoclast	3
	Appropriate intervention to deal with changing parameters	3
	Advanced skills enabling safe treatment of complex renal calculi	4
	Medical management	4
	Ureteric calculi	
	MDT management of stones and ability to formulate management plan including issues of complications	4
	Ability to perform extracorporeal lithotripsy	4
	Able to take informed consent and explain procedures and outcomes to patients	4
	Team working with theatre staff	4
	Post-op assessment and communication	4
	Prioritisation of further investigation	4
	Post-operative assessment	4
	Appropriateness of investigation and interventions	4
	Appropriate use of intra-corporal fragmentation devices including laser, EHL, lithoclast	3
	Advanced skills enabling safe treatment of complex urinary calculi	4

Urology

Technical Skills and Procedures	Bladder calculi	
	Assessment of obstruction / sepsis	4
	Appropriate investigation and treatment plans	4
	Use of endo-urological techniques to deal with complex bladder calculi	4
	Indications for open surgery	4
	Cystoscopy and insertion JJ stent	4
	ESWL for renal stone	4
	ESWL for ureteric stone	3
	Rigid ureteroscopy and therapeutic management lower 1/3 ureteric calculi	4
	Rigid ureteroscopy and therapeutic management middle and upper 1/3 ureteric calculi	3
	Flexible ureteroscopy including intra-corporal lithotripsy	3
	Access to the kidney and the retroperitoneum including percutaneous access	2
	Percutaneous nephrolithotomy including intra-corporal lithotripsy	2
	Endoscopic litholopaxy	4
	Open removal bladder calculi	4

Topic	Upper urinary tract obstruction	
Objective	<i>To assess and treat a patient who has urinary tract obstruction including onward referral when appropriate</i>	
Knowledge		
	Anatomy, causes and patho-physiology of upper urinary tract obstruction	4
	Aetiology, patho-physiology and management of ureteric stricture	4
	Aetiology, patho-physiology and clinical features of PUJ obstruction	4
	Clinical features of upper urinary tract obstruction	4
	Investigation of PUJ obstruction	4
	Pathogenesis, natural history and complications of retroperitoneal fibrosis	4
	Clinical presentation and management of RPF	4
	Formulation of appropriate management of patient with PUJ obstruction	4
	Indications, operative steps and complications of the different approaches to the treatment of PUJ obstruction, including:	
	-Percutaneous approaches	4
	-Ureteroscopic approaches	4
	-Laparoscopic approaches	4
	-Open surgical approaches	4
	Surgical management of PUJ obstruction	3
	Endoscopic management of upper urinary tract obstruction	4
Clinical Skills		
	Appropriate assessment of unilateral and bilateral renal obstruction	4
	Recognition and early management of sepsis	4
	Interpretation of imaging and diuresis renography	4
	Management of post obstructive diuresis	4
	Assessment of renal function and fluid loading	4
	Assessment of fluid balance and renal function	4
	Interpretation of clinical findings and results of investigations of the obstructed upper tract	4
	Ability to organise appropriate management plan for the obstructed kidney	4
	Ability to explain procedures and outcomes to patients and relatives and obtain informed consent	4
	Knowledge and appropriate use of treatment options	4
	Appropriate management of patient with PUJ obstruction and ureteric stricture	4
	Assessment of patient with RPF	4
	Ability to choose appropriate surgical approach for the treatment of PUJ obstruction	3
	Medical and surgical management of the patient with RPF	2
	Team working with other specialties e.g. radiologists, reconstructive surgeon	4
	Ability to choose appropriate surgical approach for the treatment of upper urinary tract obstruction	3
Technical		

Urology

Skills and Procedures	Nephrostomy	2
	Cystoscopy and retrograde ureterogram	4
	Cystoscopy and insertion JJ stent	4
	Extra-anatomical stent insertion	1
	Rigid diagnostic ureteroscopy	4
	Flexible diagnostic ureteroscopy	3
	Ureteroscopic treatment of PUJ obstruction	2
	Percutaneous treatment of PUJ obstruction	2
	Laparoscopic pyeloplasty	2
	Laparoscopic nephrectomy	3
	Open pyeloplasty	2
	Open surgical procedures for the management of ureteric stricture	1

Topic	Imaging used in urology	
Objective	<i>To understand the different radiological techniques used in the investigation of urological disease, including practical techniques, indications and safety issues</i> <i>To gain hands on experience in diagnostic and interventional radiology</i> <i>To develop technical skills in standard radiological techniques relevant to urology</i>	
Knowledge		
	Principles of ionising radiation	4
	Patient and physician protection	4
	Investigation related radiation dose	4
	Appreciation of aberrant anatomy	4
	Appropriate use of radiological investigations	4
	Principles of isotope and isotope imaging	4
	Application of isotopes to functional assessment	4
	Techniques of interventional radiology	3
	Indications, limitations and complications of interventional radiology	4
	IVP: Basic theory, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	4
	Ultrasound (including Doppler): Basic theory principles, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	4
	CT scanning: Basic theory principles, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	4
	MR scanning: Basic theory, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	4
	DEXA scanning: Basic theory principles, practical techniques (including contrast agents), indications, interpretation and limitations	3
	PET scanning: Basic theory, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	3
	Renography: Basic theory, practical techniques (including contrast agents), indications, interpretation and limitations, safety issues and contraindications	4
Clinical Skills		
	Indications for use of ionising radiation in urological investigation	4
	Application in clinical situation	4
	Understand role of ultrasound in urological investigations	4
	Resuscitation skills following complications	4
	Selection of appropriate isotopic investigations	4
	Interpretation of renograms	4
	Use of other radionuclides used in urology	4
	IVP: Therapeutic application, interpretation and limitations	4
	Ultrasound (including Doppler): Therapeutic application, interpretation and limitations	4
	CT scanning: Therapeutic application, interpretation and limitations	4
	MR scanning: Therapeutic application, interpretation and limitations	4
	PET scanning: Therapeutic application, interpretation and limitations	3
	Renography:	4

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	DMSA, Cr EDTA and MDP scanning: Therapeutic application, interpretation and limitations	4
Technical Skills and Procedures		
	IVU	4
	Cystogram	4
	Urethrogram	4
	Retrograde Pyelogram	4
	Renal ultrasound	2
	Bladder ultrasound	3
	Scrotal ultrasound	3
	Trans-rectal ultrasound (TRUS) including biopsy	4
	Ultrasound guided percutaneous puncture of kidney	2
	Ultrasound guided percutaneous puncture of bladder	3
	CTKUB and CTUrography	2
	Data acquisition and analysis of the renogram	2

Topic	Technology applied to urology	
	<i>To demonstrate knowledge of the mechanisms of action and the practical application of technologies used diagnostically and therapeutically in urology</i> <i>To demonstrate knowledge of the management of acute and chronic renal failure and its management techniques</i>	
Knowledge		
	Principles of rigid and flexible urological endoscopes	4
	Light, light sources, light leads and camera systems	4
	Peripheral instrumentation for endoscopic and laparoscopic use and stone manipulation	4
	Endoscopic use of laser energy	4
	HIFU and cryotherapy	3
	Radiotherapy	3
	Prostatic hyperthermia	3
	Contact and extracorporeal lithotripters	4
	Double J stents and nephrostomy	4
	Urinary catheters and prostatic and urethral stents	4
	Urological prosthetics and meshes	4
	Theatre safety and design and principles of decontamination	3
	Monopolar and bipolar diathermy and alternatives to electrosurgery	4
	Haemostatic agents, sealants and adhesives	4
	Insufflants and irrigants for endoscopic use	4
	Laparoscopic access and elementary robotics	3
Clinical Skills		
	Know the reasons for poor endoscope performance in the operating theatre and how to correct it	4
	Understand the reasons for poor tissue destruction by diathermy	4
	Understand the options available for tissue destruction in-situ, their risks and clinical applications	4
	Understand how to decompress the obstructed and lower urinary tract and the limitations of endoprostheses	4
	Understand the available urological prostheses, including meshes, when and how they should be used, their risks and long term results.	3
	Maintain a safe environment in the operating theatre for both staff and the patient	4
	Understand how to stop operative bleeding during open and endoscopic surgery	4
	Understand the principles of laparoscopic and robotic surgery	3

Topic	Nephrology and Renal Replacement Therapy	
Objective	<i>To have a good working knowledge of the assessment of renal function and the urological conditions that predispose to the development of renal failure.</i> <i>To understand the pathogenesis, natural history and complications of urological conditions</i>	

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	<i>that can lead to renal dysfunction and how urological intervention may prevent or delay the onset of renal failure.</i>	
	<i>To understand the different methods of renal replacement including renal transplantation</i>	
Knowledge		
	Anatomy	
	The retroperitoneum and the great vessels	4
	Embryology of the genitourinary tract including development of the kidney and the common variations in vascular supply to the kidney	3
	Anatomy and blood supply of the kidney, ureter and bladder	4
	Neuro-anatomy as it relates to normal and abnormal bladder, urethral and pelvic floor function	4
	Arterial supply and venous drainage of the upper and lower limbs	4
	Physiology	
	Physiology of the kidney	4
	Physiology of fluid balance	4
	Physiology of the lower urinary tract	4
	GFR estimation techniques	4
	Pharmacology	4
	Pharmacology of drugs used in immuno-suppression	3
	Pharmacology of perfusion fluids and use of diuretics	3
	Pharmacology of inotropes and blood pressure control and effects of drugs on renal blood flow	3
	Control of blood pressure	3
	Immunology	
	HLA matching	3
	Cytotoxic cross match	3
	Rejection	3
	Immuno-suppression	3
	Renal failure	
	Causes and classification	4
	Patho-physiology	4
	Clinical features	4
	Treatment options for renal failure	4
	Indications and types of dialysis	4
	Indwelling cannulae for haemodialysis	4
	Continuous ambulatory peritoneal dialysis (CAPD)	4
	Indications and contraindications for kidney transplantation	4
	Recipient selection and indications for transplantation	3
	Indications, operative steps and complications of surgery in the treatment of end stage renal failure	3
	Surgery in the treatment of end stage renal failure	3
	Complications of renal transplantation	3
	Organ donation	
	Criteria for determining brainstem death	3
	Patho-physiology of brainstem death	4
	Principles of donor management and organ preservation	3
Clinical Skills		
	Practical methods of GFR assessment	4
	Assessment of patients with the following:	
	Tubular disorders	4
	Anuria	4
	Renal failure	4
	Obstructive uropathy	4
	Liaison with other specialties (nephrology, transplantation)	4
	Management of fluid/acid base balance	4

