

2018

*Malaysian Board  
of Urology  
Curriculum*



**MALAYSIAN UROLOGICAL  
ASSOCIATION**



## **PREFACE**

This edition of “*Malaysian Board of Urology Curriculum (MBUC)*” provides guidance to Urology Training in Malaysia

This edition in 2017 is the first edition and applies to all trainees taking up appointments in specialty training which commence on or after January 2018.

The development of this curriculum has been through an interactive process of feedback by stakeholders of the programme namely members of the Board of Urology and Malaysian Urological Association. The contribution of stakeholder colleagues is gratefully acknowledged.

The standards and requirements set by the Malaysian Medical Council (the MMC) are extensively quoted to ensure that the Guide is underpinned by them and by the Malaysian Medical Council’s *Good Medical Practice*.

The *MBUC* is published in electronic format and will be available on the Malaysian Urological Association and Ministry of Health, MOH websites. This will enable updating of the Guide to ensure that it reflects developments in urology specialty training.

## **FOREWORD FROM DIRECTOR GENERAL OF HEALTH**



Firstly, I would like to thank the Malaysian Urological Association and Malaysian Board of Urology for inviting me, to write this foreword to the recent update of the Urology curriculum for Malaysia. Kudos to the Curriculum writing team of consultant urologists who have contributed to the development of this curriculum. I am also pleased that the Malaysian Urological Association is part of the team involved in the National Postgraduate Curriculum committee, which aims to standardize all postgraduate curriculums in Malaysia.

The Malaysian Board of Urology which was formed by the Malaysian Urological Association has been conducting its Board of Urology Training and exit exam certification since the year 2000. Formal Urology training has thus been in many ways unique since it has been driven by a professional society with involvement of the MOH as the main training centres together with the Universities and with the participation of private Urologists in the academic programme. The Malaysian Board of Urology members has comprised of all the Head of the Urology training centres in the MOH Hospitals and Universities with the Chairman being the National Head of the Urological Services for the MOH. The MOH for its part has always supported this initiative by the Urologists ever since October 2005.

In the year 2008, the Malaysian Board of Urology had its first Conjoint MBU/FRCSG Urology examination in collaboration with the Royal College of Physician and Surgeons of Glasgow, with its conjoint exam held annually in November at Hospital Selayang. With trainees from Singapore, Brunei and Myanmar sitting for this exam, Malaysia has become the hub for FRCSG Urology exam in the region.

The conjoint examination in Urology is pioneering and unique. In many ways, the

Urology training in Malaysia is ahead of other subspecialty programmes. Having exit examination certification is one noteworthy achievement but having it benchmarked by the participation of one of the Royal Colleges is a major success. With the recent signing of the MOU between the RCPSG with the MUA and the Malaysian Board of Urology, this collaboration including in the conduct of the conjoint examination will be extended for a period of another 10 years until 2027.

I would like to take this opportunity to congratulate the Malaysian Urological Association and Board of Urology in updating the Malaysian curriculum in Urology in keeping with recent developments in postgraduate training in Malaysia. The MOH would also like to congratulate the urology fraternity for continuing to take the leap forward by including the private sector into the specialty training. This Public Private Partnership initiative proposed by the MUA to allow the participation of Private urologists in the training of Urologists in government hospitals is certainly welcomed as we continue to work together hand-in-hand as Nation, for better health.

Finally , MOH will continue to support the efforts of the Malaysian Urological Association and the Malaysian Board of Urology in their effort to provide the best possible training programme for Urology in Malaysia.



**Datuk Dr Noor Hisham Abdullah Director-General of Health Malaysia**

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## **SECTION 1:**

# **BACKGROUND AND INTRODUCTION**

## **1.1 BACKGROUND AND INTRODUCTION**

Malaysian Urological Association, MUA established the Board of Urology and held its first exit examination in November 2000. Subsequent examinations were conducted by the Malaysian Urological Association with the participation of invited external examiners from the Asian region, Australia and the United Kingdom. In 2005, recognition was accorded by the Ministry of Health, Malaysia to the Board of Urology training programme. In 2008, the exit exam became a joint examination with the Royal College of Physicians and Surgeons of Glasgow, leading to the joint award of MBU (Malaysian Board of Urology) and the FRCSG (Urol).

In 2017, the Malaysian Board of Urology and the Ministry of Health embarked on the parallel intake of urology trainees who hold the MRCS (medical officer trainees), in addition to the existing post FRCS or Master of Surgery Urology specialist trainees. The objective is to meet the long term need of specialist urologists in Malaysia. The criteria for direct entry (18-page document) was drawn up by the MUA and presented to the Director General of Health Ministry of Health on 29 January 2016. It is therefore timely that the Malaysian Urological Association conducts a major review of its curriculum in 2017.

The curriculum is a statement of the aims and objectives, content, experiences, outcomes and processes including a description of the structure and expected method of learning, teaching, feedback and supervision. The curriculum sets out knowledge, skills and personal attributes the trainees will achieve. In developing the curriculum, the members draw heavily on established programmes in the UK as well as Australia as Malaysian medical education has been traditionally closely linked with these two countries.

Curriculum is structured with transparent processes for all the stakeholders. It aims to produce competent urologists with the necessary expertise and experience for independent Urological practice in Malaysia. However, the curriculum must also allow for changes which may be necessary from time to time, in view of any advances in knowledge, technology and practice for the better. The candidate would eventually

be awarded the MBU and the FRCSG (Urol). The curriculum will also have to be acceptable to the Malaysian Medical Council registration with the National Specialist Registry.

## **1.2 SPECIALITY OVERVIEW**

### **1.2.1 Members of writing group**

Members of writing group in the development of the 2017 amended Curriculum for Urology training in Malaysia are as follows:

1. Dr Clarence Lei Chang Moh (Advisor of Writing Committee)
2. Professor Dr Azad Hassan Abdul Razack (Chairman of Writing Committee)
3. Dato Dr Rohan Malek (Chairman of Malaysian Board of Urology)
4. Dr Teh Guan Chou (Deputy Chairman of Writing Committee)
5. Dato Dr Selvalingam Sothilingam (President Malaysian Urological Association)
6. Dr Murali Sundram
7. Dr Susan Woo Yoke Yin
8. Professor Dato Dr Zulkifli Md Zainuddin
9. Assoc Prof Dr Ong Teng Aik (Vice President, Malaysian Urological Association)
10. Dr Shanggar Kuppusamy
11. Dr Poongkodi Nagappan (Hon Secretary, Malaysian Urological Association)
12. Dr Noor Ashani Md Yusoff
13. Dr Hemanth Kumar Ramasamy
14. Assoc Prof Dr Tan Guan Hee
15. Dr Vijayan Manogran
16. Assoc. Prof. Dato' Dr Khairul Asri Mohd Ghani

### **1.2.2 Urology in Malaysia- an overview**

The speciality of Urology deals with male and female patients with urogenital problems including renal transplantation. The various subspecialties under the field of Urology include:

- a. Uro-Oncology
- b. Robotic Assisted Surgery
- c. Laparoscopic and Minimally Invasive Surgery
- d. Endourology
- e. Paediatric Urology
- f. Andrology
- g. Trauma and Reconstructive Urology
- h. Female Urology
- i. Functional Urology
- j. Urological Infections
- k. Renal Transplantation

It has both medical and surgical components. Surgical procedures include open and endoscopic procedures. Urology is a clear example of the evolution and use of technology in medicine. Urology trainees will be expected to be exposed to all areas of Urology subspecialty and this wide variety of subject matter will be an attraction to many young doctors and aspiring surgeons.

Urologist work closely with the following specialities and therefore potential trainees are encouraged to spend some time in the relevant specialities prior to entering the urology training programme:

- a. General Surgery and its Subspecialties
- b. Anaesthesia
- b. Nephrology
- c. Radiology
- d. Pathology
- e. Obs & Gyn
- f. Rehabilitation Medicine
- g. Paediatrics

There are currently 118 Urology consultants in Malaysia. The Malaysian Board of Urology (MBU) is the sole body conducting and regulating the Malaysian Urology

training programme. The Board is governed by the guidelines set by the Malaysian Medical Council (MMC) and the Ministry of Health (MOH). The Chairman of MBU is the Head of Urology Services from MOH, and other members include the Heads of Urology from all public training centres. Two private urology consultants are also elected into the Board and serve a term of three years. There are in total 15 board members. MBU conducts trainee evaluation twice a year during which time decisions are made on the progress and rotation of the trainees. Trainees will also be required to submit a confidential feedback evaluation form of their supervisor and training centre to the Chairman of MBU during this time. Other stakeholders of the training programme include the Malaysian Urological Association (MUA) that governs the finances of MBU and The Royal College of Surgeons of Glasgow which sets the examination standard and runs the conjoint exit examination.

In the current system, only consultants within the public system are the clinical supervisors involved in the training of Urology. There are currently 21 clinical supervisors. Under a new initiative in 2017 known as the Public Private Partnership for Urology Malaysia (PPPUM), consultants in the private sector have been encouraged to participate in supervision of urology trainees. They shall apply into the position and will be selected to undergo a 'train the trainer' session before being appointed as a clinical supervisor. Clinical Supervisors will have academic duties in providing tutorials, seminars, supervising ward rounds, advanced urology block lectures, research and providing clinical supervision. At present there is no reward system for trainers.

### **1.2.3 Urology trainee intake and training centres**

There are currently two modes of entry into Urology training:

- a. Specialist entry (post MS for Specialist Trainee)
- b. Parallel entry (Medical Officer Trainee)

Although there are 2 modes of entry, the candidates will undergo the same Board of Urology Training programme which is for a minimum duration of 4 years.

Candidates accepted into the training programme will be known as Urology Trainees (UT1-4). There are currently 28 trainees undergoing urology training (6 trainees in their first year, are the first intake of parallel entry). All selected trainees are offered the scholarship by the government of Malaysia. Overseas trainees need to source for their own funding. All the overseas trainees so far have been funded by their own government. There are currently 15 training centres in Malaysia, all of which are public hospitals. In Malaysia the largest volume and case mix of urology patients is still in the public centres.

#### Ministry of Health (MOH) Training Centres

- 1 Hospital Kuala Lumpur
2. Hospital Selayang
3. Hospital Umum Sarawak, Kuching
4. Hospital Pulau Pinang
6. Hospital Sultanah Aminah, Johor Bahru
7. Hospital Queen Elizabeth, Kota Kinabalu
8. Hospital Raja Perempuan Zainab II, Kota Bharu
9. Hospital Tengku Ampuan Afzan, Kuantan
10. Hospital Sultanah Bahiyah, Alor Setar
11. Hospital Serdang

#### University Training Centres

1. University Malaya Medical Centre (UMMC)
2. University Kebangsaan Medical Centre (UKMMC)
3. Hospital Universiti Sains Malaysia (HUSM)
4. Universiti Putra Malaysia (UPM)

The MOH trainees will undergo rotation between the various centres as decided by MBU. They will spend only one year in most centres. Candidates may spend more than one year in the following tertiary Urology centres :

- a. Hospital Kuala Lumpur

- b. Hospital Selayang
- c. Hospital Umum Sarawak, Kuching

The exception is with University trainees who may spend the entire 4 years with the University training centre. They are however encouraged to rotate 6 months-1 year to any of the MOH hospitals.

Under the PPPUM programme, the Ministry of Health has approved short period of observer-ship for trainees in selected Private Urology Centres, as approved by the Board of Urology from time to time.

#### **1.2.4 The Future of Urology in Malaysia**

The training direction will be in the increase of number of trainees and training centres. This is because of the existing shortage of Urology consultants in the country. The introduction of the parallel entry pathway in 2016, provides a alternative for qualified senior medical officers to gain entry into the Urology programme earlier than was previously possible with the specialist entry pathway.

With increasing number of Consultant Urologist, Urology subspecialties can be further developed and strengthened. This will be in line of providing more comprehensive care for all urological condition affecting Malaysians.

#### **1.2.5 Overall structure of training programme**

The structure of the training programme is based on the curriculum approved by Malaysian Medical Council and the Malaysian Board of Urology (MBU) conducts the training programme. All training centres are approved by MBU based of set criteria. Urology trainers are known as clinical supervisors. In centres with more than two clinical supervisors, the Head of Urology will function as a training coordinator.

The duration of training is 4 years and the trainee cannot extend beyond 7 years. Progression is not time but competency based. Competency at each stage will be evaluated based on log book, formative and summative assessments. Involvement in research, scientific presentation and publication is also required. Completion of



training requires the achievement of minimum standards required which will lead to the completion of FRCSG (Urology) exit examination and MBU certificate of completion.

The following Work Based Assessment tools are available

- a. Direct Observation of Procedural Skill Assessment Form
- b. Case Based Assessment Form
- c. Mini Clinical Examination Assessment form (Mini-CEX)
- d. Core Surgical Procedure requirement
- e. 360 degrees assessment
- f. Academic and Research Portfolio

#### **1.2.6 Curriculum documents in place**

Trainees are provided with the syllabus in the form of Urology modules. Weekly job plans are arranged by the training coordinators or clinical supervisors of the respective training centres which includes clinic session, daily ward rounds, case presentation, audit, morbidity and mortality meetings, surgery and lectures. Training centres will also conduct joint meetings with other departments such as radiology, pathology and this includes multidisciplinary meetings (MDT) in which the trainee shall present the cases and actively participate in the discussion.

Weekend supervised block lectures on various topics are arranged by MBU and is compulsory for trainees to participate. A timetable of these block lectures is released at the beginning of each year by MUA. Senior urologist will play a key role in leading the discussion during the block lectures and trainees will also be taken for mock viva sessions.