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	Assessment of fluid balance, renal function and fluid loading	4
	Management of post obstructive diuresis	4
	Temporary dialysis techniques	3
	Team working with other specialties e.g. radiologists, renal physicians, transplant surgeons	4
	Ability to choose appropriate surgical approach for the treatment of end stage renal failure	3
	Evaluation of potential recipients for renal transplantation and timing of dialysis	2
	Urinary tract workup of potential recipients prior to transplantation	3
	Vascular Access	
	Assess patients Identify appropriate access site referred for vascular access:	2
	Manage complications including thrombosis, haemorrhage and vascular complications such as steal, venous hypertension, cardiac failure and aneurysm	2
	Peritoneal dialysis	
	Assess patients referred for peritoneal dialysis	2
	Manage post-op care of patients with peritoneal dialysis catheter	2
	Manage complications including peritonitis	2
	Renal transplantation	
	Select appropriate patient from the waiting list	3
	Assessment of patients requiring renal transplantation or renal replacement therapy	2
	Counsel patients regarding organ donation	3
	Manage transplant recipient peri-operatively	3
	Manage post-operative complications	3
	Follow up of patients with renal transplants	2
	Liaison with other specialties e.g. nephrology and radiology	3
Technical Skills and Procedures		
	Percutaneous supra-pubic catheterization	4
	Peritoneal dialysis catheter-insertion	2
	Peritoneal dialysis catheter-removal	2
	Central venous line insertion	2
	Form arterio-venous fistula at wrist and elbow	2
	Ligate arterio-venous fistula at wrist and elbow	2
	Laparoscopic nephrectomy	2
	Open donor nephrectomy for transplantation	2
	Laparoscopic donor nephrectomy for transplantation	1
	Renal transplantation including:	
	Preparation of kidney for transplant	2
	End to end and end to side anastomosis of renal artery to recipient	2
	End to side venous anastomosis and vein patch	2
	Ureteric reimplantation	3
	Transplant nephrectomy	2

Topic	Paediatric Urology	
Objective	<i>To assess and manage a child with a congenital disorder of the urogenital tract including onward referral as necessary</i> <i>To assess and manage a child with a enuresis, congenital neuropathic bladder or with intersex, including onward referral as necessary</i> <i>To assess and manage a child with an inguino-scrotal abnormality including onward referral as necessary</i> <i>To assess and manage a child with urinary infection, including onward referral as necessary</i>	
Knowledge		
	Embryology and anatomy of common congenital abnormalities, e.g undescended testis, duplex systems, reflux and hydronephrosis	4
	Principles of functional assessment of the genitourinary tract	4

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Basic embryology, anatomy of abnormality and natural history of intersex, spina bifida and posterior urethral valves	3
Concise knowledge of inguino-scrotal anatomy relevant to childhood conditions	4
Bacteriology of UTI in childhood	4
Natural history and normal patterns of continence in children	4
Detailed knowledge of the pelvis, male genitalia and urethra including the embryology of urethra including hypospadias and epispadias	4
Neuro-anatomy as it relates to normal and abnormal bladder, urethral and pelvic floor function of the developing child	4
Physiology and neurophysiology of micturition and continence	4
Physiology of erection and ejaculation relevant to childhood and adolescence	4
Developmental reproductive physiology	4
Pharmacology of drugs used in the management of lower urinary tract dysfunction in childhood and their side-effects and complications	4
Causes, patho-physiology and complications of urethral strictures in childhood	4
Patho-physiology of traumatic injury to the urethra	3
UTI in childhood	
Biological mechanisms of upper and lower urinary tract infection – virulence	4
Host defence	4
Detailed knowledge of reflux	4
Antibiotics - Mechanisms of action	4
The acute scrotum in childhood	
Pathogenesis, natural history and complications	4
Clinical presentation and management	4
Upper urinary tract obstruction	
Aetiology, patho-physiology and clinical features in childhood	4
Investigation of the dilated upper urinary tract in childhood	4
Formulation of appropriate management of children with Pelvi-ureteric junction obstruction (PUJ) obstruction	4
Indications, operative steps and complications of the different approaches to the treatment of PUJ obstruction, including:	
-Percutaneous approaches	2
-Laparoscopic approaches	2
-Open surgical approaches	2
Surgical management of PUJ obstruction	2
Wilm's tumour and Neuroblastoma	
TNM classification	3
Pathology of the differing types of benign and malignant tumours affecting the kidney	2
Current theories of tumour initiation and growth	2
Thorough understanding of current and previous systems for staging	2
Understanding of the theoretical basis and techniques of radiological and nuclear medicine imaging	3
Current standards of treatment for common urological cancers in childhood	2
Practical treatment of localised renal cancer in childhood	2
Urinary incontinence and neuropathic bladder To include spina bifida, epispadias/ extrophy complex and posterior urethral valves	
Anatomy/physiology and pharmacology of bladder and sphincter mechanisms	4
Aetiology, epidemiology, pathophysiology and classification incontinence in childhood	4
Natural history of enuresis	4
Causes of neuropathic bladder	4
Types of neuropathic bladder presentation in childhood	3
Clinical presentation and differential diagnosis of neuropathic bladder	2
Management of neuropathic incontinence in childhood	3

Urology

	Management of urinary incontinence	3
	The child requiring urinary tract reconstruction	
	Surgical techniques in reconstruction of the bladder and ureter	2
	The management of boys requiring urethral reconstruction	
	Pathophysiology of congenital abnormalities including hypospadias and epispadias	4
	Causes, pathophysiology and complications of urethral strictures	4
	Patho-physiology of traumatic injury to the urethra	3
	Techniques of assessment for bladder and urinary tract reconstruction including urodynamics, radiology and nuclear medicine techniques	3
	Techniques and complications of urethral reconstruction	3
Clinical Skills		
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	3
	Common congenital urological disorders e.g. undescended testis, duplex systems reflux and hydronephrosis	
	Appreciation of prognostic possibilities	4
	Appropriate investigation plans	4
	Formulation of realistic treatment plan	4
	Appropriate referral for sub-specialist management and / or surgery	4
	Family orientated communication skills	3
	Spina bifida, intersex and posterior urethral valves	
	Appreciation of prognostic possibilities	3
	Formulation of realistic treatment plan	2
	Appropriate referral for sub-specialist management and / or surgery	4
	Inguino-scrotal abnormalities (eg undescended testes, hydrocele, testicular torsion) and phimosis.	
	Appropriate tests to elicit differential diagnosis	4
	Formulate appropriate treatment plan	4
	Management of condition, including knowledge of indications, results and complications of surgery	4
	Urinary tract infection	
	Identification of;	
	- Significant infection	4
	- Asymptomatic bacteruria	4
	Practical management of UTI	4
	Appropriate investigation plans	4
	Formulation of realistic treatment plan	4
	Correct antibiotic selection	4
	Choice of surgical approach for vesico-ureteric reflux	4
	Appropriate referral for sub-specialist management and / or surgery	4
	Upper urinary tract obstruction	
	Appropriate assessment of unilateral and bilateral renal obstruction	4
	Differentiation of the obstructed from the non-obstructed dilated upper tract	4
	Recognition and early management of sepsis	4
	Interpretation of clinical findings and results of investigations	4
	Ability to organise appropriate management plan	4
	Appropriate management of patient with PUJ obstruction	4
	Ability to explain procedures and outcomes to parents and obtain informed consent	4
	Knowledge and appropriate use of treatment options	3
	Wilm's tumour and Neuroblastoma	
	Appropriate use of stage, grade and molecular markers in the management of	2

Urology

	a child with renal cancer	
	Appropriate imaging of children with renal cancer	2
	High level/empathetic communication skills	4
	Appropriate management of urological malignancies	2
	Appropriate referral for sub-specialist management and surgery	4
	Urinary incontinence and neuropathic bladder To include spina bifida, epispadias/ extrophy complex and posterior urethral valves	
	Appropriate history and examination	4
	Investigation including Interpretation of frequency volume chart	4
	Appropriate liaison with multidisciplinary team (eg neurology and continence services)	4
	Appropriate referral for sub-specialist management and surgery	4
	Formulation of a realistic treatment plan	4
	Medical management of urinary incontinence	4
	The child requiring urinary tract reconstruction	
	Appropriate choice of surgical procedure for a child requiring reconstruction	3
	The management of boys requiring urethral reconstruction	
	Appropriate assessment of the child requiring urethral reconstruction	4
	Be able to advise on the surgical options and the appropriateness of surgery	4
	Management of post-operative consequences of urethral reconstruction	4
	Arrange appropriate follow up of boys with urethral reconstruction	4
	Liaison with other specialties e.g. radiology, orthopaedics, GI surgeons	4
	Appropriate choice of surgical procedure for the child with hypospadias	3
	Appropriate choice of surgical procedure for the child with epispadias	2
Technical Skills and Procedures		
	Urodynamic studies	3
	Circumcision	4
	Hydrocele repair and herniotomy	4
	Surgical Management of cryptorchidism	3
	Endoscopic treatment of reflux disease	3
	Open ureteric re-implantation	3
	Surgical management of the acute scrotum	4
	Percutaneous treatment of PUJ obstruction	3
	Open pyeloplasty	2
	Laparoscopic pyeloplasty	2
	Radical nephrectomy	2
	Laparoscopic nephrectomy	2
	Ureteric anastomosis	2
	Ureteric reimplantation	3
	Psoas hitch	2
	Boari flap	2
	Transuretero-ureterostomy	1
	Simple cystectomy	2
	Augmentation cystoplasty	1
	Substitution cystoplasty	2
	Ileal conduit diversion	2
	Continent urinary diversion	1
	Artificial urinary sphincter insertion	1
	Vaginal reconstruction	1
	MAGPI repair	2
	Harvesting buccal mucosa graft	2
	Snodgrass Two stage buccal graft urethroplasty repair	2
	Surgery for epispadias	1

Topic	Emergency Urology
Objective	To assess and manage patients who present acutely with urological problems, including onward referral when necessary

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	<i>To assess and manage patients who present with genitourinary trauma, including onward referral when necessary</i>	
Knowledge		
	Ureteric colic	
	Patho-physiology of nephrolithiasis	4
	Renal adaptation to ureteric obstruction	4
	Presentation and clinical course of urinary tract calculi	4
	The role of IVU/USS and CT in diagnosis	4
	Management options	4
	Complications of urinary tract calculi including urosepsis	4
	Pharmacology of pain relief	4
	Endoscopic management of ureteric calculi	4
	Urinary tract infection and pyelonephritis	
	Causes and patho-physiology of urinary tract infections, including the complications	4
	Presentation of urinary tract infection	4
	Renal function during infection	4
	Antibiotics and their relevant pharmacology	4
	Indications for further investigation of urinary tract infection	4
	Urinary retention in men and women	
	Causes, epidemiology and patho-physiology of acute and chronic urinary retention	4
	Mechanisms of acute and chronic urinary retention	4
	Risk factors and timing of treatment	4
	Treatment options for acute and chronic urinary retention	4
	Haematuria	
	Causes and patho-physiology of haematuria	4
	Causes and patho-physiology of disorders of coagulation	4
	Tests for disorders of coagulation	4
	Testicular pain	
	Anatomy of the Scrotum and Testicle	4
	Patho- physiology of testicular torsion	4
	Patho-physiology of epididymo-orchitis	4
	Patho-physiology of scrotal abscess	4
	Clinical features and differential diagnosis	4
	Appropriate management	4
	Other emergencies	
	Causes patho-physiology, clinical features and management of Fournier's Gangrene	4
	Causes, patho-physiology, clinical features and management of phimosis	4
	Causes, patho-physiology, clinical features and management of paraphimosis	4
	Causes, patho-physiology, clinical features and management of priapism	4
	Causes, patho-physiology, clinical features and management of penile fracture	4
	Urogenital trauma	
	Causes, patho-physiology classification and management of renal trauma	4
	Causes, patho-physiology classification and management of ureteric trauma	4
	Causes, patho-physiology classification and management of bladder trauma	4
	Causes, patho-physiology classification and management of urethral trauma	4
	Causes, patho-physiology classification and management of genital trauma	4
	Causes, patho-physiology classification and management of testicular trauma	4
Clinical Skills		
	Ureteric colic	
	Emergency assessment and treatment of uncomplicated urinary tract calculi including analgesia	4
	Appropriate definitive management of uncomplicated urinary tract calculi	4

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	Assessment and management of obstruction and sepsis	4
	Detection of complications e.g. as obstructed kidney, renal failure, peri-nephric abscess	4
	Urinary tract infection and pyelonephritis	
	Diagnosis and management of urinary tract infection	4
	Assessment and management of obstruction and sepsis	4
	Appropriate pain relief as indicated	4
	Appropriate action to relieve renal function	4
	Urinary retention in men and women	
	Assessment, investigation and formulation of a management plan for acute and chronic urinary retention	4
	Assessment of fluid balance and renal function	4
	Medical management of urinary retention	4
	Management of post obstructive diuresis	4
	Haematuria	
	Assessment, investigation and management of patient with haematuria	4
	Testicular pain	
	Assessment, investigation and management of acute scrotal pain	4
	Assessment, investigation and management of epididymo-orchitis	4
	Assessment, investigation and management of scrotal abscess	4
	Other emergencies	
	Assessment, investigation and management of Fournier's gangrene including liaison with other teams as appropriate e.g. plastic and colorectal surgeons	4
	Assessment, investigation and management of Phimosis	4
	Assessment, investigation and management of Paraphimosis	4
	Assessment, investigation and management of Priapism including onward referral where necessary	4
	Assessment, investigation and management of Penile fracture including onward referral	4
	Urogenital trauma	
	Resuscitation, ATLS	4
	Appropriate liaison with other relevant specialists in multiple trauma cases	4
	Assessment and management of renal trauma	4
	Assessment and management of ureteric trauma including appropriate onward referral	4
	Assessment and management of bladder trauma including appropriate onward referral	4
	Assessment and management of urethral trauma including appropriate onward referral	4
	Assessment and management of testicular trauma	4
	Assessment and management of genital trauma including appropriate onward referral	4
Technical Skills and Procedures		
	Insertion of urethral and irrigating catheters	4
	Insertion of a suprapubic catheter by puncture or cystotomy	4
	Rigid ureteroscopy and therapeutic management lower 1/3 ureteric calculi	4
	Rigid ureteroscopy and therapeutic management middle and upper 1/3 ureteric	4
	Cystoscopy and insertion JJ stent	4
	TURP	4
	Bladder neck incision	4
	Cystoscopy and bladder washout	4
	TURBT	4
	Management of ureteric and bladder injuries	4
	Open surgical exploration of the kidney for trauma	2

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	Surgical exploration for torsions of testis, with fixation	4
	Surgical management of scrotal abscess	4
	Surgical management of Fournier's gangrene	3
	Reduction of paraphimosis	4
	Dorsal slit	4
	Circumcision	4
	Operative management of priapism	3
	Operative management of penile fracture	4

Topic	Benign Prostatic Hypertrophy	
Objective	<i>To assess and treat a patient presenting with lower urinary tract symptoms and dysfunction</i> <i>To assess and treat a patient who has urinary tract obstruction including onward referral when appropriate</i> <i>To assess and treat a patient with urinary retention</i>	
Knowledge	Lower tract obstruction	
	Anatomy, physiology, epidemiology and patho-physiology of lower urinary tract dysfunction in men	4
	Investigative tools	4
	Available treatment options for male LUTS	4
	Causes and patho-physiology of urinary retention in men	4
	Mechanisms of acute/chronic retention	4
	Aetiology, patho-physiology and management of urethral stricture	4
	Aetiology, patho-physiology and management of bladder neck stenosis	4
	BPH	
	Epidemiology of BPH	4
	Natural history and complications of BPH	4
	Mechanisms of fluid balance	4
	Urodynamic basis for symptoms	4
	Non-urological causes of similar symptom complex	4
	Utility of PSA	4
	Detailed medical and surgical therapy for BPH	4
Clinical Skills	Lower tract obstruction	
	Interpretation of urinary flow rates	4
	Appropriate clinical assessment and investigation of men with LUTS	4
	Formulation of differential diagnosis for men with LUTS	4
	Formulation of therapeutic plan for men with LUTS	4
	Management of urethral stricture including onward referral as appropriate	3
	Management of bladder neck stenosis including onward referral as appropriate	3
	BPH	
	Appropriate assessment, investigation and management including:	
	- Interpretation of fluid charts	4
	- Interpretation of biochemistry (eg PSA)	4
	- Interpretation of urodynamic investigations (eg flow rate, residual urine)	4
	Formulation of appropriate differential diagnosis	4
	Formulation of appropriate plan of management	4
	Medical therapy of BPH / LUTS	4
Technical Skills and Procedures		
	Urodynamic testing	4
	Rigid and flexible cystoscopy	4
	TURP	4
	Bladder neck incision	4
	Percutaneous insertion of suprapubic catheter	4
	Urethrography	3
	Optical urethrotomy	4

Topic	Andrology	
Objective	<i>To assess and manage a man with male factor infertility including onward referral as necessary</i> <i>To assess and manage a man with erectile dysfunction including onward referral as necessary</i> <i>To assess and manage a man with varicocele, ejaculatory disorders, penile deformity, penile fracture or prolonged erection including onward referral as necessary</i> <i>To assess and counsel a man requesting a vasectomy</i>	
Knowledge	Anatomy	
	A detailed knowledge of the anatomy and embryology of the genitalia and reproductive system	4
	Knowledge of the vascular, lymphatic and nerve supply to the genitalia and reproductive system and abdominal/pelvic organs	4
	Embryology of the male genitalia with particular emphasis on congenital anomalies and their effects on male sexual function	4
	Micro/macrosopic anatomy of the reproductive system including their anatomical relationship to other genito-urinary organs	4
	Micro/macrosopic anatomy of the male genitalia	4
	Physiology	
	Genetics and male sexual function (Normal sexual differentiation, Abnormal sexual differentiation, Intersex states Genetic anomalies and infertility)	4
	The male reproductive axis (Hypothalamic- pituitary function, Endocrinology of the Testis, Testosterone metabolism, Effects of aging on male endocrinology)	4
	Spermatogenesis (Genetic basis of spermatogenesis, Hormonal regulation of spermatogenesis, Sertoli cell function)	4
	Physiology of male reproduction (Epididymal function, Physiology of the vas deferens)	4
	Physiology of ejaculation (Physiology of the vas deferens, Physiology of the seminal vesicles, Role of the prostate in sexual function)	4
	Physiology of female sexual function	2
	Functional anatomy (blood supply and venous/lymphatic drainage of the penis)	4
	Physiology and neurophysiology of penile erection including neurotransmitters involved in penile erection	4
	Cardiovascular function relevant to sexual dysfunction	4
	Endocrinology of male sexual function (Hypothalamic- pituitary function	4
	Endocrinology of the Testis, Testosterone metabolism	4
	Desire	4
	Orgasm	4
	Pharmacology	
	Drugs / gonadotoxins and their effects on male reproduction and sexual function	4
	The pharmacological treatment of male factor infertility	2
	Neuropharmacology and receptor pharmacology relevant to erectile dysfunction	4
	Endothelial derived modulators of corporal smooth muscle	4
	Oral pharmacotherapy for erectile dysfunction including basic pharmacokinetics and pharmacodynamics and adverse events/drug interactions of commonly used drugs	4
	Intra-cavernosal, topical and intra-urethral treatments for MED	4
	Novel oral agents for the treatment of MED	3
	Pharmacological treatment of priapism	4
	Pharmacological therapy of ejaculatory disorders	4
	Testosterone replacement therapy	3
	Pathology	
	Aetiology and pathogenesis of male infertility	4
	Anti-sperm anti-bodies and fertility	4
	Varicocele and male fertility	4
	Patho-physiology of testicular obstruction	4