There will also be a compulsory year end viva session for all trainees where they will be tested on higher level thinking based of real case scenarios. Trainees will be given a reading list and they will need to keep a log book of all procedures done and observed which will be reviewed by their clinical supervisors and presented at the

Board meetings and interview. Trainees are provided with a list of core urological procedures for each stage of training.

On completing the FRCSG (Urology) exit examination, trainees are encouraged to do a 6 month- 1 year fellowship in urological Institutions abroad. Countries that have accepted Malaysian fellows include Australia, United Kingdom, Singapore, United States, Canada, Taiwan China and India.

### **1.2.7 Evaluation and Success of training**

Criteria for success should be the following:

1. Ability to attract trainees regularly
2. Successful completion of training within the stipulated time frame.
3. Successful trainees are able to secure a consultant post and work independently.

The passing rate for the exit exam is about 80%. Most candidates who failed would clear the examination in their second attempt. Failure could be due to candidates not being well prepared due to heavy clinical commitment at the training centre, lack of knowledge and poor examination answering techniques and personal matters that may have interfered with their preparation. The number of trainees sitting for the exit examination each year is 6-8 candidates.

### **1.2.8 Unique feature of the Urology training programme**

This is the first speciality training programme in Malaysia conducted outside of the University setting under the purview of Ministry of Health and Malaysian Medical Council. The administration of the training programme is solely governed by the Malaysian Board of Urology and Malaysian Urological Association. Consultant Urologist from the public, private sector and university work together in supervising this training programme.

It is one of the few training programmes that has formed a Memorandum of Understanding with the Royal College of Glasgow in providing an exit examination

that is benchmarked by international standards. On 21st November 2017, MUA, MBU and RCSI signed the extension of this MoU to 2027.

### **1.3 PUBLIC PRIVATE PARTNERSHIP OF UROLOGY MALAYSIA (PPPUM)**

#### **1.3.1 Name of Organizations Involved**

1. Ministry of Health Malaysia
2. Malaysian Urological Association
3. Malaysian Board of Urology
4. Malaysian Urology Foundation
5. Royal College of Physicians & Surgeons, Glasgow

#### **1.3.2 Title of Programme**

Public Private Partnership of Urology Malaysia (PPPUM)

*Motto: Breaking barriers in the teaching and training of Urologists in Malaysia*

#### **1.3.3 Introduction**

The Malaysian Board of Urology was conceived under the constitution of the Malaysian Urological Association (MUA) in the year 2000. It has been endorsed by the Director General of Health, Ministry of Health Malaysia (MOH) in 2005 as the regulating body in the teaching and training of Urology in Malaysia.

The Board consists of the MOH Head of Urology Service as the chairman and all Heads of Department of Urology from MOH and University Hospitals which offer Urology training. Two nominated Consultant Urologist from the private sector also sit in the Board. The Board convenes at least twice a year.

Since 2008, MUA and the Malaysian Board of Urology have signed a Memorandum of Understanding with the Royal College of Physicians & Surgeons of Glasgow to

conduct a joint exit examination in Kuala Lumpur for all Malaysian urology trainees. The trainees who are successful will be conferred FRCS (Urol) Glasgow and Malaysian Board of Urology Certification.

Training in urology in Malaysia is via two pathways:

Specialist Entry (Candidate has a recognized Surgical based qualification ie. Masters of Surgery) - candidates under this programme if eligible, can sit for the exit examination at the end of their year 3 and recommended to do an overseas fellowship in year 4.

Parallel Entry (Candidate is a Medical officer having fulfilled the set criteria)- candidates under this programme will sit for the examination at the end of year 4 of training and may do an overseas fellowship after completion of training. This is a NEW initiative between the Malaysian Board of Urology and the MOH which was commenced in 2016.

Training of candidates has been conducted in MOH and University hospitals and trainers have been predominantly from the public sector.

#### **1.3.4 Objective of PPPUM**

- To encourage and increase the participation of Private Urologists in the teaching and training programs in Urology.
- To allow Private Urologists to supervise candidates in Public Hospitals.
- To encourage Private urologists to participate in Urology examinations.
- To promote good and mutually beneficial relationships between private and public urologists and the candidates.

To allow candidates to have specified approved training sessions (clinical and operative observations, workshops and teaching sessions) in Private Hospitals.

### **1.3.5 Rationale**

The current reality is 80% of Malaysian Urologists work in the Private Sector. Therefore, the current teaching strength is mainly dependent upon the 20% of the Urology workforce in Public Sector. With increasing number of candidates pursuing Urology through the Parallel Pathway, there will be a need to increase the teaching strength for Urology training in Malaysia.

1. The introduction of PPPUM will also promote better collaboration between private and public urologists and has the indirect effect of promoting Best Urology Practice in both sectors.
2. Candidates will also have the opportunity to experience the differing challenges in public and private practice
3. The programme will also encourage a closer relationship between private, public urologists and candidates.

In summary, the PPPUM collaboration is an excellent example of a National Blue Ocean Strategy (NBOS) in line with the promotional objectives of the Government of Malaysia.

### **1.3.6 Committee of PPPUM**

Advisor: Mr. Clarence Lei

Chairman: Chairman of MBU

Deputy Chairman: MUA President

Secretary: Secretary MUA

Training Coordinators: Consultants heading Urology training centres

Supervisors: Consultants involved in training

### **1.3.7 Subcommittees of PPPUM**

1. Examination Writing Committee- consist of public and private urologists who will meet usually in July each year to prepare viva questions that will be included in the question bank for the final FRCS (Urol) Glasgow examination.

2. Court of Examiners (COE)- consist of public and private urologists involved as examiners for the Urology Examination. There will be two sets of COE:
  - a. Annual exam- Year 1 & 2 (Specialist Entry), Year 1-3 (Parallel Entry)
  - b. FRCSG(Urol) Exam- exit examination.

### **1.3.8 Strategy of Implementation**

*MUA requests the MOH to send a circular to the State Hospitals in support of PPP, public private partnership where upon urologists in private sector can work in government hospitals with no remuneration required. This is an important requirement for the parallel pathway to be sustained and consolidated.*

1. MUA will advertise to all members on the teaching posts available. Application by members is voluntary and they shall not expect any financial remuneration.
2. Application by Private Urologist to MOH or University Hospitals will have to follow protocol set by the respective hospital. The concerned Urologist will be provided with the necessary documentation by the Urology unit/department head and advised on the necessary steps in application.
3. Private Urologists will be then given a letter of approval from the Hospital Director which will be valid for two years. The Urologist will be required to have at least TWO teaching/training session with the trainee for at least 2 hours for each month. Teaching can be in the form of ward round, tutorial, case discussion, lecture or supervision in operative procedures.
4. Private Urologists who wish to supervise operative procedures will need to apply for credentialing and privileging with the Hospital Director through the respective Head of Urology of the said hospital.
5. Private Urologists involved in PPPUM will be given a certificate, designating them the position of Training Supervisor.

5. Private Urologists may also apply to the Malaysian Board of Urology if they wish their centre to be included as a training centre where candidates may do a specified short training or teaching session.

6. The YOUTH subcommittee of MUA has also implemented several Special Interest Groups (SIG) in areas of urology subspecialties. Private Urologist are encouraged to be part of these SIG's which will coordinate CME activities for trainees which include Advanced Urology Training sessions and various Skills Workshops.

### **1.3.9 Event Diary**

As per submitted to MOH by Board of Urology for parallel intake programme.

### **1.3.10 Resources (Bahan /Sumber)**

1. Malaysian Urology Association
2. Malaysian Urology Foundation
3. Urology Training Centres (MOH)
  - a. Hospital Kuala Lumpur
  - b. Hospital Selayang
  - c. Hospital Pulau Pinang
  - d. Hospital Sultanah Aminah Johor Bahru
  - e. Hospital Raja Perempuan Zainab II, Kota Bharu
  - f. Hospital Tengku Ampuan Afzan, Kuantan
  - g. Hospital Sultanah Bahiyah, Alor Setar
  - h. Hospital Umum Sarawak, Kuching
  - i. Hospital Queen Elizabeth, Kota Kinabalu
  - j. Hospital Serdang
4. Urology Training Centres (University)
  - a. University Malaya Medical Centre
  - b. University Kebangsaan Medical Centre
  - c. Hospital University Sains Malaysia

d. IIUM

5. Private Urology Centres

6. Royal College of Physicians & Surgeons, Glasgow

### **1.3.11 BUDGET**

No specific budgetary requirement

### **1.3.12 CONCLUSION**

The PPPUM will be a partnership between the Malaysian Urological Association with Ministry of Health, MOH. It aims to bridge the gap and break boundaries between the public and private centres. Through this programme, teaching and training of urologists in Malaysia will be further enhanced to produce well supervised and trained urologists. This programme will need to be formalized with MOH specific endorsement in order for it to be sustainable.

*Submitted to Office of Director General of Health, MOH November 2017*

*by Dato Dr Rohan Malek,*

*Chairman of Malaysian Board of Urology and*

*on behalf of MALAYSIAN UROLOGICAL ASSOCIATION, MUA*

*(1<sup>st</sup> Presented and approved at MUA Curriculum Meeting, Cyberjaya, 17.9.17)*



## **SECTION 2:**

### **SPECIALITY TRAINING –**

### **ORGANISATION AND POLICY**

## **2.1 ORGANIZATIONS / STAKEHOLDERS**

### **2.1.1 Ministry of Health Malaysia (MOH)**

1 The MUA with the Ministry of Health of Malaysia has the objective to lead and work in partnership and to facilitate and support the people to:

- Attain fully their potential in health
- Appreciate health as a valuable asset
- Take individual responsibility and positive action for their health

The MUA, with the MOH will ensure a high quality system that is equitable, affordable, efficient, technologically appropriate, environmentally adaptable, customer centered, innovative with emphasis on professionalism, caring and teamwork value, respect for human dignity and community participation.

### **2.1.2 Malaysian Medical Council (MMC)**

The Malaysian Medical Council (MMC) is a body corporate established under the provisions of section 3(1) of the Medical Act 1971 whilst the legal powers are derived from section 4 of the same Act.

The Council is a supreme body and vested with the authority to make policy decisions. Though Para 2(1) of the First Schedule, under the Medical Act 1971 requires the Council to meet at least twice in a year; however, meetings are held on the second Tuesday of every month to enhance efficiency. The Council meetings are presided over by the President and in his absence by a chairman elected by members present.

The Council acts through various Committees and Secretariat. The principal aim of the MMC is to ensure the highest standards of medical ethics, education and practice, in the interest of patients, public and the profession through the fair and effective administration of the Medical Act.

### 2.1.2.a Duties and function of MMC

To protect, promote and maintain the health and safety of the public in the practice of medicine, the Council:

- a. Registers only qualified doctors;
- b. Prescribes and promulgates good medical practice;
- c. Promotes and maintains high standards of medical education; and
- d. Deals firmly and fairly with doctors whose fitness to practice is in doubt.

The core functions of the Council under the statute are as follows:

- a. To authorise registration of medical practitioners;
- b. To maintain a Medical Register of all registered medical practitioners in Malaysia;
- c. To issue practicing certificates to registered medical practitioners;
- d. To promote, recognise and accredit medical education and training programmes and institutions;
- e. To determine and regulate the conduct and ethics of registered medical practitioners;
- f. To consider the cases of medical practitioners who, because of some mental or physical condition, may be unfit to practice medicine;
- g. To review the competence of medical practitioner;
- h. To advise and make recommendations to the Minister of Health on matters relating to the practice of medicine in Malaysia; and

The Medical (Amendment) Act 2012, which is the amendment to the Medical Act 1971, and the Medical Regulations 2017 which is to replace the Medical Regulation 1974 are to both appointed to come into force on the 1<sup>st</sup> July 2017. The amended Act and its Regulation 2017 are able to strengthen the functionality of the Malaysian Medical Council as a corporate entity (*Badan Berkanun*) to regulate and to ensure safe and quality medical care is being provided to Malaysians.

Among the major changes in the amended Medical Act 2012 are:

### **2.1.2.b Establishment of the Council**

- a. The composition of the 33 Council members will consist of 17 elected members, of which 15 are from West Malaysia and one each from Sabah and Sarawak, 9 appointed members to represent the local recognized medical schools, and three each appointed among the private medical practitioners and the practitioners in the public healthcare sector, and the Council to be led by the Director General of Health as a President.
- b. The new composition reflects the autonomy of the Council in drafting the policy, and it provides opportunity for a balance input to be derived from the professionals from the academician, doctors from the private and doctors from the public sectors, so as the Council will be able to discharge their function to register qualified medical practitioners and to regulate the practice of medicine.
- c. As a corporate entity, Malaysian Medical Council is provided with power to appoint their own staff and employee of the Council, and is empowered to manage their own financial account through the ‘Malaysian Medical Council Fund’, of which it was not provided under the old Act.
- d. The Council may get funding from the government and at the same time the Council may generate revenue from the services and activities that is rendered within the ambit of the Act.

The Council is empowered to do all things expedient or reasonably necessary for the carrying out of its function under the Act.

The daily activities of the Council will be carried out by the Chief Executive Officer that will be appointed by the President after consultation with Council; the candidate could be freely chosen as deems fit by the Council to be the CEO and he will be supported by the secretarial staff and function within the ambit and direction of the Council. The Council is empowered to establish any committees as required to assist in performing their duties and functions.

### **2.1.2.c Registration of Medical Practitioners**

The amended Act provides that all doctors to practice in Malaysia must be fully registered under this Act; and for a doctor to practice as a specialist he must be registered under this Act as a specialist. The Malaysian Medical Council established the National Specialist Register to cater for the specialist registration.