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	Patho-physiology of Male Erectile Dysfunction (MED)	4
	Risk factors and aetiology of MED	4
	Sexual function and ageing	4
	Cardiovascular disease and sexual function	4
	Early ejaculation	4
	Retrograde ejaculation	4
	Delayed ejaculation	4
	Hypogonadism	4
	Androgen deficiency of ageing	4
	Patho-physiology of penile deformity	4
	Patho-physiology of priapism	4
	Assessment	
	Causes of male factor infertility	4
	Causes of female factor infertility	3
	Appropriate investigation of male sub-fertility	4
	Varicocele and male fertility	4
	Endocrine disease and infertility	4
	Causes of testicular obstruction	4
	The role of assisted conception techniques in the treatment of the infertile couple	3
	Anti-sperm anti-bodies and fertility	4
	Theoretical basis for investigation of erectile and ejaculatory disorders	4
	Treatment	
	Contraception - Methods, results and complications of different methods of contraception	4
	Medical and surgical management of male factor infertility	4
	Modern methods of assisted fertilisation	4
	Indications for, methods, results and complications of sperm retrieval	4
	Indications for, methods, results and complications of assisted conception	4
	Microsurgical treatment of male factor infertility	3
	Standards of assessment and investigation of erectile dysfunction	4
	Therapeutic options including the pharmacological basis of modern therapy for MED	4
	Knowledge of range of therapies for ejaculatory problems	3
	Penile deformity – conservative and surgical management	3
	Prolonged erection – management	4
	Penile fracture – assessment and management	4
	Causes and classification and treatment of penile dysmorphism	2
Clinical Skills	Male fertility and infertility	
	Contraception - Assess and counsel a man requesting contraceptive advice	4
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	3
	Clinical assessment of the sub-fertile male	4
	Evaluation of the female partner	3
	Empathetic assessment of fertility issues	4
	Appropriate liaison with multidisciplinary team and referral for assisted reproductive techniques	3
	Ability to determine appropriate surgical plan for male factor infertility	3
	Sexual and Erectile dysfunction	
	High level and empathetic communication skills	4
	Appropriate investigation and treatment plan	4
	Medical management of erectile dysfunction	4
	Appropriate investigation and management of man with rapid ejaculation	4
	Appropriate liaison with other specialties for ejaculatory problems	4
	Penile Andrology	

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	Appropriate investigation and treatment plan and onward referral where appropriate for the following:	
	Erectile dysfunction	4
	Penile deformity	4
	Ejaculatory disorders	4
	Varicocele	4
	Penile fracture	4
	Prolonged erection	4
	Penile dysmorphophobia	2
	Liaison with multidisciplinary team and referral for sub-specialist management	4
	Appropriate assessment and medical management of man with Liaison with relevant specialties (eg interventional radiology) in priapism	3
Technical Skills and Procedures	Vasectomy	4
	Operative varicocele treatment	4
	Testicular exploration and vasography	3
	Transurethral resection of ejaculatory ducts	2
	Electro-ejaculation	2
	Vaso-vasostomy	3
	Testicular exploration and sperm extraction (TESE)	2
	Percutaneous sperm extraction (PESA)	2
	Micro-epididymal sperm aspiration (MESA)	2
	Tubulo-vaso and epididymostomy	2
	Nesbit's procedure	3
	Lue procedure	2
	Operative management of priapism	3
	Penile implant	3
	Surgical repair of penile fracture	4

Topic	Female urology and bladder dysfunction	
Objective	<i>To demonstrate advanced skills in the assessment and treatment of women with lower urinary tract dysfunction</i>	
Knowledge	Anatomy	
	Detailed knowledge of abdomino-pelvic anatomy especially bony pelvis, all pelvic viscera, pelvic floor, pelvic side wall and the endopelvic fasciae	4
	Embryology of the genitourinary tract including development of the cloaca, intestinal tract and omentum	4
	Neuroanatomy as it relates to normal and abnormal bladder, urethral and pelvic floor function	4
	Physiology	
	Physiology and neurophysiology of the bladder including the basis of micturition and continence	4
	Physiology of bladder musculature	4
	Physiology of bladder mucosa	4
	Physiological basis of bladder sensation	4
	Physiology of female reproduction	4
	Understanding of normal female hormonal function	4
	Normal female sexuality including genital function and orgasm	4
	Pharmacology	
	Pharmacology of the urogenital organs including cholinergic, adrenergic and other neurotransmitter systems	4
	Pharmacology of drugs used in the management of lower urinary tract dysfunction side-effects and complications	4
	Knowledge of the relevant supporting scientific literature	4
	Pharmacological agents treating other systems and their side-effects on urogenital tract including side-effects and complications of commonly used drugs	4
	The use of hormone replacement therapy in postmenopausal women and	

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	hormone manipulation in pre-menopausal women	4
	Pharmacological agents treating ano-rectal dysfunction including the pharmacological methods of treating constipation and altering bowel activity	4
	Pathology	
	Patho-physiology of urinary incontinence in women	4
	Patho-physiology of pelvic organ prolapse in women	4
	Pathology of ageing in women	4
	Specific needs of the elderly and cognitively impaired	4
	Patho-physiology of urinary infection in women	4
	Patho-physiology of interstitial cystitis and other causes of painful bladder syndrome	4
	Urge syndromes	
	An understanding of the investigation, diagnosis and management	4
	Clinical assessment techniques according to ICS standards	4
	The role of urodynamic, imaging, endoscopic and other investigative techniques	4
	Knowledge of conservative management techniques	4
	Knowledge of surgical management techniques including indications, results and complications	4
	Surgical interventions for urge urinary incontinence	4
	Stress urinary incontinence and mixed urinary incontinence	4
	An understanding of the investigation, diagnosis and management	4
	Clinical assessment techniques according to ICS standards	4
	The role of urodynamic, imaging, endoscopic and other investigative techniques	4
	Knowledge of surgical management techniques including indications, results and complications	4
	Surgical interventions for stress urinary incontinence	4
	Knowledge of conservative management techniques	4
	Genito-urinary prolapse (primary and recurrent)	
	Understanding of cause, patho-physiology and classification of pelvic organ prolapse	4
	Understanding of female sexual function and dysfunction	4
	Understanding of indications, techniques, results and complications of surgical and non-surgical therapies for pelvic organ prolapse	4
	Surgical interventions for pelvic organ prolapse	4
	Urinary fistula	
	Causes, patho-physiology, presentation and complications of urinary fistulae	4
	Knowledge of appropriate management and diagnostic techniques including indications, results, complications	4
	Surgical treatment of urinary fistula	4
	Urethral diverticulum	
	Causes, patho-physiology, presentation and complications of urethral diverticulum	4
	Knowledge of appropriate management and diagnostic techniques including indications, results, complications	4
	Knowledge of appropriate management and diagnostic techniques	4
Clinical Skills	Integrate issues of reproductive and sexual issues into the holistic management of women with lower urinary tract dysfunction	4
	Appropriate use of commonly used drugs recognising common side effects, interactions and contra-indications	4
	Appropriate assessment of women with lower urinary tract dysfunction	4
	Demonstrate an appreciation of the specific issues posed by old age on management	4

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	Urge syndromes	
	Counsel patients for a range of therapeutic options	4
	Plan investigation and treatment	4
	Conservative management	4
	Appropriate liaison with the multidisciplinary team	4
	Ability to determine appropriate management of patient with resistant overactive bladder	4
	Stress urinary incontinence and mixed urinary incontinence	
	Counsel patients for a range of therapeutic options	4
	Plan investigation and treatment	4
	Conservative management	4
	Appropriate liaison with the multidisciplinary team	4
	Ability to determine appropriate surgical management of patient with stress urinary incontinence	4
	Genito-urinary prolapse (primary and recurrent)	
	Appropriate assessment of pelvic organ prolapse	4
	Be able to identify and advise on the appropriateness of surgery or other conservative approaches	4
	Able to fit ring pessary	4
	Be able to advise on the appropriateness of surgery	4
	Liaison with other specialties as appropriate	4
	Ability to determine appropriate management of patient with prolapse	4
	Urinary fistula	
	Appropriate assessment of urinary fistulae	4
	Be able to advise on the appropriateness of surgery	4
	Liaise with appropriate specialty including pelvic reconstructive surgeon	4
	Ability to determine appropriate management of patient with urinary fistula	4
	Urethral diverticulum	
	Appropriate assessment of urethral diverticulum	4
	Be able to advise on the appropriateness of surgery	4
	Liaise with appropriate specialty including pelvic reconstructive surgeon	4
Technical Skills and Procedures	Undertake urodynamic studies to investigate lower urinary tract dysfunction	4
	Cystoscopy and injection Botulinum toxin	3
	Detrusor myectomy	2
	Augmentation and substitution cystoplasty	2
	Sacral neuromodulation	2
	Mid-urethral tapes	3
	Injection of bulking agents into bladder neck	3
	Colposuspension	3
	Artificial urinary sphincter Pubo-urethral slings	2
	Anterior repair	2
	Para-vaginal repair / Vagino-obturator shelf	2
	Sacro-colpopexy	2
	Vaginal hysterectomy	1
	Repair vesico-vaginal fistula	2
	Martius flap	2
	Ileal conduit	3
	Repair urethro-vaginal fistula	1
	Repair of uretero-vaginal fistula	2
	Simple cystectomy	2
	Continent urinary diversion	1
	Surgical excision urethral diverticulum	2

Topic	Neuro-urology	
Objective	<i>To develop advanced skills in the assessment and treatment of patients with neuropathic</i>	

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	<i>bladder and genital dysfunction</i>	
Knowledge	Anatomy	
	Anatomy of the genitourinary tract, including embryology	
	Neuro-anatomy of the peripheral and central nervous system as it relates to normal and abnormal bladder, urethral and pelvic floor function	4
	Physiology	
	Physiology and neurophysiology of the bladder including the basis of micturition and continence	4
	Physiology of bladder musculature	4
	Physiology of bladder mucosa	4
	Physiological basis of bladder sensation	4
	Central nervous control of micturition and sexual function	4
	Physiology and neurophysiology of sexual function in men and women	4
	Reproductive physiology in men	4
	Reproductive physiology in women	3
	Pharmacology	
	Pharmacology of the genitourinary organs including cholinergic, adrenergic and other neurotransmitter systems	4
	Pharmacology of drugs used in the management of lower urinary tract dysfunction side-effects and complications	4
	Pharmacology of drugs used to treat male and female sexual dysfunction	4
	Pharmacology of drugs used in the management of diseases of the central nervous system (e.g. drugs used for treatment of Parkinson's disease, drugs used for neuropathic pain, drugs used to alleviate hypertonicity)	4
	Pharmacological agents treating ano-rectal dysfunction including the pharmacological methods of treating constipation and altering bowel activity	3
	Pathology	
	Patho-physiology of neurogenic bladder dysfunction in congenital and acquired diseases of the central and peripheral nervous system	4
	Effects of neurogenic bladder dysfunction upon renal function	4
	Patho-physiology of sexual dysfunction in congenital and acquired diseases of the central and peripheral nervous system	4
	Patho-physiology of traumatic spinal cord injury, including effects upon function of the genitourinary tract	4
	Effects of neurological disease upon mobility, manual dexterity, vision and other bodily functions relevant to the management of bladder dysfunction	4
	Patho-physiology of autonomic dysreflexia	4
	Assessment	
	Understand the effects of neurological diseases on bladder and sexual function	4
	An understanding of the investigation, diagnosis and management of patients with neurogenic bladder or sexual dysfunction	4
	Complications of neurogenic bladder dysfunction including renal impairment, urosepsis and calculus formation	4
	Clinical assessment techniques according to ICS standards	4
	The role of urodynamic, imaging, endoscopic and other investigative techniques	4
	Treatment	
	Knowledge of conservative management techniques	4
	Knowledge of surgical management techniques including indications, results and complications	4
	Surgical treatment of neurogenic bladder dysfunction	4
Clinical skills	Ability to determine appropriate management of patient with neurogenic bladder dysfunction	4
	Appropriate assessment of patients with neurological disease and bladder or sexual dysfunction including video-urodynamic studies	4
	Appropriate use of commonly used drugs recognising common side effects,	

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	interactions and contra-indications	4
	Counsel patients for a range of therapeutic options	4
	Plan investigation and treatment	4
	Conservative management including medical therapy of urinary incontinence and sexual dysfunction	4
	Appropriate liaison with the multidisciplinary team	4
Technical Skills and Procedures	Undertake urodynamic studies to investigate lower urinary tract dysfunction	4
	Perform urodynamic studies in patients with neurological disease	4
	Cystoscopy and injection Botulinum toxin	3
	Cystoscopy and insertion suprapubic catheter	4
	Cystoscopy and fragmentation of bladder calculi	4
	Cystoscopy and external sphincterotomy	2
	Open removal bladder calculi	4
	Intestinal anastomosis	3
	Mobilisation omentum	2
	Bladder neck closure	2
	Ileal conduit	3
	Augmentation cystoplasty	2
	Substitution cystoplasty	2
	Continent diversion	2
	Insertion artificial urinary sphincter	2
	Insertion spinal stimulator	1
	Neuromodulation	1

Topic	Urinary tract reconstruction	
Objective	<i>To demonstrate advanced skills in the reconstruction of the bladder and the upper urinary tract</i>	
Knowledge	Bladder and ureter	
	Causes and patho-physiology of conditions requiring bladder and ureteric reconstruction	4
	Techniques of assessment for bladder and urinary tract reconstruction including urodynamics, radiology and nuclear medicine techniques	4
	Metabolic effects of urinary tract reconstruction and interposition of intestine within the urinary tract	4
	Complications of urinary tract reconstruction and interposition of intestine within the urinary tract	4
	Knowledge of endo-urological techniques relevant to urinary tract reconstruction	4
	Surgical techniques in reconstruction of the bladder and ureter	3
	Urethra	
	Knowledge of the pelvis, male genitalia and urethra including embryology of urethra including hypospadias and epispadias	4
	Neuro-anatomy as it relates to normal and abnormal bladder, urethral and pelvic floor function	4
	Physiology and neurophysiology of micturition and continence	4
	Physiology of erection and ejaculation	4
	Reproductive physiology	4
	Pharmacology of drugs used in the management of lower urinary tract dysfunction	4
	Causes, patho-physiology and complications of urethral strictures	4
	Patho-physiology of traumatic urethral injury	4
	Techniques of assessment for bladder and urinary tract reconstruction including urodynamics, radiology and nuclear medicine techniques	4
	Techniques and complications of urethral reconstruction	4
	Knowledge of endourological techniques relevant to urethral	4
	Surgery of urethral reconstruction	4
Clinical Skills	Bladder and ureter	

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	Appropriate assessment of patients requiring urinary tract reconstruction	4
	Be able to advise on the surgical and non-surgical options and the appropriateness of surgery	4
	Management of post-operative consequences of urinary tract reconstruction and interposition of intestine within the urinary tract	4
	Arrange appropriate follow up of patients with urinary tract reconstruction and interposition of intestine within the urinary tract	4
	Liaison with other specialties e.g. radiology, GI surgeons	4
	Ability to determine appropriate choice of reconstructive technique	3
	Urethra	
	Appropriate assessment of men with urethral strictures	4
	Be able to advise on the surgical options and the appropriateness of surgery	4
	Management of post-operative consequences of urethral reconstruction	4
	Arrange appropriate follow up of patients with urethral reconstruction	4
	Liaison with other specialties e.g. radiology, orthopaedics, GI surgeons	4
	Ability to determine appropriate surgical option for patients with urethral stricture	4
Technical Skills and Procedures	Intestinal anastomosis	3
	Mobilisation omentum	3
	Ureteric anastomosis	3
	Ureteric reimplantation	3
	Psoas hitch	2
	Boari flap	2
	Transuretero-ureterostomy	1
	Simple cystectomy	3
	Augmentation cystoplasty	2
	Substitution cystoplasty	2
	Ileal conduit diversion	3
	Continent urinary diversion	2
	Orthotopic bladder reconstruction	1
	Artificial urinary sphincter insertion	1
	Vaginal reconstruction	1
	Optical urethrotomy	4
	Harvesting buccal mucosa graft	2
	Bulbar anastomotic urethroplasty	3
	Single stage substitution urethroplasty using flaps and grafts	1
	Two stage buccal graft urethroplasty	1
	Pelvic fracture urethral reconstruction	1

Professional Behaviour and Leadership

Professional Behaviour and Leadership Syllabus

The Professional Behaviour and leadership elements expected of candidates sitting this examination are mapped to the leadership curriculum as laid out by the Academy of Medical Royal Colleges (web link). The assessment of these areas is a thread running throughout this examination and is common to all disciplines of surgery.