The MMC works closely with the Academy of Medicine and specialties fraternity on standard setting and also to evaluate the application for specialist registration. Specialist registration is valid for 5 years, and for those yet to be registered is given until 1 January 2018 for them to be registered.

Those who are not registered as specialist under this Act is not qualified to practice as specialist and if they do so it is contravene to this Act and shall be subjected to the disciplinary jurisdiction of the Council. Among the pre-requisites for specialist registrations are:

- a. Has been fully registered under this Act
- b. Has attended specialized training in that specialty in a recognized training institution
- c. He holds a recognized specialist qualification, and
- d. Has proven to the satisfaction of the Council that he is fit and of good character.

The Medical Regulation 2017 specifically provides the power to the Council to establish the **Medical Education Committee**, which is responsible to recognize the training institution and to recognize the qualification awarded by the recognized training institution for the purpose of registration of medical practitioners. And for that, the Medical Education Committee will recommend to the Council:

- a. The required standard and qualifications of training institutions and the maintenance of such standard,

- b. The standard of proficiency which is required from candidates in the qualifying examinations (for those graduated from unrecognized university),
- c. The relevant training programme for the provisionally registered medical practitioners (Houseman); and
- d. The standard and qualifications for entry into the specialist register.

The Medical Regulation 2017 also provided for the establishment of the **Evaluation Committee** for Primary Medical Qualification (**PMQ**) and the **Evaluation Committee** for Specialist Medical Qualification (**SMQ**) to assess and to consider the application for the registration of practitioners under this Act, i.e. consideration for full registration of the medical practitioners and the registration of specialist respectively.

The Evaluation Committee for the PMQ shall recommend to the Council for certain condition and restriction deems necessary to be imposed to those apply for Provisional Registration, full registration and temporary practicing certificate, whereas the Evaluation Committee for SMQ shall do so for those for those apply for specialist registration; and the Council may accept or refuse the recommendation made by the committee.

#### **2.1.2.d Annual Practicing Certificate**

Annual Practicing Certificate (APC) is mandatory for those to practice medicine, except for the first year upon being granted the full registration under the Act; the practitioners is obliged to apply for the APC before the first day of December for them to practice in subsequent year, failing which additional fee for late application will be imposed.

The Council views the patient safety as of utmost important, and for that very reasons it is very important for the practitioners to continuously updated their knowledge and skill so as they are keeping abreast with the latest knowledge for the benefit of patients.

Under the Medical Regulation 2017, all application for Annual Practising Certificates shall be accompanied by:

- a. Professional indemnity cover, and
- b. Evidence of sufficient Continuing Professional Development (CPD) points in order for them to be eligible for APC.

The Council is working closely with the Ministry of Health, and the professional association to manage the CPD point's collection, which is set to be implemented by 1 January 2019, together with the requirement of the professional indemnity cover for APC application.

The template for the CPD point's collection already being agreed with the Ministry of Health, Academy of Medicine Malaysia, and Malaysian Medical Association, and the total CPD points required is 20 points.

#### **2.1.2.e Disciplinary Jurisdiction**

Disciplinary Jurisdiction of the Council against the registered medical practitioners is being provided under the Section 29 of the amended Act. The Council may exercise its power against any registered person who:

- a. Has been convicted in Malaysia or elsewhere of any offence punishable with imprisonment
- b. Has had his qualification withdrawn or cancelled by the awarding authority
- c. He has been alleged to have committed serious professional misconduct as stipulated in the Code of Professional Conduct and any other guideline sand directives of the Council
- d. Has obtained registration by fraud or misrepresentation
- e. Was not at the time of his registration entitled to be registered; or
- f. Has since been removed from the register of medical practitioners maintained in any place outside Malaysia.

The amended Medical Act 2012 provides a new approach in managing the disciplinary proceeding of the registered medical practitioner; it provides the power for the Council to established a Disciplinary Panel consisted of members of the Council, fully registered medical practitioners of at least ten years of good standing and with current Annual Practicing Certificates and any layperson other than doctors.

Any complaints or information pertinent to the registered medical practitioners touching on any disciplinary or ethical matter will be subjected for preliminary investigation by the Preliminary Investigation Committee which will be derived from the Disciplinary Panel, and will determine whether there shall be inquiry or not.

The Disciplinary Board also will be derived from the Disciplinary Panel and may consisted of at least 3 Council members, three registered medical practitioners of at least 10 years of good standing and any other person other than the doctors and the Council members.

The present of the layperson or non-doctors in the disciplinary proceeding is only introduced by the amended Act; such a provision was not provided under the old Act. It mains objective is to ensure fair and transparent proceeding.

A new provision under Section 29a of the Act provides for the Disciplinary Board to impose **Interim Orders** for the suspension of the registration of practitioners for a period not more than 12 months, if it is deems necessary for the protection of members of public. This provision is important so as public or patients will be protected from the risk of being exposed to the unsafe practices of practitioners.

During the course of inquiry, if the Disciplinary Board found that the registered medical practitioner concerned is professionally incompetent or his fitness to practice is impaired due to physical or mental disability, than the Board may refer the practitioner to the **Fitness to Practice Committee** for an evaluation (not in old Act). The Council may upon considering the recommendation of the Disciplinary Board and the records of proceeding decide whether:



- a. Accept the recommendation of the Disciplinary Board and impose punishment; which may range between just simple reprimand, suspension from the register, or removal of practitioner's name from the register. It is also provided under the amended Act among others for the practitioners to be referred for medical treatment if required, or be subjected for educational courses or programme which may be specified by the Council,
- b. Direct the Disciplinary Board to reconvene the meeting and inquire further into the complaints or information
- c. Direct that a new Disciplinary Board to be constitute and conduct an inquiry
- d. Direct the charge to be dismissed if the Council finds that no case has been made against the practitioner
- e. Reject the decision of the disciplinary Board and makes it decision, or
- f. Give such other direction as the Council thinks fit.

The Act provided for the practitioners aggrieved by the Council decision to appeal to the High Court within one month.

#### **2.1.2.f Power of the Minister**

The powers granted to the Minister under the Medical act 2012 amongst others are:

- a. Appointment of the appointed Council members
- b. To issue general instruction to the Council not inconsistent to the provision of the Act
- c. To add or to delete any universities from the list in the Second Schedule after Consulting the Council
- d. To approve to registration of medical practitioners whose qualification is not listed in the Second Schedule but subjected to condition and restriction after consulting the Council
- e. To consider any appeal for the reinstatement of names of those deregistered practitioners, the decision of Minister shall be final.

- f. To consider appeal by the aggrieved practitioners against imposition of interim orders (Section 29a), the decision of Minister is final.

#### **2.1.2.g Saving and Transitional Provisions**

Not to disrupt the running of the Council, it was provided under Section 42 of the Medical (Amendment) Act 2012 for the Council to decide on the process of transition, either to let existing Council members to complete their terms of office, or to revoke or to be replaced in phases. The existing proceeding before the Preliminary Investigation Committee or the Council shall continue to be dealt with as per the principal Act, and all the new cases after the enforcement of the Act will be dealt with as per Amended Act/Regulation.

#### **2.1.3 MALAYSIAN UROLOGICAL ASSOCIATION (MUA)**

The Malaysian Urological Association was registered on July 23, 1974 with Dr Sreenevasan as the founder President and Dr. David Chelvanayagam as its first secretary. In fact, when the MUA was set up, there were only four urologists in the country, the others being Dr Hussein and Dr. Proehoeman.

Under the MUA constitution, the aims and objectives of the Association are:

- a. To advance the art and science of Urology.
- b. To cultivate and maintain the highest principles of urological practice and ethics.
- c. To promote and encourage the development and practice of Urology in the country.
- d. To encourage postgraduate training in Urology at the hospitals and elsewhere and to provide for the holding of classes, lectures and meetings and other means of instructing members and others in the science and art of Urology.
- e. To promote research in Urology and in any other related branch of science or learning for the purpose of improving the practice of Urology.

- f. To establish cordial relationships with similar Urological and other bodies in other countries.

#### **2.1.4 MALAYSIAN BOARD OF UROLOGY (MBU)**

The Board of Urology will be the sole provider of Urology training Malaysia.

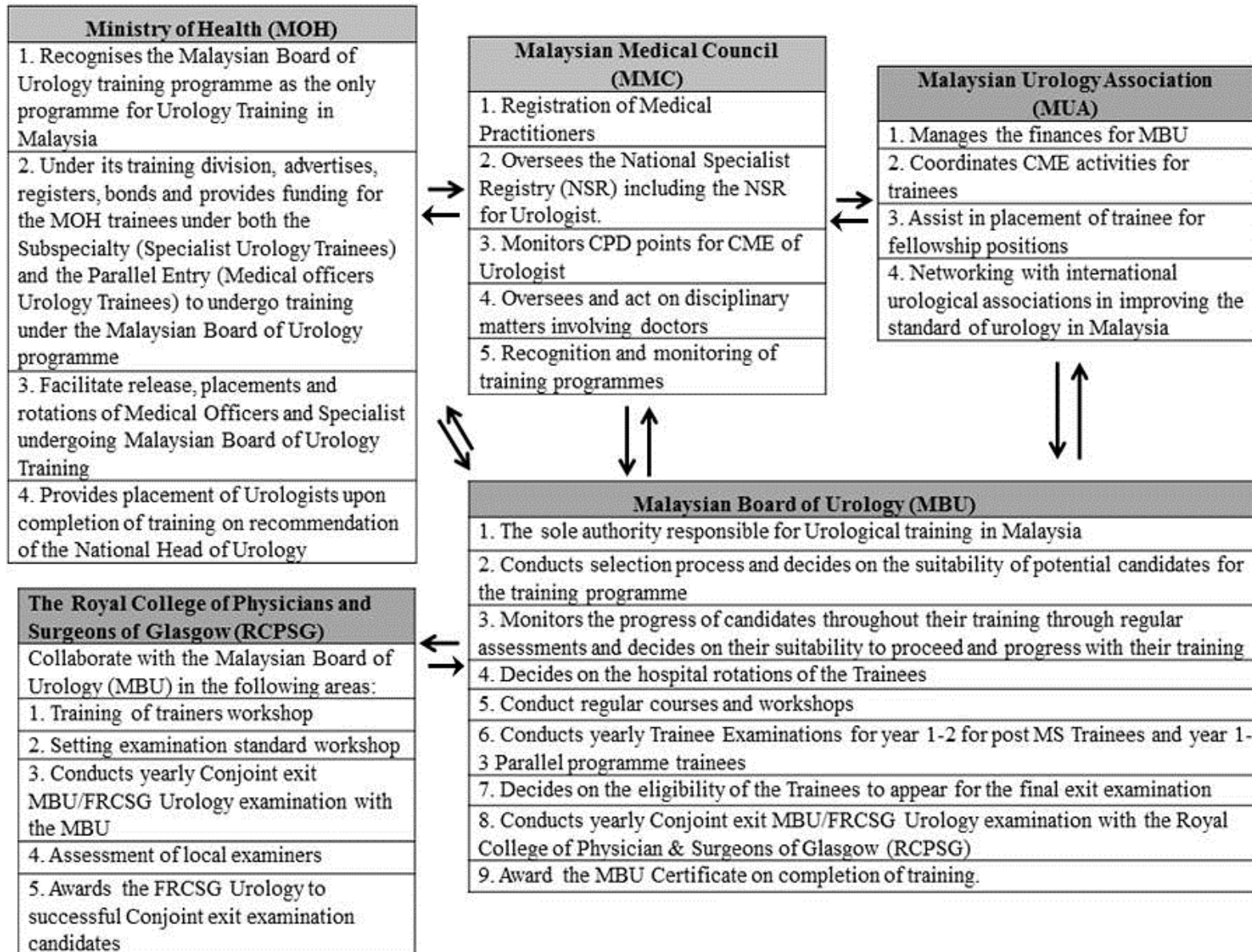
This subcommittee is set up by the Malaysian Urological Association for the purpose of establishing and maintaining the standard of urological training in Malaysia. In 2005, recognition was accorded by the Ministry of Health, Malaysia to the Malaysian Board of Urology as the sole body in conducting and regulating the Malaysian urology training programme. The Board shall carry out assessment of training by regular inspections, interview with the trainers and trainees and shall have power to award or remove accreditation of urological units/departments as training centres from time to time.

The board will recommend to the association upon completion of training and assessment whether an associate member be admitted to full membership. Members on the MUA Board of Urology, who shall be full members of MUA, shall include:

- a. Head of Department of Urology, Hospital Kuala Lumpur
- b. A second consultant from the Department of Urology, Hospital Kuala Lumpur
- c. Head of Department of Urology, Hospital Selayang, Johor Baru, Penang, Kuching, Kota Kinabalu
- d. Head of Department of Urology, Pusat Perubatan Universiti Malaya.
- e. Head of Department of Urology, Hospital Universiti Kebangsaan Malaysia
- f. Head of Department of Urology, Hospital Universiti Sains Malaysia
- g. Head of Urology in any training centres not included in above; and
- h. Two Urologists in private practice, elected at AGM of Malaysian Urological Association, 3-year term, non-consecutive

The national adviser of the urology service in the Ministry of Health of Malaysia shall be the chairman for the MUA Board of Urology.