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	<p>Good Clinical Care, to include:</p> <ul style="list-style-type: none"> • History taking (see GMP Domains: 1, 3, 4) • Physical examination (see GMP Domains: 1, 2,4) • Time management and decision making (see GMP Domains: 1,2,3) • Clinical reasoning (see GMP Domains: 1,2, 3, 4) • Therapeutics and safe prescribing (see GMP Domains: 1, 2, 3) • Patient as a focus of clinical care (see GMP Domains: 1, 3, 4) • Patient safety (see GMP Domains: 1, 2, 3) • Infection control (see GMP Domains: 1, 2, 3) 	Area 4.1
Objective	<p>To achieve an excellent level of care for the individual patient</p> <ul style="list-style-type: none"> • To elicit a relevant focused history • To perform focused, relevant and accurate clinical examination • To formulate a diagnostic and therapeutic plan for a patient based upon the clinic findings • To prioritise the diagnostic and therapeutic plan communicate a diagnostic and therapeutic plan appropriately <p>To prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non – medication based therapeutic and preventative indications</p> <p>To prioritise the patient's agenda encompassing their beliefs, concerns expectations and needs</p> <p>To prioritise and maximise patient safety:</p> <ul style="list-style-type: none"> • To understand that patient safety depends on <ul style="list-style-type: none"> ○ The effective and efficient organisation of care ○ Health care staff working well together ○ Safe systems, individual competency and safe practice • To understand the risks of treatments and to discuss these honestly and openly with patients • To use systematic ways of assessing and minimising risk • To ensure that all staff are aware of risks and work together to minimise risk <p>To manage and control infection in patients, including:</p> <ul style="list-style-type: none"> • Controlling the risk of cross-infection • Appropriately managing infection in individual patients • Working appropriately within the wider community to manage the risk posed by communicable diseases 	Area 4.1
Knowledge	<p>Patient assessment</p> <ul style="list-style-type: none"> • Knows likely causes and risk factors for conditions relevant to mode of presentation • Understands the basis for clinical signs and the relevance of positive and negative physical signs • Recognises constraints and limitations of physical examination • Recognises the role of a chaperone is appropriate or required • Understand health needs of particular populations e.g. ethnic minorities • Recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions 	Area 4.1

	<p>Clinical reasoning</p> <ul style="list-style-type: none"> • Interpret history and clinical signs to generate hypothesis within context of clinical likelihood • Understands the psychological component of disease and illness presentation • Test, refine and verify hypotheses • Develop problem list and action plan • Recognise how to use expert advice, clinical guidelines and algorithms • Recognise and appropriately respond to sources of information accessed by patients • Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort <p>Record keeping</p> <ul style="list-style-type: none"> • Understands local and national guidelines for the standards of clinical record keeping in all circumstances • Understanding of the importance of high quality and adequate clinical record keeping and relevance to patient safety and to litigation • Understand the primacy for confidentiality <p>Patient safety</p> <ul style="list-style-type: none"> • Outline the features of a safe working environment • Outline the hazards of medical equipment in common use • Understand principles of risk assessment and management • Understanding the components of safe working practice in the personal, clinical and organisational settings • Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing • Understands the investigation of significant events, serious untoward incidents and near misses <p>Infection control</p> <ul style="list-style-type: none"> • Understand the principles of infection control • Understands the principles of preventing infection in high risk groups 	
Skills	<p>Patient assessment</p> <ul style="list-style-type: none"> • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient • Encourage patients to voice their preferences and personal choices about their care <p>Clinical reasoning</p> <ul style="list-style-type: none"> • Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders • Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning • Recognise critical illness and respond with due urgency • Generate plausible hypothesis(es) following patient assessment • Construct a concise and applicable problem list using available information • Construct an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicate this effectively to the patient, parents and carers where relevant 	Area 4.1

	<p>Patient safety</p> <ul style="list-style-type: none"> • Recognise and practise within limits of own professional competence • Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so • Ensure the correct and safe use of medical equipment • Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention • Recognise and respond to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory results) and support other members of the team to act similarly <p>Infection control</p> <ul style="list-style-type: none"> • Recognise the potential for infection within patients being cared for • Counsel patients on matters of infection risk, transmission and control • Actively engage in local infection control procedures • Prescribe antibiotics according to local guidelines and work with microbiological services where appropriate • Recognise potential for cross-infection in clinical settings • Practice aseptic technique whenever relevant 	
Behaviour	<ul style="list-style-type: none"> • Shows respect and behaves in accordance with Good Medical Practice • Ensures that patient assessment, whilst clinically appropriate considers social, cultural and religious boundaries • Support patient self-management • Recognise the duty of the medical professional to act as patient advocate • Ability to work flexibly and deal with tasks in an effective and efficient fashion • Remain calm in stressful or high pressure situations and adopt a timely, rational approach • Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention • Show willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers • Be willing to facilitate patient choice • Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning • Continue to maintain a high level of safety awareness and consciousness • Encourage feedback from all members of the team on safety issues • Reports serious untoward incidents and near misses and co-operates with the investigation of the same. • Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others • Continue to be aware of one's own limitations, and operate within them • Encourage all staff, patients and relatives to observe infection control principles • Recognise the risk of personal ill-health as a risk to patients and colleagues in addition to its effect on performance 	Area 4.1
Examples and descriptors for candidates	<p>Patient assessment</p> <ul style="list-style-type: none"> • Undertakes patient assessment (including history and examination) under difficult circumstances. Examples include: <ul style="list-style-type: none"> ○ Limited time available (Emergency situations, Outpatients, ward referral) ○ Severely ill patients ○ Angry or distressed patients or relatives • Uses and interprets findings adjuncts to basic examination appropriately e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy, sigmoidoscopy • Recognises and deals with complex situations of communication, 	Area 4.1

	<p>accommodates disparate needs and develops strategies to cope</p> <ul style="list-style-type: none"> • Is sensitive to patients cultural concerns and norms • Is able to explain diagnoses and medical procedures in ways that enable patients understand and make decisions about their own health care. <p>Clinical reasoning</p> <ul style="list-style-type: none"> • In a complex case, develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence, institutes an appropriate investigative and therapeutic plan, seeks appropriate support from others and takes account of the patients wishes <p>Patient safety</p> <ul style="list-style-type: none"> • Leads team discussion on risk assessment, risk management, clinical incidents • Works to make organisational changes that will reduce risk and improve safety • Promotes patients safety to more junior colleagues • Recognises and reports untoward or significant events • Undertakes a root cause analysis • Shows support for junior colleagues who are involved in untoward events <p>Infection control</p> <ul style="list-style-type: none"> • Performs complex clinical procedures whilst maintaining full aseptic precautions • Manages complex cases effectively in collaboration with infection control specialists 	
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	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	<p>Being a good communicator</p> <p>To include:</p> <ul style="list-style-type: none"> • Communication with patients (GMP Domains: 1, 3, 4) • Breaking bad news (GMP Domains: 1, 3, 4) • Communication with colleagues (GMP Domains: 1, 3) 	N/A
Objective	<p>Communication with patients</p> <ul style="list-style-type: none"> • To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality • To communicate effectively by listening to patients, asking for and respecting their views about their health and responding to their concerns and preferences • To cooperate effectively with healthcare professionals involved in patient care • To provide appropriate and timely information to patients and their families <p>Breaking bad news</p> <ul style="list-style-type: none"> • To deliver bad news according to the needs of individual patients <p>Communication with Colleagues</p> <ul style="list-style-type: none"> • To recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals. • To communicate succinctly and effectively with other professionals as appropriate • To present a clinical case in a clear, succinct and systematic manner 	
Knowledge	<p>Communication with patients</p> <ul style="list-style-type: none"> • Understands questioning and listening techniques • Understanding that poor communication is a cause of complaints/ litigation <p>Breaking bad news</p>	

	<ul style="list-style-type: none"> In delivering bad news understand that: <ul style="list-style-type: none"> The delivery of bad news affects the relationship with the patient Patient have different responses to bad news Bad news is confidential but the patient may wish to be accompanied Once the news is given, patients are unlikely to take in anything else Breaking bad news can be extremely stressful for both parties It is important to prepare for breaking bad news <p>Communication and working with colleagues</p> <ul style="list-style-type: none"> Understand the importance of working with colleagues, in particular: <ul style="list-style-type: none"> The roles played by all members of a multi-disciplinary team The features of good team dynamics The principles of effective inter-professional collaboration The principles of confidentiality 	
Skills	<p>Communication with patients</p> <ul style="list-style-type: none"> Establish a rapport with the patient and any relevant others (eg carers) Listen actively and question sensitively to guide the patient and to clarify information Identify and manage communication barriers, tailoring language to the individual patient and others and using interpreters when indicated Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc) Use, and refer patients to appropriate written and other evidence based information sources Check the patient's understanding, ensuring that all their concerns/questions have been covered Make accurate contemporaneous records of the discussion Manage follow-up effectively and safely utilising a variety if methods (eg phone call, email, letter) Ensure appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner <p>Breaking bad news</p> <ul style="list-style-type: none"> Demonstrate to others good practice in breaking bad news Recognises the impact of the bad news on the patient, carer, supporters, staff members and self Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism <p>Communication with colleagues</p> <ul style="list-style-type: none"> Communicate with colleagues accurately, clearly and promptly Utilise the expertise of the whole multi-disciplinary team Participate in, and co-ordinate, an effective hospital at night or hospital out of hours team Communicate effectively with administrative bodies and support organisations Prevent and resolve conflict and enhance collaboration 	

Behaviour	<p>Communication with patients</p> <ul style="list-style-type: none"> Approach the situation with courtesy, empathy, compassion and professionalism Demonstrate an inclusive and patient centred approach with respect for the diversity of values in patients, carers and colleagues <p>Breaking bad news</p> <ul style="list-style-type: none"> Behave with respect, honesty and empathy when breaking bad news Respect the different ways people react to bad news <p>Communication with colleagues</p> <ul style="list-style-type: none"> Be aware of the importance of, and take part in, multi-disciplinary teamwork, including adoption of a leadership role Foster an environment that supports open and transparent communication between team members Ensure confidentiality is maintained during communication with the team Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur Able to break bad news in both unexpected and planned settings Fully recognises the role of, and communicates appropriately with, all relevant team members Predicts and manages conflict between members of the healthcare team Beginning to take leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	<ul style="list-style-type: none"> Teaching and Training (GMP Domains: 1, 3) 	N/A
Objective	<ul style="list-style-type: none"> To teach to a variety of different audiences in a variety of different ways To assess the quality of the teaching To train a variety of different trainees in a variety of different ways To plan and deliver a training programme with appropriate assessments 	
Knowledge	<ul style="list-style-type: none"> Understand relevant educational theory and principles relevant to medical education Understand learning methods and effective learning objectives and outcomes Differentiate between appraisal, assessment and performance review Understand the appropriate course of action to assist a trainee in difficulty 	
Skills	<ul style="list-style-type: none"> Critically evaluate relevant educational literature Vary teaching format and stimulus, appropriate to situation and subject Provide effective feedback and promote reflection Deliver effective lecture, presentation, small group and bed side teaching sessions Participate in patient education Lead departmental teaching programmes including journal clubs Recognise the trainee in difficulty and take appropriate action Be able to identify and plan learning activities in the workplace 	

Behaviour	<ul style="list-style-type: none"> In discharging educational duties respect the dignity and safety of patients at all times Recognise the importance of the role of the physician as an educator Balances the needs of service delivery with education Demonstrate willingness to teach trainees and other health workers Demonstrates consideration for learners Acts to ensure equality of opportunity for students, trainees, staff and professional colleagues Encourage discussions with colleagues in clinical settings to share understanding Maintains honesty, empathy and objectivity during appraisal and assessment 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> Performs a workplace based assessment including giving appropriate feedback Appraises a medical student, nurse or colleague Plans, develops and delivers educational programmes with clear objectives and outcomes Plans, develops and delivers an assessment programme to support educational activities 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	Keeping up to date and understanding how to analyse information Including <ul style="list-style-type: none"> <i>Ethical research</i> (GMP Domains: 1) Evidence and guidelines (GMP Domains: 1) Audit (GMP Domains: 1, 2) Personal development 	Area 1.3
Objective	<ul style="list-style-type: none"> To understand the results of research as they relate to medical practise To participate in medical research To use current best evidence in making decisions about the care of patients To construct evidence based guidelines and protocols To complete an audit of clinical practice At actively seek opportunities for personal development To participate in continuous professional development activities 	Area 1.3
Knowledge	<ul style="list-style-type: none"> Understands the principles of research governance Understands research methodology including qualitative, quantitative, bio-statistical and epidemiological research methods Understands of the application of statistics as applied to medical practice Understands the principles of critical appraisal Understands levels of evidence and quality of evidence Understands guideline development together with their roles and limitations Understands the different methods of obtaining data for audit Understands the role of audit in improving patient care and risk management Understands the audit cycle Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc To demonstrate knowledge of the importance of best practice, transparency and consistency 	Area 1.3
Skills	<ul style="list-style-type: none"> Develops critical appraisal skills and applies these when reading literature Devises a simple plan to test a hypothesis Demonstrates the ability to write a scientific paper Obtains appropriate ethical research approval Uses literature databases 	Area 1.3

Urology

	<ul style="list-style-type: none"> Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine Designs, implements and completes audit cycles To use a reflective approach to practice with an ability to learn from previous experience To use assessment, appraisal, complaints and other feedback to discuss and develop an understanding of own development needs 	
Behaviour	<ul style="list-style-type: none"> Follows guidelines on ethical conduct in research and consent for research Keep up to date with national reviews and guidelines of practice Aims for best clinical practice at all times, responding to evidence based medicine while recognising the occasional need to practise outside clinical guidelines Recognise the need for audit in clinical practice to promote standard setting and quality assurance To be prepared to accept responsibility Show commitment to continuing professional development 	Area 1.3
Examples and descriptors for candidates	<ul style="list-style-type: none"> Demonstrates critical appraisal skills in relation to the published literature Demonstrates ability to apply for appropriate ethical research approval Demonstrates knowledge of research organisation and funding sources Demonstrates ability to write a scientific paper Lead a complete clinical audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess the effectiveness of the changes Seeks opportunity to visit other departments and learn from other professionals 	Area 1.3

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	<p>Manager including</p> <ul style="list-style-type: none"> Self Awareness and self management (GMP Domains: 1) Team-working (GMP Domains: 1, 3) Leadership (GMP Domains: 1, 2, 3) Principles of quality and safety improvement (GMP Domains: 1, 3, 4) Management and health service structure (GMP Domains: 1) 	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>
Objective	<p>Self awareness and self management</p> <ul style="list-style-type: none"> To recognise and articulate one's own values and principles, appreciating how these may differ from those of others To obtain, value and act on feedback from a variety of sources To manage the impact of emotions on behaviour and actions To be reliable in fulfilling responsibilities and commitments to a consistently high standard To ensure that plans and actions are flexible, and take into account the needs and requirements of others <p>Team working</p> <ul style="list-style-type: none"> To identify opportunities where working with others can bring added benefits To work well in a variety of different teams and team settings by listening to others, sharing information, seeking the views of others, empathising with others, communicating well, gaining trust, respecting roles and expertise of others, encouraging others, managing differences of opinion, adopting a team approach <p>Leadership</p>	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 5</p> <p>Area 4.2, 4.3 and 4.4</p> <p>Area 3</p>

	<ul style="list-style-type: none"> To develop the leadership skills necessary to lead teams effectively. These include: <ul style="list-style-type: none"> Identification of contexts for change Application of knowledge and evidence to produce an evidence based challenge to systems and processes Making decision by integrating values with evidence Evaluating impact of change and taking corrective action where necessary <p>Principles of quality and safety improvement</p> <ul style="list-style-type: none"> To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety To critically evaluate services To identify where services can be improved To support and facilitate innovative service improvement <p>Management and health service culture</p> <ul style="list-style-type: none"> To actively contribute to plans which achieve service goals To manage resources effectively and safely To manage people effectively and safely To manage performance of themselves and others To understand the management of local healthcare systems in order to be able to participate fully in managing healthcare provision 	
Knowledge	<p>Self awareness and self management</p> <ul style="list-style-type: none"> Demonstrate knowledge of ways in which individual behaviours impact on others; Demonstrate knowledge of personality types, group dynamics, learning styles, leadership styles Demonstrate knowledge of methods of obtaining feedback from others Demonstrate knowledge of tools and techniques for managing stress Demonstrate knowledge of the role and responsibility of occupational health and other support networks Demonstrate knowledge of the limitations of self professional competence <p>Team working</p> <ul style="list-style-type: none"> Outline the components of effective collaboration and team working Demonstrate knowledge of specific techniques and methods that facilitate effective and empathetic communication Demonstrate knowledge of techniques to facilitate and resolve conflict Describe the roles and responsibilities of members of the multidisciplinary team Outline factors adversely affecting a doctor's and team performance and methods to rectify these Demonstrate knowledge of different leadership styles <p>Leadership</p> <ul style="list-style-type: none"> Demonstrate knowledge of patient outcome reporting systems within surgery, and the organisation and how these relate to national programmes. Understand how decisions are made by individuals, teams and the organisation Understand effective communication strategies within organisations Demonstrate knowledge of impact mapping of service change, barriers to change, qualitative methods to gather the experience of patients and carers <p>Quality and safety improvement</p> <ul style="list-style-type: none"> Understand the elements of clinical governance and its relevance to clinical care Understands significant event reporting systems relevant to surgery Understands the importance of evidence-based practice in relation to 	<p>Areas 1.1 and 1.2</p> <p>Area 4.2, 4.3, 4.4</p>

	<p>clinical effectiveness</p> <ul style="list-style-type: none"> • Understand risks associated with the surgery including mechanisms to reduce risk • Outline the use of patient early warning systems to detect clinical deterioration • Keep abreast of national patient safety initiatives • Understand quality improvement methodologies including feedback from patients, public and staff • Understand the role of audit, research, guidelines and standard setting in improving quality of care • Understand methodology of creating solutions for service improvement • Understand the implications of change 	
Skills	<p>Self awareness and self management</p> <ul style="list-style-type: none"> • Demonstrate the ability to maintain and routinely practice critical self awareness, including able to discuss strengths and weaknesses with supervisor, recognising external influences and changing behaviour accordingly • Demonstrate the ability to show awareness of and sensitivity to the way in which cultural and religious beliefs affect approaches and decisions, and to respond respectfully • Demonstrate the ability to recognise the manifestations of stress on self and others and know where and when to look for support • Demonstrate the ability to □ balance personal and professional roles and responsibilities, prioritise tasks, having realistic expectations of what can be completed by self and others <p>Team working</p> <ul style="list-style-type: none"> • Preparation of patient lists with clarification of problems and ongoing care plan • Detailed hand over between shifts and areas of care • Communicate effectively in the resolution of conflict, providing feedback • Develop effective working relationships with colleagues within the multidisciplinary team • Demonstrate leadership and management in the following areas: <ul style="list-style-type: none"> ○ Education and training of junior colleagues and other members of the team ○ Deteriorating performance of colleagues (e.g. stress, fatigue) ○ Effective handover of care between shifts and teams • Lead and participate in interdisciplinary team meetings • Provide appropriate supervision to less experienced colleagues • Timely preparation of tasks which need to be completed to a deadline <p>Leadership</p> <ul style="list-style-type: none"> • Identify trends, future options and strategy relevant to surgery • Compare and benchmark healthcare services • Use a broad range of scientific and policy publications relating to delivering healthcare services • Prepare for meetings by reading agendas, understanding minutes, action points and background research on agenda items • Work collegiately and collaboratively with a wide range of people outside the immediate clinical setting • Evaluate outcomes and re-assess the solutions through research, audit and quality assurance activities • Understand the wider impact of implementing change in healthcare provision and the potential for opportunity costs <p>Quality and safety improvement</p> <ul style="list-style-type: none"> • Adopt strategies to reduce risk e.g. Safe surgery • Contribute to quality improvement processes e.g. <ul style="list-style-type: none"> ○ Audit of personal and departmental performance 	<p>Area 1.2 and 1.2</p> <p>Area 2</p> <p>Area 5</p> <p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>