## Organization Chart and Roles of Stakeholders



## **2.2 POLICY**

### **2.2.1 Intake into Training Programme**

The candidate will be accepted into the Malaysian Urology training based on two modes of entry depending on the criteria met by the candidate:

Specialist Entry (Candidate has a recognized Surgical based qualification ie. Masters of Surgery, FRCS)

Parallel Entry (Candidate is a Medical officer having fulfilled the set criteria)

#### **2.2.1.a Specialist Entry**

Candidates who have completed the Masters of Surgery from recognized Universities in Malaysia are eligible to apply to enter the Urology training programme having fulfilled the following criteria:

- Obtained permission and release from the Ministry of Health or other relevant bodies as required.
- Have no pending medico legal or recorded disciplinary actions.
- Two recommendation letters from previous supervisors.

Candidates with surgical qualifications other than that obtained in Malaysia will need to write in to the Board of Urology. Members of the Board will then decide if the candidate is eligible for the training programme. Each applicant will be evaluated for entry on individual merit.

Candidates deemed eligible for training will be called for an interview and assessment with the Board of Urology. The decision made by the Board is final.

### **2.2.1.b Parallel Entry**

The candidate must have fulfilled the following criteria, some of which are mandatory and others optional:

- a. Fully registered with MMC (mandatory)
- b. Completed Housemanship (mandatory)
- c. No previous or pending disciplinary issues (mandatory)
- d. MRCS Part A & B (mandatory)
- e. Compulsory rotation as follows:
  - General surgery (vascular, colorectal, hepatobiliary, endocrine & breast, paediatric surgery) (minimum 12 months)
  - Urology (minimum 6 months)
- f. Optional Rotation (minimum 3 months each, any two rotations)
  - i. Nephrology
  - ii. Radiology
  - iii. Anaesthesia
  - iv. Intensive Care Medicine

Candidate must produce documentation of satisfactory performance of the above postings

- a. Courses to attend (optional but preferred)
  - i. Basic surgical skills
  - ii. Basic / intermediate biostatistics
  - iii. Medical writing course
  - iv. Good clinical practice
  - v. Basic endoscopy/laparoscopy

The candidate, who has met the criteria listed, will then have to complete the Application Form, with the necessary supporting documents as evidence on the candidate's qualification, registration and training.

### **2.2.2 Application process**

Application forms can be obtained from:

- a. Malaysian Urological Association Web Site ([www.mua.my](http://www.mua.my))
- b. Malaysian Urological Association official address

### **2.2.3 Submission of Application forms:**

The eligible candidate may apply by filling up all the pages of application form. The application must be accompanied with attested copies of the following which can be uploaded and given as hard copies:

- a. Copy of Identity Card \*
- b. Passport size recent photograph \*
- c. Reference from 2 referees, referees should have at least 3 months direct Supervision of applicant (*in attached standard MUA format, confidential reference*) (*at least one referee should be a Urologist*) \*
- d. Certified copy of MMC full registration \*
- e. Certified Copy of Basic Medical Qualification \*
- f. Certified copy of MRCS \*
- g. Log Book \*
- h. Certificates of relevant courses attended \*
- i. Any article published by candidate, preferably peer review journals

*\* Required for complete application*

Shortlisted applicants will have to undergo an entrance examination and interview before the final selection is made. Successful applicants will be notified within 2

weeks after interview and the applicants will be required to indicate their acceptance within 2 weeks.

### **2.3 TERMINATION CRITERIA**

The trainee may only withdraw from the program with the consent and approval of the Malaysian Board of Urology. MOH trainees will also need to inform MOH

The trainee may be terminated or discontinued from the programme if

- a. The performance of the trainee is consistently poor based on the set assessment tools used by the Board of Urology.
- b. Disciplinary action has been instituted against the Trainee by the Ministry of
- c. Health, Malaysia, Malaysian Medical Council or other regulatory bodies
- d. The Trainee has been convicted of a criminal charge or medical malpractice.
- e. The trainee has failed to comply with and/or has breached any term of the
- f. Contract between the Trainee and the Ministry of Health or other employing authority.
- g. The trainee who is deemed medically unfit and is unable to satisfactorily proceed with the program and/or complete the program.
- h. Candidate fails to complete the training programme within 7 years unless there are legitimate reasons for delay as approved by the Board of Urology

2.3.1 The process of termination will be initiated by the Chairman of the Board, and the final decision will be made by the Board.

2.3.2 The candidate may apply for review of the decision within 2 weeks with supporting evidence. The Board will deliberate on the matter however the decision of the Board is final.



## **SECTION 3:**

# **KEY CHARACTERISTIC OF SPECIALITY TRAINING**

### **3.1 KEY CHARACTERISTICS OF SPECIALITY TRAINING**

#### **3.1.1 Standards**

3.1.1.a Standards have been set by the Malaysian Board of Urology relating to all aspects of specialty training, including curricula, delivery of training, assessment and entry into speciality training. These standards shall comply with the Malaysian Medical Council requirements.

3.1.1.b Curriculum describes outcomes in terms of achieved competences, knowledge, skills, attitude and time-served. There is a complex relationship between outcomes, performance and experience.

#### **3.1.2 Structure**

3.1.2.a The structure of the training programme is based on the curriculum as approved by the MMC. The Malaysian Board of Urology conducts the training programme. The training centres and the trainers are decided based on the approved curriculum. All training centres and the trainers have to be approved by the Board of Urology Malaysia. The board will appoint a training coordinator for each centre with more than two clinical supervisors. The number of trainees and the duration of training in each centre will be decided by the board. Each trainee will have named supervisor when attached to a training centre.

3.1.2.b The duration of training is 4 years. Each candidate must meet the entry criteria and undergo the structured entry assessment. There will be continuous evaluation both formative and summative. Progression in the training is dependent on the performance in both these assessments. Progression is not time but competency based.

3.1.2.c Candidates in the programme will be called Urology Trainee (UT 1- 4)

Completion of the training requires the achievement of minimum standards required for progression for each level which leads to Malaysian Board of Urology (MBU) certification, which qualifies the trainee for entry to the National Specialist Register held by the MMC. This is subject to the successful attainment of required competencies.

## **3.2 BOARD OF UROLOGY MALAYSIA STANDARDS FOR CURRICULA AND ASSESSMENT SYSTEMS**

### **3.2.1 Design**

Standard 1: The purpose of the curriculum must be stated, including linkages to previous and subsequent stages of the trainees' training and education. The appropriateness of the stated curriculum to the stage of learning and to the specialty in question must be described.

Standard 2: The overall purpose of the assessment system must be documented and in the public domain.

### **3.2.2 Content**

Standard 3: The curriculum must set out the general, professional, and specialty specific content to be mastered, including; the acquisition of knowledge, skills, and attitudes demonstrated through behaviours, and expertise.

Standard 4: The recommendations on the sequencing of learning and experience should be provided, if appropriate; and the general professional content should include a statement about how 'Good Medical Practice' is to be addressed.

Standard 5: Assessments must systematically sample the entire content, appropriate to the stage of training, with reference to the common and important clinical problems that the trainee will encounter in the workplace and to the wider base of knowledge, skills and attitudes demonstrated through behaviours that doctors require.

### **3.2.3 Delivery**

Standard 6: The curriculum will be managed and assured within local standards

Standard 7: Recommended teaching/learning experiences in Malaysia should include the following, practical training with guidance; participation in advanced urology courses by the Malaysian Urological Association; individual study and specific trainer/supervisor inputs.

Standard 8: The assessment methods should be in line to the content and purpose of the curriculum.

### **3.2.4 Outcomes**

Standard 9: Methods for supervision of the trainee should be defined.

Standard 10: Trainers/examiners will be appointed based on the predefined criteria

Standard 11: Relevant feedback should be provided to the trainees.

Standard 12: Result of the assessments is documented.

**SECTION 4:**

**SETTING STANDARD**

#### **4.1 SETTING STANDARDS**

Structured postgraduate medical training is dependent on having curricula, which clearly sets out the standards and competences of practice, an assessment strategy to know whether those standards have been achieved and an infrastructure which supports a training environment within the context of service delivery in the MOH and university hospitals. Supervised training is a core responsibility to ensure both patient safety and the development of a competent urologist.

#### **4.2 ENTRY CRITERIA**

Applicants will have to undergo a selection process as required by the board. This selection process includes an entry examination, viva and oral interview by the Board of Urology. Selected applicants will then be required to undergo a probation period stipulated by the Board at a selected urology unit.

- The applicants must satisfy a probation period of a minimum of 6 months (Parallel Entry) and a minimum of 3 months (Specialist Entry) before the Board formally accepts the applicants into the training programme.
- Entry into specialty training is through competitive entry.

#### **4.3 ASSESSMENTS**

Assessment is a formally defined process within the curriculum in which a trainee's progress in the training programme is assessed and measured using a range of defined and validated assessment tools, along with professional judgment about the trainee's rate of progress. It results in an *Outcome* following evaluation of the written evidence of progress and is essential if the trainee is to progress and to confirm that the required competences are being achieved.

Assessment strategies for specialty training must not deliver just "snapshots" of skills and competences, but must deliver a program of assessment which looks at the sustainability of competences and the clinical and professional performance of trainees in everyday practice.

### 4.3.1 Formative Assessments

Formative assessments are used to monitor a trainee's progress to provide ongoing feedback that can be used by trainers to improve training and trainees to improve learning.

- i. Workplace-Based Assessments (WBAs)
  - The emphasis on workplace based assessments (WBAs) aims to address this through assessing performance and demonstration of the standards and competences in clinical practice. It means that trainers and trainees must ensure that appropriate opportunities are provided to enable this to happen effectively.
  - Trainees gain competences at different rates, depending on their own abilities, their determination, and their exposure to situations, which enable them to develop the required competences. It is imperative that these processes are explicit and not secretive. Both the trainer and trainee must agree to conduct the assessment. The trainee may request for the assessment.
  - The expected rate of progress in acquisition of the required competences is defined clearly by the curriculum, as to what is considered to be acceptable progress. This will enable reasonable limits for remediation to be set so that trainees are aware of the boundaries within which remediation can and will be offered.
  - A total of 20 WBAs is required at every year of training. The types of cases or procedures to be assessed are determined by the requirements of the curriculum. Set numbers to be completed at each quarter will be determined by the Board of Urology. It is important to comply with the requirement, as this will be reviewed at Board Assessment. WBAs may comprise of combination of any of the following:
    - Direct Observation of Procedural Skills (DOPs)
    - Procedure-Based Assessment (PBA)
    - Case-Based Discussion (CBD)

- Mini Clinical Evaluation Exercises (Mini CEX)

ii. Logbook

Trainees are required to maintain a logbook throughout the period of their training. The logbook must be recorded in the format stipulated by the Board. Any falsifying or inaccurate entry is considered as serious misconduct.

- The minimum number of index operations to be done at any level will be determined by the Board. The trainee must review his or her logbook with the clinical supervisor(s) every quarterly. This is to ensure that deficiencies are identified and rectified early.
- At every level of training the trainee will be required to audit the outcome of cases that they have performed. The type of operations to be audited will be index procedures determined by the Board.
- A logbook summary report must be generated and submitted by a communicated date before Board Assessments. This summary report must be signed by the clinical supervisor to verify the accuracy of entries. Failure to submit on time may result in non-accreditation of this training period.

During their appraisal discussion trainees must be able to discuss their worries/mistakes without fear that they will be penalized. Patient safety issues should usually be identified by clinical incident reporting or audit assessment

If despite genuine and reasonable attempts by the trainee, there are logistic difficulties in providing WBAs or adequate case mix of operations for the trainee, the clinical supervisor must raise this issue with the board to facilitate appropriate arrangements within the timescales required by the assessment process.

#### **4.3.2 Summative Assessments**

i. Examinations

Compulsory examinations include the following:

- EBU in-service Examination



A minimum mark of more than the worldwide median is one of the requirements before a final year candidate is allowed to sit for the exit examination.

- End of Year Examination

This examination is applicable to all trainees except for those who are appearing for the final exit examination.

- Exit Examination

A final year trainee must fulfil all board requirements including a favourable assessment in order to be eligible for the exit examination.

## ii. Research and Publication Requirements

- Publication of at least 1 paper as first author in a peer-reviewed journal
- Annual presentation of paper/video as at national meeting.
- A minimum of 4 clinical audits and 1 prospective study must be completed in the 4-year period.

Case reports will not be accepted as papers published or presented. Presentation at international meetings is strongly encouraged.

## **4.4 BOARD ASSESSMENT AND OUTCOMES**

The competence points, which allow the trainees to be benchmarked, are Board Assessments. Members of the board convene two times a year for this meeting. A professional evaluation of the trainee by the clinical supervisor must be submitted to the board before each meeting. At the Board meeting this evaluation together with the entire trainee portfolio is will be taken into consideration.

The 3 key elements in this process are assessment, appraisal, and planning. The appraisal process is the principle mechanism whereby there is an opportunity to identify concerns about progress as early as possible. It is a mechanism for reviewing progress at a time when remedial action can be taken quickly e.g. provide additional

learning opportunities to the trainee to correct deficiencies or modification to the learning agreement or modification of the training period. It is recognised that trainees may gain competences at different rates for a number of reasons; trainees will be able to have additional aggregated training time of normally of up to **one year**.

The Board Assessment is a summative process, which scrutinizes each trainee's suitability to progress, and at the conclusion, the following outcomes should be recorded and recommendations made.