	<ul style="list-style-type: none"> ○ Errors / discrepancy meetings ○ Critical incident and near miss reporting ○ Unit morbidity and mortality meetings ○ Local and national databases ● Maintenance of a personal portfolio of information and evidence ● Creatively question existing practise in order to improve service and propose solutions <p>Management and health service structures</p> <ul style="list-style-type: none"> ● Manage time and resources effectively ● Utilise and implement protocols and guidelines ● Participate in managerial meetings ● Take an active role in promoting the best use of healthcare resources ● Work with stakeholders to create and sustain a patient-centred service ● Employ new technologies appropriately, including information technology ● Conduct an assessment of the community needs for specific health improvement measures 	
Behaviour	<p>Self awareness and self management</p> <ul style="list-style-type: none"> ● To adopt a patient-focused approach to decisions that acknowledges the right, values and strengths of patients and the public ● To recognise and show respect for diversity and differences in others ● To be conscientious, able to manage time and delegate ● To recognise personal health as an important issue <p>Team working</p> <ul style="list-style-type: none"> ● Encourage an open environment to foster and explore concerns and issues about the functioning and safety of team working ● Recognise limits of own professional competence and only practise within these. ● Recognise and respect the skills and expertise of others ● Recognise and respect the request for a second opinion ● Recognise the importance of induction for new members of a team ● Recognise the importance of prompt and accurate information sharing with a patients own doctors following hospital discharge <p>Leadership</p> <ul style="list-style-type: none"> ● Demonstrate compliance with national guidelines that influence healthcare provision ● Articulate strategic ideas and use effective influencing skills ● Understand issues and potential solutions before acting ● Appreciate the importance of involving the public and communities in developing health services ● Participate in decision making processes beyond the immediate clinical care setting ● Demonstrate commitment to implementing proven improvements in clinical practice and services ● Obtain the evidence base before declaring effectiveness of changes <p>Quality and safety improvement</p> <ul style="list-style-type: none"> ● Participate in safety improvement strategies such as critical incident reporting ● Develop reflection in order to achieve insight into own professional practice ● Demonstrates personal commitment to improve own performance in the light of feedback and assessment ● Engage with an open no blame culture ● Respond positively to outcomes of audit and quality improvement ● Co-operate with changes necessary to improve service quality and safety <p>Management and health service structures</p> <ul style="list-style-type: none"> ● Recognise the importance of equitable allocation of healthcare resources 	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 5</p> <p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>

	<ul style="list-style-type: none"> Recognise the role of doctors as active participants in healthcare systems Respond appropriately to own health service objectives and targets and take part in the development of services Recognise the role of patients and carers as active participants in healthcare systems and service planning Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service 	
Examples and descriptors for candidates	<p>Self awareness and self management</p> <ul style="list-style-type: none"> Participates in case conferences as part of multidisciplinary and multi agency team Responds to service pressures in a responsible and considered way Liaises with colleagues in the planning and implementation of work rotas <p>Team working</p> <ul style="list-style-type: none"> Discusses problems within a team and provides an analysis and plan for change Works well in a variety of different teams Shows the leadership skills necessary to lead the multidisciplinary team Beginning to leads multidisciplinary team meetings <ul style="list-style-type: none"> Promotes contribution from all team members Fosters an atmosphere of collaboration Ensures that team functioning is maintained at all times. Recognises need for optimal team dynamics Promotes conflict resolution Recognises situations in which others are better equipped to lead or where delegation is appropriate <p>Leadership</p> <ul style="list-style-type: none"> Shadows own health service managers Attends multi-agency conference Uses and interprets departments performance data and information to debate services Participates in clinical committee structures within an organisation <p>Quality and safety improvement</p> <ul style="list-style-type: none"> Able to define key elements of clinical governance Demonstrates personal and service performance Designs audit protocols and completes audit cycle Identifies areas for improvement and initiates improvement projects Supports and participates in the implementation of change Leads in review of patient safety issue Understands change management <p>Management and Health Care Structure</p> <ul style="list-style-type: none"> Can describe in outline the roles of primary care, including general practice, public health, community, mental health, secondary and tertiary care services within own healthcare system Participates fully in clinical coding arrangements and other relevant local activities <ul style="list-style-type: none"> Participate in team and clinical directorate meetings including discussions around service development Can discuss the most recent guidance from the relevant local health regulatory agencies in relation to the surgical specialty Can describe the local structure for health services and how they relate to regional or devolved administration structures Discusses funding allocation processes from central government in outline and how that might impact on the local health organisation 	<p>Area 1.1 and 1.2</p> <p>Area 2</p> <p>Area 5</p> <p>Area 4.2, 4.3, 4.4</p> <p>Area 3</p>

	Professional Behaviour and Leadership	Mapping to
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Urology

		Leadership Curriculum
Sub-category:	Promoting good health	
Objective	<ul style="list-style-type: none"> To demonstrate an understanding of the determinants of health and public policy in relation to individual patients To promote supporting people with long term conditions to self-care To develop the ability to work with individuals and communities to reduce levels of ill health and to remove inequalities in healthcare provision To promote self care 	N/A
Knowledge	<ul style="list-style-type: none"> Recognises the agencies that can provide care and support out with the hospital Understand the factors which influence the incidence and prevalence of common conditions including psychological, biological, social, cultural and economic factors Understand the role of screening programmes Demonstrate knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these 	
Skills	<ul style="list-style-type: none"> Adapts assessment and management accordingly to the patients social circumstances Ensures appropriate equipment and devices are discussed and where appropriate puts the patient in touch with the relevant agency Identifies opportunities to promote change in lifestyle and to prevent ill health Counsels patients appropriately on the benefits and risks of screening and health promotion activities 	
Behaviour	<ul style="list-style-type: none"> Recognises the impact of long term conditions on the patient, family and friends Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition Encourage where appropriate screening to facilitate early intervention 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> Demonstrates awareness of management of long term conditions Develops management plans in partnership with the patient that are pertinent to the patients long term condition Provide information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances concerning the factors that would affect the risks and benefits of screening to them as an individual. 	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	<i>Probity and Ethics</i> To include <ul style="list-style-type: none"> Acting with integrity Medical Error Medical ethics and confidentiality Medical consent Legal framework for medical practise 	Area 1.4
Objective	<ul style="list-style-type: none"> To uphold personal, professional ethics and values, taking into account the values of the organisation and the culture and beliefs of individuals To communicate openly, honestly and inclusively 	Area 1.4

Urology

	<ul style="list-style-type: none"> To act as a positive role model in all aspects of communication To take appropriate action where ethics and values are compromised To recognise and respond to the causes of medical error To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality as they apply to surgery To understand the necessity of obtaining valid consent from the patient and how to obtain To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations Understand ethical obligations to patients and colleagues To appreciate an obligation to be aware of personal good health 	
Knowledge	<ul style="list-style-type: none"> Understand local complaints procedure Recognise factors likely to lead to complaints Understands the differences between system and individual errors Outline the principles of an effective apology Knows and understand the professional, legal and ethical codes of own I Medical Council and any other codes to which the physician is bound Understands of the principles of medical ethics Understands the principles of confidentiality Understands the principles of Information Governance Understands the legal framework for patient consent in relation to medical practise Recognises the factors influencing ethical decision making including religion, personal and moral beliefs, cultural practices Understands the local standards of practice employed when deciding to withhold or withdraw life-prolonging treatment Understands the local legal framework and guidelines for taking and using informed consent for invasive procedures including issues of patient incapacity 	Area 1.4
Skills	<ul style="list-style-type: none"> To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice taking into account local and national regulations To create open and nondiscriminatory professional working relationships with colleagues awareness of the need to prevent bullying and harassment Contribute to processes whereby complaints are reviewed and learned from Explains comprehensibly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives Deliver an appropriate apology and explanation relating to error Use and share information with the highest regard for confidentiality both within the team and in relation to patients Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment Present all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent Provide a balanced view of all care options Applies the relevant legislation that relates to the health care system in order to guide one's clinical practice including reporting to the Coroner's/Procurator Officer (or local equivalent), the Police or the proper officer of the local authority in relevant circumstances Ability to prepare appropriate medical legal statements for submission to any relevant legal proceedings Be prepared to present such material in Court 	Area 1.4
Behaviour	<ul style="list-style-type: none"> To demonstrate acceptance of professional regulation To promote professional attitudes and values To demonstrate probity and the willingness to be truthful and to admit errors 	Area 1.4

	<ul style="list-style-type: none"> • Adopt behaviour likely to prevent causes for complaints • Deals appropriately with concerned or dissatisfied patients or relatives • Recognise the impact of complaints and medical error on staff, patients, and the local Health Service • Contribute to a fair and transparent culture around complaints and errors • Recognise the rights of patients to make a complaint • Identify sources of help and support for patients and yourself when a complaint is made about yourself or a colleague • Show willingness to seek advice of peers, legal bodies, and the local medical council in the event of ethical dilemmas over disclosure and confidentiality • Share patient information as appropriate, and taking into account the wishes of the patient • Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment • Seeks and uses consent from patients for procedures that they are competent to perform while <ul style="list-style-type: none"> ○ Respecting the patient's autonomy ○ Respecting personal, moral or religious beliefs ○ Not exceeding the scope of authority given by the patient ○ Not withholding relevant information • Seeks a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity • Show willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the local medical council on medico-legal matters 	
Examples and descriptors for candidates	<ul style="list-style-type: none"> • Recognises and responds to both system failure and individual error • Provides timely accurate written responses to complaints when required • Counsels patients on the need for information distribution within members of the immediate healthcare team • Seek patients' consent for disclosure of identifiable information • Discuss with patients with whom they would like information about their health to be shared • Understand the importance the possible need for ethical approval when patient information is to be used for any purpose • Understand the difference between confidentiality and anonymity • Know the process for gaining ethical approval for research • Able to assume a full role in making and implementing decisions about resuscitation status and withholding or withdrawing treatment • Able to support decision making on behalf of those who are not competent to make decisions about their own care • Obtains consent for interventions that he/she is competent to undertake, even when there are communication difficulties • Identifies cases which should be reported to external bodies • Identify situations where medical legal issues may be relevant • Work with external bodies around cases that should be reported to them. • Collaborating with external bodies by preparing and presenting reports as required 	