- **Satisfactory progress.** This means that the trainee has established that they have acquired and demonstrated the competencies expected of a trainee undertaking a placement of this type and duration at the level specified.
- **Unsatisfactory progress - additional training time not required.** The trainee's progress has been acceptable overall; however, there are some competences not fully achieved, which the trainee needs to develop either before the end of their current placement or in a further post to achieve the full competences for this year of training. The rate of overall progress is not expected to be delayed, nor the prospective date for completion of training extended. This outcome usually involves closer than normal monitoring, supervision and feedback on progress to ensure that the specific competences that have been identified for further development are obtained.
- **Unsatisfactory progress – additional time required.** The trainee has not made adequate progress for this period of Training and will be required to repeat this period of training. Trainees in UT1-3 (parallel pathway) and UT 1-2 (Masters entry) with this outcome may not be permitted to progress to the next level. For UT 4 (parallel pathway) and UT 3 (Masters entry), the outcomes may determine their eligibility for the final exit examination.
- **Incomplete Evidence Presented.** The panel can make no statement about progress or otherwise since the trainee has supplied either no information or incomplete information to the Board. The trainee will have to supply the panel with a written account within five working days of the panel meeting as to why documentation was not provided for the panel. However, the panel does not have

to accept the explanation given by the trainee and can require the trainee to submit the required documentation by a designated date. The panel will then consider this evidence. Failure to do so will mean that the period of training cannot be counted.

If the trainee fails to comply with the planned additional training, he/she may be asked to leave the training programme. The board may also recommend that a trainee who has 2 consecutive or 3 non-consecutive unfavourable assessments be terminated from urology training.

Whilst the Board must recommend the outcome for an individual trainee on the basis of the submitted evidence it must also take into account any mitigating factors on the trainee's part such as ill health or domestic circumstances. It should also consider aspects within the training environment such as changing circumstances or the supervision available in determining its specific recommendations with respect to the additional time, which may be required. Whilst these factors should be taken into account in planning future training for the individual trainee, they in and of themselves should not change the outcome arrived at based on the available evidence received by the panel.

The trainee will have the opportunity to discuss this outcome with the panel and to see all the documents on which the decision about the outcome was based. If the trainee disagrees with the decision they have a right to ask for a review.

#### **4.5 REVIEW OF BOARD DECISION**

A review is a process where an individual or a group who originally made a decision returns to it to reconsider whether it was appropriate. They must take into account the representations of the person asking for the review and any other relevant information, including additional relevant evidence, whether it formed part of the original considerations or has been freshly submitted.

- Requests for a review must be made in writing to the chair of the Board within ten working days of being notified of the Board's decision. The chair may then arrange a further interview for the trainee (as far as practicable with all the parties of the Board).
- Trainees may provide additional evidence at this stage.
- The decision of the board at the review is final.

#### **4.6 EXIT CRITERIA**

A trainee may be asked to leave the training programme because of any the following:

- Unsatisfactory outcome in 2 consecutive or 3 non-consecutive assessments. Candidates must receive a written notification after first unsatisfactory assessment.
- Failure to complete program in 7 years.
- Failure to pay outstanding training related fees.
- Failure to satisfy medical registration (APC) and failure to sustain the position as a trainee.

#### **4.7 TRAINING SYSTEM**

##### **4.7.1 Clinical Supervision**

- The responsibility for the quality management of the training programme rests with the Training Coordinator of any centre who is accountable to the Malaysian Board of Urology. In a centre where there is only one consultant who is also the clinical supervisor, he or she may also be the training coordinator.
- All consultants in a training centre are clinical supervisors. All trainees must have formally appointed clinical supervisors directly responsible for their training. There should be a ratio of at least 1 clinical supervisor to 2 trainees.

- A clinical supervisor is a trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work, assessment and providing constructive feedback during a training placement.
- The clinical supervisor is responsible for the structured outcomes report and for undertaking work based assessments. The structured report must be discussed with the trainee prior to submission. The discussion must be evidence based, timely, open and honest.
- Clinical supervisors should demonstrate their competence in educational appraisal and assessment methods

#### **4.7.2 Training Programme**

An accredited centre conducting the training programme must be able to provide the following to a trainee during the duration of their training.

- Quality indicators (QI) - The Board of Urology will develop quality indicators to assess the quality of training in accredited centres. This will help identify areas that need improvement to ensure that the trainee receives adequate training.
- The centre should provide the minimum number of operating theatre and specialist clinic sessions a week to provide the opportunities to perform a range of operations of appropriate case mix and case load for the level of trainee. Operative briefings must be done in accordance with a WHO checklist.
- It is preferable that the centre provides a trainee at least 2 hours of facilitated formal teaching per week. There should also preferably one multidisciplinary meeting or equivalent per week.
- Where possible, a trainee should have a half-day per week for self-learning activities. This includes library sessions. The training centre must have adequate IT access. Simulation training whenever available is encouraged.

**SECTION 5:**  
**THE STRUCTURE OF TRAINING –**  
**SYLLABUS INCLUDED**

## **5.1 STRUCTURE OF TRAINING AND SYLLABUS**

### **5.1.1 Structure of Training**

Essential professional activities:

#### **5.1.1.a At entry**

- Able to take a focused history of urological patients
- Able to do a focused physical examinations
- To be able to formulate a working diagnosis and differential diagnoses
- Order the necessary investigations
- Has completed Basic Suturing Skills workshop
- Basic life support
- Able to perform the following procedures:
  - i. Insertion of urinary catheter
  - ii. Insertion of suprapubic catheter
  - iii. Do a bladder washout in a patient with gross haematuria
  - iv. Open and close surgical wound
  - v. Manage a patient with testicular torsion
  - vi. Perioperative management of a patient
  - vii. Able to perform cystoscopy

#### **5.1.1.b UT 1**

- Early management of urological patients
- Enhance the skills from the basic surgical training
- Able to deal with acute and emergency patients – trauma, infections, obstructive uropathy, acute urinary retention and gross haematuria
- Able to perform the following procedures:
  - i. Cystoscopy – rigid and flexible – 100 cases \*
  - ii. Ureteroscopy - 30 cases \*
  - iii. Insertion of JJ stent - 50 cases \*

- iv. TRUS guided prostate biopsy - 50 cases \*
- v. ESWL if facilities available
- vi. Surgery for torsion of testes
- vii. Orchidectomy – scrotal and inguinal
- viii. Hydrocele surgery
- ix. Circumcision
- x. Ultrasound Urinary Tract

Progression:

- To complete all the work based assessment satisfactorily
- Summative assessment is clinical case scenario in an oral examination
- Annual review

#### **5.1.1.c UT 2**

- Able to manage selected elective patients
- Enhance the management of acute and emergency patients
- Enhance and develop endoscopic skills
- Communicate and counsel patients and relatives with regards to the diagnosis and management
- Able to perform the following additional procedures:
  - i. Diagnostic and therapeutic rigid ureteroscopy
  - ii. Bladder biopsy and TURBT – 10 cases \*
  - iii. TURP – 10 cases \*
  - iv. Optical urethrotomy
  - v. AVF if available
  - vi. PD access if available
  - vii. Vesicolithotomy and Vesicolithotripsy – 5 cases \*
  - viii. Bladder Repair
  - ix. Nephrostomy
  - x. Urodynamics if available



Progression:

- Complete formative assessment satisfactorily
- Summative assessment is clinical case scenario in an oral examination
- Annual review

#### **5.1.1.d UT 3**

- Able to undertake more responsibilities in the management of the patient.
- Able to supervise the junior and the core trainees in some of the procedures
- Able to completely prepare patients for elective operations
- Able to perform the following procedures:
  - i. TURP and related procedures
  - ii. PCNL
  - iii. Nephrectomy – open and lap
  - iv. Ureteric reimplantation

Progression:

- Complete summative assessment satisfactorily
- Summative assessment is clinical case scenario in an oral examination
- Annual review

#### **5.1.1.e UT 4**

- Able to manage all the patients seen the unit confidently and report directly to the consultant
- Able to organise the team smoothly including the rota and educational activities
- Able to perform the following procedures:
  - i. PCNL - 50 cases \*
  - ii. RIRS and Flexible URS if available
  - iii. Nephroureterectomy

- iv. Ileal conduit
- v. Be the primary assistant in the following procedure:
- vi. Radical prostatectomy
- vii. Radical cystectomy
- viii. Renal transplant
- ix. Pyeloplasty
- x. Urethroplasty

#### **5.1.1.f Exit criteria**

- Have successfully completed the training programme as required in each year.
- Completed all the required formative assessment.
- Has gone through each review by the board during the training period.
- Has passed the summative assessment.

## **5.2 SYLLABUS**

### **5.2.1 Foundational Competency**

#### **Non-technical skills**

- Assessment of poly-trauma patient
- Pre-operative risk assessment
- Management of urology patients taking anti-coagulant and anti-platelet medications
- Assessment and management of a deteriorating patient
- Assessment and management of post-operative complications
- Fluid and electrolyte management
- Use of blood products

#### **Technical skills**

- Safely administer appropriate sedation
- Safely administer appropriate local anaesthetic agent

- Safely position patients on the operating table
- Demonstrate sterile technique in the operating room and when conducting bedside procedures
- Safely handle common surgical instruments
- Safely handle tissue/ Safely handle endoscopic instruments
- Competent in selection of suture and needle
- Able to tie secure knots
- Able to assist in the operating theatre environment
- Safely use surgical diathermy
- Safely insert drains
- Accurately close superficial tissue
- Safely handle bladder irrigation

## 5.2.2 Urology Modules

Module	Stages	Knowledge syllabus	Skills syllabus
<p><b>1. Urological emergencies</b></p> <p>Learning Objectives:</p> <p>General:</p> <ul style="list-style-type: none"> <li>i. Able to evaluate and manage patients presenting with acute urological conditions.</li> <li>ii. Able to refer the patient for co-existing issues.</li> </ul> <p>Specific</p> <ul style="list-style-type: none"> <li>i. Able to assess and manage a case of ureteric colic.</li> <li>ii. Able to assess and manage a patient with upper or lower urinary tract</li> </ul>	<p>UT1</p>	<ul style="list-style-type: none"> <li>• Demonstrate understanding of basic sciences in relation to common urological emergencies that includes the relevant anatomy, patho-physiology, pharmacological and radiological basis.</li> <li>• Demonstrate knowledge in principles of management of common urological emergencies.</li> <li>• Able to manage the patient at presentation in terms of stabilization, commencement of treatment and relevant referrals.</li> </ul>	<ul style="list-style-type: none"> <li>• Able to demonstrate competency in assessment and planning the relevant investigation and initial treatment.</li> <li>• Able to demonstrate adequate resuscitative skills.</li> <li>• Able to perform relevant procedures like</li> <li>• Demonstrate communication skill in explaining condition and management proposed. <ul style="list-style-type: none"> <li>▪ Able to perform crucial procedures like:</li> </ul> </li> </ul>

<p>infection.</p> <p>iii. Able to assess and manage a male or female patient in urinary retention.</p> <p>iv. Able to assess and manage a patient presenting with haematuria.</p> <p>v. Able to assess and manage patient presenting with acute testicular pain.</p> <p>vi. Able to assess and manage patients</p>			<ul style="list-style-type: none"> <li>▪ Urethral catheterization</li> <li>▪ Suprapubic catheterization</li> <li>▪ Orchidopexy</li> <li>▪ Bladder washout</li> <li>▪ Dorsal slit and circumcision</li> <li>▪ Scrotal Debridement</li> </ul>
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<p>presenting with Fournier's gangrene, phimosis, paraphimosis, priapism and penile fracture.</p> <p>vii. Able to assess and manage patients who presents with urogenital trauma.</p>	<p>UT2,3</p>	<p>Ureteric colic</p> <ul style="list-style-type: none"> <li>• Pathophysiology of urinary calculi</li> <li>• Changes in the kidney in response to ureteric obstruction</li> <li>• Clinical features and sequelae of urinary tract calculi</li> <li>• The importance of investigations like U/S and CT scan in establishing the diagnosis</li> <li>• Treatment plan</li> <li>• Complications of urinary tract calculi including urosepsis</li> <li>• Establishment of pain relief</li> <li>• Endoscopic options of ureteric calculi</li> </ul> <p>Upper and lower urinary tract infection</p>	<ul style="list-style-type: none"> <li>• Emergency assessment, investigation and initiation of management plan.</li> <li>• Initiate definitive plan of management</li> <li>• Relevant referral to support units.</li> <li>• Procedural skills: <ul style="list-style-type: none"> <li>○ Percutaneous suprapubic catheterisations</li> <li>○ TURP</li> <li>○ Bladder neck incision</li> <li>○ Cystoscopy and bladder washout</li> <li>○ TURBT</li> <li>○ Surgical exploration for torsions of testis, with fixation</li> <li>○ Surgical management of</li> </ul> </li> </ul>
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		<ul style="list-style-type: none"> <li>• Aetiology and pathophysiology of urinary tract infections and complications</li> <li>• Clinical features of urinary tract infection</li> <li>• Renal function during infection</li> <li>• Basis of antibiotic therapy</li> <li>• Indications for further investigation of urinary tract infection</li> </ul> <p>Acute urinary retention</p> <ul style="list-style-type: none"> <li>• Causes, epidemiology and pathophysiology of acute and chronic urinary retention</li> <li>• Mechanisms of acute and chronic urinary retention</li> <li>• Risk factors and timing of treatment</li> <li>• Treatment options for acute and chronic urinary retention</li> </ul>	<p>scrotal abscess</p> <ul style="list-style-type: none"> <li>○ Surgical management of Fournier's gangrene</li> <li>○ Reduction of paraphimosis</li> <li>○ Dorsal slit</li> <li>○ Circumcision</li> <li>○ Operative management of priapism</li> <li>○ Operative management of penile fracture</li> <li>○ Rigid ureteroscopy and therapeutic management ureteric calculi</li> <li>○ Cystoscopy and insertion JJ stent</li> </ul>
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		<p>Haematuria</p> <ul style="list-style-type: none"><li>• Causes and pathophysiology of haematuria</li><li>• Causes and pathophysiology of disorders of coagulation</li><li>• Tests for disorders of coagulation</li></ul> <p>Acute testicular pain</p> <ul style="list-style-type: none"><li>• Pathophysiology of testicular torsion, epididymo-orchitis and scrotal abscess</li><li>• Clinical features and differential diagnosis</li></ul> <p>Fournier's gangrene, phimosis, paraphimosis, priapism and penile fracture.</p> <ul style="list-style-type: none"><li>• Causes, pathophysiology,</li></ul>	
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		<p>clinical features and management.</p> <p>Urogenital Trauma</p> <ul style="list-style-type: none"> <li>• Pathophysiology, features and management</li> <li>• Resuscitation</li> <li>• Plan of investigation using appropriate tools.</li> <li>• Management</li> </ul>	
	UT4	<ul style="list-style-type: none"> <li>• Principles of management of all urological emergencies including endourological, pharmacological and open surgeries.</li> <li>• Classification, pathophysiology, investigation and management of all urogenital trauma</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate management of all urological emergencies including assessment, investigation and definitive management.</li> <li>• Resuscitation</li> <li>• Referral and liaising with</li> </ul>

			other speciality for management of trauma
<p><b>2. Infection and inflammation</b></p> <p>Learning objectives:</p> <ul style="list-style-type: none"> <li>• Demonstrate understanding of the pathogenesis, natural history and complications of urinary tract infection.</li> <li>• Be able to assess and manage patients presenting with common urinary tract infections.</li> <li>• Be able to assess and manage patients presenting with genital infections</li> </ul>	UT 1	<p>Basic sciences in mechanism of infection, appropriate tests to identify, antibiotics usage and principles</p> <p>Epididymitis</p> <ul style="list-style-type: none"> <li>• Causes, pathophysiology and clinical features</li> <li>• Management</li> </ul> <p>Scrotal abscess</p> <ul style="list-style-type: none"> <li>• Causes, pathophysiology and clinical features</li> <li>• Management</li> </ul>	<ul style="list-style-type: none"> <li>• Rigid and flexible cystoscopy</li> <li>• Cystoscopy and retrograde ureterogram Diagnostic ureteroscopy</li> <li>• Cystoscopy and J-J stent insertion</li> <li>• Surgical management of scrotal abscess</li> </ul>
	UT2, 3	<p>Pyelonephritis</p> <ul style="list-style-type: none"> <li>• Causes, pathophysiology and clinical features</li> </ul>	<ul style="list-style-type: none"> <li>• Cystoscopy and biopsy</li> <li>• Diagnostic ureteroscopy</li> </ul>

		<ul style="list-style-type: none"><li>• Management</li></ul> <p>Renal and perinephric abscess</p> <ul style="list-style-type: none"><li>• Causes, pathophysiology and clinical features</li><li>• Management</li></ul> <p>Genital TB</p> <ul style="list-style-type: none"><li>• Causes, pathophysiology and clinical features</li><li>• Management</li></ul> <p>Prostatitis</p> <ul style="list-style-type: none"><li>• Classification</li><li>• Investigation and diagnosis</li><li>• Progression and complications</li><li>• Management</li></ul> <p>Sexually transmitted disease</p>	
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		<ul style="list-style-type: none"> <li>• Classification</li> <li>• Pathogenesis</li> <li>• Complications</li> <li>• Investigation and diagnosis</li> <li>• Management</li> </ul>	
	UT4	<p>Interstitial cystitis and Chronic pelvic pain syndrome</p> <ul style="list-style-type: none"> <li>• Pathogenesis, progression</li> <li>• Complications</li> <li>• Clinical features</li> <li>• Investigation and diagnosis</li> <li>• Management options</li> </ul> <p>Fournier's gangrene</p> <ul style="list-style-type: none"> <li>• Aetiology</li> <li>• Pathophysiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>	<ul style="list-style-type: none"> <li>• Rigid ureteroscopy and biopsy</li> <li>• Scrotal debridement</li> </ul>

		Retroperitoneal fibrosis <ul style="list-style-type: none"> <li>• Aetiology</li> <li>• Pathophysiology</li> <li>• Clinical features</li> <li>• Management</li> </ul>	
<b>3. Urolithiasis</b> Learning objectives: <ul style="list-style-type: none"> <li>• Able to assess a patient presenting with a urinary stone in kidney, ureter or bladder</li> <li>• Plan an investigative strategy in establishing the diagnosis and complications</li> <li>• Able to plan treatment of a patient presenting with a urinary stone in kidney, ureter or bladder including referring to appropriate units.</li> <li>• Able to perform the procedures required as</li> </ul>	UT 1	<ul style="list-style-type: none"> <li>• Anatomy of urinary tract</li> <li>• Epidemiology of stone disease</li> <li>• Mechanism of stone formation</li> <li>• Impact on renal function</li> <li>• Principles of stone management</li> <li>• Medical/metabolic management of urinary stones</li> <li>• Assess and investigate appropriately</li> </ul>	<ul style="list-style-type: none"> <li>• Rigid cystoscopy and retrograde pyelogram</li> <li>• Rigid cystoscopy and insertion of J-J stent</li> <li>• Flexible cystoscopy and removal of J-J stent</li> <li>• ESWL</li> </ul>
	UT2,3	<ul style="list-style-type: none"> <li>• Principles of management of stone disease.</li> <li>• Complications of stone disease like obstruction and sepsis</li> </ul>	<ul style="list-style-type: none"> <li>• ESWL for renal stone</li> <li>• ESWL for ureteric stone</li> <li>• Rigid ureteroscopy and management of ureteric</li> </ul>

treatment of the urogenital stone.		<ul style="list-style-type: none"> <li>• Surgical management of renal, ureteric and bladder stones</li> <li>• Appropriate investigation and treatment plan of renal, ureteric and bladder calculi</li> <li>• Referral to other units for complications encountered</li> </ul>	<ul style="list-style-type: none"> <li>• calculi</li> <li>• Cystoscopy and insertion J-J stent</li> <li>• Endoscopic fragmentation of bladder calculi</li> <li>• Open extraction of bladder calculi</li> </ul>
	UT4	<ul style="list-style-type: none"> <li>• Emergency management</li> <li>• Follow-up and management of recurrent stone formers</li> <li>• Surgical and medical management of stone disease</li> </ul>	<ul style="list-style-type: none"> <li>• ESWL for renal stone</li> <li>• ESWL for ureteric stone</li> <li>• Rigid ureteroscopy and management of ureteric calculi</li> <li>• Cystoscopy and insertion J-J stent</li> <li>• Endoscopic fragmentation of bladder calculi</li> <li>• Open extraction of bladder</li> </ul>

			<p>calculi</p> <ul style="list-style-type: none"><li>• Introduction to retrograde intrarenal surgery</li><li>• Percutaneous nephrolithotomy</li></ul>
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Module	Stages	Knowledge Syllabus	Skills Syllabus
<b>4. Oncology</b> <b>4.1 Renal Cell Carcinoma (RCC)</b> Learning Objectives: <ul style="list-style-type: none"> <li>To acquire &amp; demonstrate knowledge of RCC on epidemiology, histopathology, staging, clinical presentation &amp; investigation.</li> <li>To demonstrate the ability to manage patients with RCC</li> </ul>	UT1	<ul style="list-style-type: none"> <li>Epidemiology, histopathology, staging.</li> <li>Clinical presentation.</li> <li>Investigation.</li> </ul>	
	UT2, 3	<ul style="list-style-type: none"> <li>Management of localized &amp; locally advanced</li> </ul>	<ul style="list-style-type: none"> <li>Nephrectomy (open &amp; lap)</li> </ul>
	UT4	<ul style="list-style-type: none"> <li>Management of metastatic RCC</li> <li>Follow up for patients with RCC</li> </ul>	<ul style="list-style-type: none"> <li>Nephrectomy &amp; Partial Nephrectomy</li> </ul>
<b>4.2 Upper tract Urothelial Carcinoma (UTUC)</b> Learning Objectives: <ul style="list-style-type: none"> <li>To acquire &amp; demonstrate knowledge of UTUC on epidemiology, histopathology, staging, clinical presentation &amp; investigation.</li> <li>To demonstrate the ability to manage patients with</li> </ul>	UT1	<ul style="list-style-type: none"> <li>Epidemiology, histopathology, staging.</li> <li>Clinical presentation.</li> <li>Investigation.</li> </ul>	<ul style="list-style-type: none"> <li>Cystoscopy</li> <li>Retrograde pyelography</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>Management of localized &amp; locally advanced UTUC</li> </ul>	<ul style="list-style-type: none"> <li>Diagnostic Ureteroscopy</li> </ul>





<b>4.4 Prostate Carcinoma (PCa)</b> Learning Objectives: <ul style="list-style-type: none"> <li>• To demonstrate knowledge in dealing with patients with raised PSA</li> <li>• To acquire &amp; demonstrate knowledge of PCa on epidemiology, histopathology, staging, clinical presentation &amp; investigation.</li> <li>• To demonstrate the ability to manage patients with localized, locally advanced, metastatic &amp; castrate resistant PCa</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Epidemiology, histopathology, staging.</li> <li>• Clinical presentation.</li> <li>• Investigation.</li> <li>• Concept of screening of PCa.</li> </ul>	<ul style="list-style-type: none"> <li>• TRUS biopsy</li> <li>• Orchiectomy</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Management of localized and metastatic PCa</li> </ul>	<ul style="list-style-type: none"> <li>• Channel TURP</li> </ul>
	UT4	<ul style="list-style-type: none"> <li>• Management of locally advanced PCa &amp; CRPC</li> <li>• Follow up for patients with PCa</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Radical prostatectomy (to assist)</li> </ul>
<b>4.5 Testicular cancers</b> Learning Objectives: <ul style="list-style-type: none"> <li>• To acquire &amp; demonstrate knowledge of testicular</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Epidemiology, histopathology, staging.</li> <li>• Clinical presentation.</li> </ul>	<ul style="list-style-type: none"> <li>• Inguinal orchidectomy</li> </ul>

<p>cancer on epidemiology, histopathology, staging, clinical presentation &amp; investigation.</p> <ul style="list-style-type: none"> <li>To demonstrate the ability to manage patients with organ confined, advanced/metastatic testicular cancer</li> </ul>		<ul style="list-style-type: none"> <li>Investigation.</li> </ul>	
	UT2, 3	<ul style="list-style-type: none"> <li>Management of organ confined testicular cancer</li> </ul>	
	UT4	<ul style="list-style-type: none"> <li>Management of advanced &amp; metastatic testicular cancer</li> <li>Follow up for patients with testicular cancer</li> </ul>	<ul style="list-style-type: none"> <li>Retroperitoneal lymph node dissection (to assist)</li> </ul>
<p><b>4.6 Penile carcinoma</b></p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> <li>To acquire &amp; demonstrate knowledge of penile cancer on epidemiology, histopathology, staging, clinical presentation &amp; investigation.</li> <li>To demonstrate the ability to manage the primary tumour and lymph nodes in patients with penile cancer</li> </ul>	UT1	<ul style="list-style-type: none"> <li>Epidemiology, histopathology, staging.</li> <li>Clinical presentation.</li> <li>Investigation.</li> </ul>	<ul style="list-style-type: none"> <li>Biopsy of penile lesion</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>Management of the primary tumour in penile cancer</li> </ul>	<ul style="list-style-type: none"> <li>Total &amp; partial penectomy</li> </ul>
	UT4	<ul style="list-style-type: none"> <li>Management of lymph nodes &amp; advanced penile cancer</li> <li>Follow up for patients with penile cancer</li> </ul>	<ul style="list-style-type: none"> <li>Inguinal lymph node dissection (to assist)</li> </ul>

<p><b>5. Benign Prostate Enlargement</b></p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> <li>• To acquire &amp; demonstrate knowledge on the assessment of LUTS.</li> <li>• To demonstrate knowledge of epidemiology, clinical presentation &amp; investigation of BPE.</li> <li>• To demonstrate the ability to manage BPE with pharmacological&amp; surgical therapies</li> <li>• To demonstrate the ability to manage the complications of BPE</li> <li>• To demonstrate the ability to assess and manage nocturia</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Assessment of patients with lower urinary tract symptoms (LUTS)</li> <li>• Epidemiology, Clinical presentation &amp; investigation of BPE.</li> <li>• Pharmacological therapy of BPE.</li> <li>• Management of complications of BPE.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Diagnostic cystoscopy</li> <li>• Uroflowmetry</li> <li>• Measurement of post void residual (PVR) and intravesical protrusion of the prostate (IPP)</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Surgical therapy of BPE.</li> </ul>	<ul style="list-style-type: none"> <li>• TURP, TUIP</li> <li>• Urodynamics</li> </ul>
	UT4	<ul style="list-style-type: none"> <li>• New techniques in BPE management.</li> <li>• Aetiology, assessment &amp; management of nocturia.</li> </ul>	<ul style="list-style-type: none"> <li>• Laser, stent, open prostatectomy (to assist)</li> </ul>

<p><b>6. Andrology</b></p> <p>Learning objectives:</p> <ul style="list-style-type: none"> <li>• Able to assess and manage a man with male factor infertility including onward referral as relevant</li> <li>• Able to assess and manage a man with erectile dysfunction including onward referral as relevant</li> <li>• Able to assess and manage a man with varicocele, ejaculatory disorders, penile deformity, penile fracture or prolonged erection including onward referral as necessary</li> <li>• Able to assess and counsel a man requesting a vasectomy</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Anatomy and physiology of male reproductive system</li> <li>• Anatomy, physiology and mechanism of erectile dysfunction.</li> <li>• Pharmacotherapy in erectile dysfunction</li> </ul>	<ul style="list-style-type: none"> <li>• Adult Circumcision</li> <li>• Hydrocele repair</li> <li>• Epididymal cyst excision</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Assessment and investigation of erectile dysfunction</li> <li>• Anatomy, physiology and management of ejaculatory disorder</li> <li>• Anatomy, physiology and management of varicocele</li> <li>• Anatomy, physiology and management of prolonged erection</li> </ul>	<ul style="list-style-type: none"> <li>• Operative management of priapism (desirable)</li> <li>• Operative management of varicocele (desirable)</li> </ul>

	UT4	<ul style="list-style-type: none"> <li>• Causes, assessment, investigation of male factor infertility including assisted fertilisation</li> <li>• Assessment, investigation and management of penile cancer</li> <li>• Anatomy, physiology and management of penile deformity and penile fracture.</li> <li>• Male contraception</li> </ul>	<ul style="list-style-type: none"> <li>• Operative management of penile cancer</li> <li>• Vasectomy (desirable)</li> </ul>
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<b>7. Neuro-Urology</b> Learning Objectives: <ul style="list-style-type: none"> <li>• To acquire &amp; demonstrate knowledge on the aetiology, clinical presentation, assessment and investigations of neurogenic bladder</li> <li>• To demonstrate the ability to interpret investigation results related to neurogenic</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Aetiology, clinical presentation, assessment &amp; investigation of neurogenic bladder (e.g. spinal injury, spinal bifida, neurological disorders etc)</li> </ul>	<ul style="list-style-type: none"> <li>• Bladder catheterization</li> <li>• Intermittent self-catheterization (CISC)</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Interpretation of investigations,</li> </ul>	<ul style="list-style-type: none"> <li>• Urodynamics</li> </ul>

bladder		including urodynamics	
<ul style="list-style-type: none"> <li>To demonstrate the ability to management neurogenic bladder and its complications</li> </ul>	UT4	<ul style="list-style-type: none"> <li>Management of neurogenic bladder and its related complications</li> </ul>	<ul style="list-style-type: none"> <li>Botox injection in bladder (desirable)</li> <li>Bladder augmentation (desirable)</li> </ul>

Female urology includes evaluation and management of stress urinary incontinence, urgency urinary incontinence, urinary tract infection, interstitial cystitis and pelvic organ prolapse among women.

Module	Stage	Knowledge Syllabus	Skills Syllabus
<b>8. Female Urology</b> <ul style="list-style-type: none"> <li>• Able to evaluate and manage a women with lower urinary tract dysfunction</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Physiology and neurophysiology of voiding and continence</li> <li>• Physiology of female reproduction</li> <li>• Understand normal female sexuality</li> <li>• Physiology of female aging</li> <li>• Pharmacology of common drugs management of lower urinary tract dysfunction</li> <li>• Pharmacology of hormone replacement therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Interpretation of bladder diary</li> <li>• Cystoscopy and biopsy</li> <li>• Clinical assessment techniques according to ICS standards</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Evaluation and management of urinary tract infections in women</li> <li>• Evaluation and management of patient with interstitial cystitis</li> </ul>	<ul style="list-style-type: none"> <li>• Urodynamic study</li> <li>• Cystoscopy and injection of urethral bulking agent (desirable)</li> <li>• Excision of a caruncle (desirable)</li> </ul>



		<ul style="list-style-type: none"> <li>• Pathophysiology of interstitial cystitis</li> <li>• Pathophysiology of pelvic organ prolapse</li> </ul>	
	UT4	<ul style="list-style-type: none"> <li>• Evaluation and management of patient with pelvic organ prolapsed</li> <li>• Evaluation and management of a patient with urethral diverticulum</li> <li>• Urethral prolapse</li> </ul>	<ul style="list-style-type: none"> <li>• Cystoscopy and injection of botulinum toxin (desirable)</li> <li>• Surgical insertion of mid-urethral tape (desirable)</li> <li>• Colposuspension (desirable)</li> <li>• Pubourethral slings (desirable)</li> <li>• Martius flap (desirable)</li> </ul>

Reconstructive urology includes evaluation and management of ureteric reconstruction, urinary fistula, urinary diversion and urethral stricture disease.

Module	Stage	Knowledge Syllabus	Skills Syllabus
<b>9. Reconstructive Urology</b> <ul style="list-style-type: none"> <li>• Able to evaluate and manage a patient requiring ureteric reconstruction</li> <li>• Able to evaluate and manage a patient with a urinary tract fistula</li> <li>• Able to evaluate and manage a patient requiring urinary diversion</li> <li>• Able to evaluate and manage a patient with urethral stricture</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Surgical anatomy of the abdomen, pelvic cavity and penis</li> <li>• Physiological effects of bowel interposition in urinary tract reconstruction</li> <li>• Pelvic fracture</li> </ul>	<ul style="list-style-type: none"> <li>• Bowel anastomosis</li> <li>• Omental mobilisation</li> </ul>
	UT2, 3	<ul style="list-style-type: none"> <li>• Urethral stricture disease</li> <li>• Urinary diversions</li> <li>• Urinary tract fistula</li> </ul>	<ul style="list-style-type: none"> <li>• Optical urethrotomy</li> <li>• Ureteric re-implantation</li> <li>• Psoas hitch</li> <li>• Ileal conduit</li> </ul>
	UT4		<ul style="list-style-type: none"> <li>• Continent urinary diversion</li> <li>• Orthotopic bladder reconstruction</li> </ul>

			<ul style="list-style-type: none"><li>• Anastomotic urethroplasty for bulbar stricture</li><li>• Harvesting buccal mucosa graft<ul style="list-style-type: none"><li>○ Urethroplasty with buccal Boari flap</li><li>○ Uretero-ureterostomy</li><li>○ Transuretero-ureterostomy</li><li>○ Ileal ureter</li><li>○ Colo-vesical fistula repair</li><li>○ Vesico-vaginal fistula</li><li>○ Uretero-vaginal fistula</li><li>○ Pelvic fracture urethral reconstruction</li><li>○ Bladder neck closure</li><li>○ Bladder neck reconstruction</li><li>○ Artificial urinary sphincter insertion</li><li>○ (all the above are desirable)</li></ul></li></ul>
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This module includes both general aspects of paediatric urology that a urology trainee should be familiar with, as well subspecialty interest at an advanced level.

Module	Stage	Knowledge Syllabus	Skills Syllabus
<p><b>10. Paediatric Urology</b></p> <ul style="list-style-type: none"> <li>• Able to recognise an acutely ill child</li> <li>• Able to evaluate and manage a child presenting with antenatal / postnatal hydronephrosis</li> <li>• Able to evaluate and manage a child presenting with urinary tract infection</li> <li>• Able to evaluate and manage a child presenting with incontinence</li> <li>• Able to evaluate and manage a child presenting with inguino-</li> </ul>	<p>UT1</p>	<ul style="list-style-type: none"> <li>• Embryologic basis of paediatric urology conditions</li> <li>• Basic genetics of paediatric urology conditions</li> <li>• Pharmacology of common drugs used in paediatric urology</li> <li>• Perioperative aspects of care in a child including similarities and differences from adult surgical patients</li> <li>• Awareness of children's rights and child protection issues</li> <li>• Penis, testis and scrotal conditions               <ul style="list-style-type: none"> <li>○ Hydrocele</li> <li>○ Varicocele</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Able to work in partnership with children and families</li> <li>• Able to consent for procedures</li> <li>• Urethral catheterisation</li> <li>• Suprapubic catheterisation</li> <li>• Cystoscopy</li> <li>• Circumcision</li> </ul>

<p>scrotal conditions</p> <ul style="list-style-type: none"> <li>• Able to evaluate and manage a child presenting with haematuria</li> </ul>		<ul style="list-style-type: none"> <li>○ Undescended testis</li> <li>○ Hypospadias</li> <li>○ Phimosi</li> <li>○ Buried penis</li> <li>• Urachal anomalies</li> <li>• Paediatric emergency urology</li> </ul>	
	UT2, 3	<ul style="list-style-type: none"> <li>• Upper urinary tract conditions <ul style="list-style-type: none"> <li>○ Pelvi-ureteric junction (PUJ) obstruction</li> <li>○ Cystic renal disease</li> <li>○ Duplication anomaly</li> <li>○ Megaureter</li> <li>○ Ureterocele</li> </ul> </li> <li>• Lower urinary tract condition <ul style="list-style-type: none"> <li>○ Vesico-ureteric (VUR) reflux</li> <li>○ Myelomeningocele and neuropathic bladder</li> <li>○ Voiding dysfunction</li> <li>○ Megacystitis</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Insertion of double J stent</li> <li>• Excision of patent urachus</li> <li>• Herniotomy</li> <li>• Inguinal orchidopexy</li> </ul>

		<ul style="list-style-type: none"> <li>○ Posterior urethral valves (PUV)</li> <li>● Paediatric Urolithiasis</li> <li>● Childhood urinary tract cancers</li> </ul>	
	UT4	<ul style="list-style-type: none"> <li>● Bladder exstrophy</li> <li>● Epispadias</li> <li>● Cloacal exstrophy</li> <li>● DSD</li> <li>● Cloacal anomaly</li> <li>● Prune-Belly syndrome</li> </ul>	<ul style="list-style-type: none"> <li>● Revision of circumcision</li> <li>● Correction of buried penis</li> <li>● Urodynamics in children - including assessment of bladder function before renal transplantation</li> <li>● Laparoscopy for undescended testes</li> <li>● Procedures for urinary tract stones</li> <li>● Varicocele surgery</li> <li>● Hypospadias surgery</li> <li>● Hypospadias surgery - with preputial / buccal graft</li> <li>● PUV ablation</li> <li>● Endoscopic sub-ureteric injection of Deflux</li> <li>● Ureteric reimplantation</li> </ul>

			<ul style="list-style-type: none"> <li>• Hemi-nephro-ureterectomy</li> <li>• Pyeloplasty</li> </ul> <p>(all the above are desirable)</p>
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This module covers the basic principles and clinical application of radiological techniques and technologies used in urology practice.

Module	Stage	Knowledge Syllabus	Skills Syllabus
<b>11. Urology Imaging and Technology</b> <ul style="list-style-type: none"> <li>• An understanding of normal radiologic anatomy, basic principles, indications and contraindications, selection and interpretation, limitations and safe use of each diagnostic modality</li> <li>• Evaluation and appropriate management of a patient at risk of</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• X-ray</li> <li>• Fluoroscopic imaging</li> <li>• Ultrasound</li> <li>• Computed tomography (CT) - including CT urography and CT angiography</li> <li>• Magnetic resonance (MR) imaging - including MR urography</li> <li>• Nuclear medicine scans - including</li> </ul>	<ul style="list-style-type: none"> <li>• Abdominal ultrasound including percutaneous nephrostomy</li> <li>• Scrotal ultrasound</li> <li>• Transrectal ultrasound of prostate (TRUS) including biopsy</li> <li>• The following procedures should be performed in collaboration with radiologist</li> <li>• Cystogram</li> </ul>

<p>contrast-induced nephropathy</p> <ul style="list-style-type: none"> <li>• An understanding of basic principles of urological technology</li> </ul>		<p>diuresis renogram and bone scintigraphy</p> <ul style="list-style-type: none"> <li>• Positron emission tomography (PET)</li> <li>• Radiation safety and protection</li> <li>• Contrast agents - contrast-induced nephropathy and contrast anaphylaxis</li> <li>• Disinfection and sterilization techniques</li> <li>• Principles of diathermy and alternative energy sources for surgical haemostasis</li> <li>• Urinary catheters used for bladder drainage and irrigation</li> <li>• Principles and design of urological endoscopes</li> <li>• Ureteric stents, guide wires, catheters and access sheath</li> <li>• Irrigation fluids for transurethral resection</li> </ul>	<ul style="list-style-type: none"> <li>• Urethrogram</li> <li>• Voiding cysto-urethrogram (VCUG)</li> </ul>
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	UT2, 3 and 4	<ul style="list-style-type: none"> <li>• Interventional radiology techniques and its limitations</li> <li>• Principles of laser and its safe use</li> <li>• Principles of laparoscopic surgery</li> <li>• Principles of robotic surgery</li> </ul>	<ul style="list-style-type: none"> <li>• Intra-operative ultrasound</li> </ul>
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Module	Stage	Knowledge Syllabus	Skills Syllabus
<b>12. Nephrology and Renal Transplant</b> <ul style="list-style-type: none"> <li>• Able to evaluate and manage a patient with upper urinary tract obstruction</li> <li>• Able to recognise indications for referral of a patient with urological disease to a nephrologist</li> <li>• Understand basic principles,</li> </ul>	UT1	<ul style="list-style-type: none"> <li>• Surgical anatomy of the retroperitoneum and great vessels</li> <li>• Physiology of renal function, regulation of blood pressure, fluid, electrolyte and acid-base balance</li> <li>• Pathophysiology of obstructive uropathy, acute renal failure and chronic renal failure</li> <li>• Pathophysiology of chronic retention</li> </ul>	<ul style="list-style-type: none"> <li>• Tenckhoff catheter insertion</li> <li>• Tenckhoff catheter removal</li> <li>• Radio-cephalic fistula (RCF)</li> <li>• RCF ligation</li> </ul> <p>(all the above are desirable)</p>

<p>indications, contraindications and selection of methods of renal replacement therapy</p> <ul style="list-style-type: none"> <li>• Able to evaluate a patient referred for dialysis access</li> </ul>		<p>and management of post-obstructive diuresis</p> <ul style="list-style-type: none"> <li>• Criteria for brain stem death and circulatory failure</li> <li>• Pharmacology of drugs used for blood pressure control, drugs used for immunosuppression,</li> <li>• Perfusion fluids and principles of organ preservation</li> </ul>	
	UT2, 3	<ul style="list-style-type: none"> <li>• Principles of haemodialysis</li> <li>• Principles of peritoneal dialysis</li> <li>• Complications of vascular access</li> <li>• Legislation pertaining to organ donation</li> <li>• Principles of organ transplantation</li> </ul>	<ul style="list-style-type: none"> <li>• Tenckhoff catheter insertion laparoscopy</li> <li>• Tenckhoff catheter salvage</li> <li>• Brachio-cephalic fistula (BCF)</li> <li>• Brachio-basilic fistula (BBF)</li> <li>• BBF exteriorization</li> <li>• BCF / BBF ligation of venous limb / primary repair or vein patch repair of brachial artery</li> </ul>

			(all the above are desirable)
	UT4	<ul style="list-style-type: none"> <li>• Principles of transplant immunology</li> <li>• Complications of renal transplantation</li> <li>• Evaluation of potential recipients for renal transplantation</li> </ul>	<ul style="list-style-type: none"> <li>• Revision of aneurysmal dilatation</li> <li>• Thrombectomy</li> <li>• Nephrectomy donor</li> <li>• Nephrectomy donor laparoscopy</li> <li>• Cadaveric kidney procurement</li> <li>• Renal transplantation deceased / living donor</li> </ul> <p>(all the above to observe or assist)</p>

### 5.2.3 Professional Behaviour

The following is based on core competencies outlined by the Accreditation Council for Graduate Medical Education (ACGME).

Competencies	Learning Objectives	Stage	Syllabus
Interpersonal and communication skills	Demonstrate effective information exchange with patients, patients' families and colleagues	UT1	<ul style="list-style-type: none"> <li>• Able to obtain consent for procedures</li> <li>• Understands the process of shared decision-making</li> </ul>
		UT2, 3	<ul style="list-style-type: none"> <li>• Able to respond to information sources accessed by patients</li> <li>• Able to maintain close working relationship with other members of the multidisciplinary team, primary and community care</li> </ul>
		UT4	<ul style="list-style-type: none"> <li>• Able to deal with complex situations of communication including breaking bad news, participating in family conference, making decisions on resuscitation status, withholding or withdrawing treatment and handling angry patients</li> </ul>

Patient care	Provide patient care that is effective, appropriate and compassionate	UT1	<ul style="list-style-type: none"> <li>• Understands patient confidentiality</li> <li>• Understands the role of family and carers in the management of patients with chronic urologic conditions</li> <li>• Recognises the impact of chronic urologic conditions on the patients' family and carers</li> <li>• Understands the quality of life is an important aspect of care and may have different meanings for each patient</li> </ul>
		UT2, 3	<ul style="list-style-type: none"> <li>• Aims for best clinical practice based on evidence based medicine while recognising the occasional need to practise outside clinical guidelines</li> <li>• Demonstrates effective time management and able to prioritise clinical and non-clinical roles</li> </ul>
		UT4	<ul style="list-style-type: none"> <li>• Demonstrates sound clinical judgement</li> <li>• Able to practise within limits of own professional competence</li> <li>• Encourage patient self-care and independence</li> <li>•</li> </ul>

Practice-based learning and improvement	Able to investigate and evaluate own patient care practices, appraise and assimilate scientific evidence and improve own patient care practices	UT1	<ul style="list-style-type: none"> <li>• Understands hierarchy of evidence</li> <li>• Understands research methodology including statistical principles</li> <li>• Participates in morbidity and mortality meetings</li> <li>• Participates in critical incident reporting and root cause analysis</li> </ul>
		UT2, 3	<ul style="list-style-type: none"> <li>• Able to critically appraise scientific publications</li> <li>• Able to complete an audit of clinical practice</li> </ul>
		UT4	<ul style="list-style-type: none"> <li>• Able to complete original study</li> <li>• Demonstrates critical self-awareness</li> </ul>
Professionalism	Demonstrate commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population	UT1	<ul style="list-style-type: none"> <li>• Behaves in accordance to principles of Good Medical Practice outlined by the Malaysian Medical Council</li> <li>• Understands influence of health beliefs, culture and ethnicity and psychological conditions on disease and clinical presentation</li> <li>• Respects patient autonomy</li> </ul>
		UT2, 3	<ul style="list-style-type: none"> <li>• Understands principles of medical ethics</li> <li>• Understands medico-legal basis for daily practice</li> </ul>

		UT4	<ul style="list-style-type: none"> <li>• Remains calm and rational in high-pressure situations</li> </ul>
Systems-based practice	Aware of larger context health care delivery and able to use appropriate system resources to provide optimal care	UT1	<ul style="list-style-type: none"> <li>• Understands safe prescribing</li> <li>• Understands importance of clear documentation and good medical records</li> <li>• Understands principles of screening</li> <li>• Understands principles of infection control</li> <li>• Understands legislations pertaining to notification of disease</li> <li>• Able to follow local protocols and practice guidelines</li> </ul>
		UT2, 3	<ul style="list-style-type: none"> <li>• Understands clinical governance</li> <li>• Understands patient safety issues</li> <li>• Understands issues related to prevention of medical errors</li> </ul>
		UT4	<ul style="list-style-type: none"> <li>• Provides supervision to less experienced colleagues</li> <li>• Able to participate in managerial meetings</li> <li>• Able to take on leadership role as appropriate</li> </ul>

## **5.3 LEARNING OPPORTUNITIES**

### **5.3.1 Workplace Opportunities**

- Self-directed learning with reading list of textbooks and journals
- Job plans with opportunities for supervised learning
- Multi-disciplinary team (MDT) meetings at which teaching occurs

### **5.3.2 Teaching Programme**

#### 5.3.2.a Lecture programmes for formal teaching

- Regular Advanced Urological Courses (AUC)
- Malaysian Urological Conference (MUC)
- Asian School of Urology
- Urological related courses and conferences, e.g. AUSTEG, UAA, EAU, AUA etc.

#### 5.3.2.b List of compulsory courses

- ATLS (Desirable)
- Advanced Urology Courses (AUC) – UT 1 – UT 4
- Laparoscopic Upper Urinary Tract Surgery course (UKM, ASSC) – UT3 and UT4
- Good Clinical Practice (GCP) – UT 1 and UT 2
- Ultrasound Course – UT 1 and UT 2
- Urodynamics Course – UT 1 to UT 4
- Research Methodology – UT 1- UT 2
- Research Weekend – UT 1 – UT 4

### **5.3.3 Online Resources**

- BJUI Knowledge
- SIU website



- EAU website
- AUA website

#### **5.3.4 Simulators**

- Surgical simulators – laparoscopy, endourology – HKL

#### **5.3.5 External Opportunities**

- Training and fellowship opportunities abroad- through established and new networks.

#### **5.3.6 Recommended textbooks:**

- a. Campbell-Walsh Urology
- b. EAU / AUA Guidelines (latest version)
- c. Oxford Handbook of Urology
- d. Smith and Tanagho's General Urology
- e. Glenn's Urologic Surgery
- f. Hinman's Atlas of Urologic Surgery
- g. Smith Endourology
- h. Essential Paediatric Urology

### **5.4 ASSESSMENT TOOLS**

The objectives in developing appropriate assessment tools are to:

- To ensure the trainees acquire adequate knowledge, able to perform specific procedures that has been set out by the board of urology as requirement at every stage of the training programme.
- The knowledge and competence acquired must be of acceptable standards.
- Develop an objective system to provide adequate feedback to the trainees to improve their performance as well as to the trainers so as to address any shortcomings in the training programme.

- A summative assessment at end of each phase of training to consolidate all the knowledge and skill developed used in clinical decision-making, ability to operate safely and highlight their overall achievement in order to be certified for entry into the National Specialist Register.

#### **5.4.1 Components of Assessment**

Workplace Based Assessment (WBA) techniques will be used to assess the core knowledge, capability of making astute clinical decisions and performing procedures. The trainees will also be assessed on their professionalism and attitude.

At the end of each year of training, an examination will be held to determine progress to the next year of training. This will include a review of the trainee's formative assessment performance as well as maintenance of a logbook on all procedures performed.

The WBA will be designed to provide a comprehensive progress report of a trainee in the following manner:

##### **5.4.1.a Assessment of clinical skills, knowledge and professionalism**

This will be a trainee led assessment where the said trainee will select suitable cases and procedures to demonstrate his/her competence to the assessor assigned as supervisor. The number of cases/procedures to be assessed in the year of training is decided prior to commencement of training.

##### **5.4.1.b Feedback to trainers and trainees.**

WBA ensures that adequate feedback is given to both the trainers and the trainees. This is to ensure that the trainee knows what they have done well and also areas that need improvement. These feedbacks must be agreed to by both the trainers and trainees and documented.

#### **5.4.1.c Assessment of progress in training**

The trainee can use these assessment tools that have been used as formative techniques to gauge the improvement in their competence and will provide the basis during the annual review to ensure progress to the next stage of training.

#### **5.4.1.d Evidence of training**

The entire outcome during the formative years will be maintained as an academic portfolio by the trainee to provide documentary evidence during review.

### **5.4.2 Formative Assessment**

#### **5.4.2.a Direct Observation of Procedural Skills**

The trainee will undertake a practical task. This can be wide-ranging from insertion of a urinary catheter to a transrectal ultrasound guided prostate biopsy or flexible cystoscopy. The trainee will fix a time and venue with the assessor. The assessor will observe the skills demonstrated with regards to professionalism in taking consent, preparation of the patient, aseptic techniques used safety, comfort to patient and skill demonstrated. The assessor will score the assessment using a pre-determined marking sheet. Feedback to be given and agreed upon by both trainee and assessor.

#### **5.4.2.b Procedure Based Assessment**

Index procedures for each year of training have been determined. A Year 1 trainee will be expected to be able to perform endo-urology procedures like cystoscopy, TRUS biopsy of prostate, Double-J stenting, CBD and SPC insertion as well as some open procedures like scrotal operations and circumcision. These procedures increase in complexity as they progress to subsequent years. The trainees are responsible to arrange the assessment of their performance of these index procedures. The assessor will score the performance of the trainee using a pre-determined scoring format and provide feedback.

#### **5.4.2.c Clinical Evaluation Exercise**

A mini-clinical evaluation exercise will be used to assess the capability of the trainee to take a proper focussed history, examine the patient, communicate well and show professionalism, make clinical judgement and demonstrate efficiency. The number of cases per year of training will be pre-determined and agreed by the board of urology and the trainee. The assessor will be marking in a scoring sheet and provide appropriate feedback. These sessions should be of 15-20 minutes duration and the trainee will lead the process based on the cases appropriate for the year of training.

#### **5.4.2.d Professional assessment**

A trainee will be assessed by personnel that he/she works with which encompasses a 360<sup>0</sup> assessment. The trainee can nominate 3-5 assessors that comprises of himself, superiors, peers and junior staff members, nursing. Pre-determined assessment tools will be used for this purpose.

#### **5.4.2.e Case based discussion**

The trainee will be expected to select a case that he/ she has been involved in the management. A discussion will be organised based on the case and the assessor will mark the trainee based on knowledge, application of knowledge in management of the patient and planning the overall management for that particular patient. Feedback will be given and agreed upon. Pre-determined marking sheet to be used and the number of sessions per year will be agreed upon by the trainee and the board.

#### **5.4.2.f Logbooks**

The trainee will be expected to maintain a logbook of all the procedures and surgeries performed, assisted or observed. They should also document whether these were performed with or without assistance/ supervision. The format of the logbook (Appendix E) has been determined by the board. The logbook demonstrates the volume of work done by a trainee and helps in the annual review process.

#### **5.4.2.g Academic and Research Portfolio**

The trainee is expected to create an academic and research portfolio which will be updated as they progress in training. This portfolio documents all the formative achievements during training, highlights all the CPD achievements and also research projects that he/she has been involved in.

#### **5.4.3. Summative Assessment**

##### **5.4.3.a EBU in-service examination**

Annual EBU in-service examination will be mandatory for each trainee beginning from UT 1. It is expected that the trainee achieve the minimum score that has been determined by the Board of Urology to progress to the next year of training. The registration for the examination will be assisted by the MUA secretariat.

##### **5.4.3.b End-of-Year examination**

Each candidate will be required to attend the end-of-year summative assessment and an annual review by the Board of Urology. The assessment will be in the format of clinical case based scenarios, which will test the knowledge, clinical acumen and decision-making, ability to describe operations and plan a follow-up for a particular clinical case. A pre-determined marking rubric will be used to score the candidate. Apart from this assessment, an annual review with the Board which will scrutinise the academic and research portfolio to ensure the trainee performance is adequate. The final year candidates will be required to appear for the examination conducted in collaboration with the Royal College of Physicians and Surgeons, Glasgow. The exam format is also clinical case based scenarios as approved by the Royal College and Malaysian Urological Board.

## **SECTION 6:**

# **BECOMING A UROLOGIST**

## **6.1 BECOMING A UROLOGIST**

The trainee who has passed the FRCSG Urology exit examination will then need to meet the criteria as defined in Section 4 and 5 to obtain certificate of completion of training whereby the trainee will receive the Malaysian Board of Urology certification

Upon obtaining the MBU certificate of completion, the specialist will then have to fulfil a 2 year period of providing urology service in Malaysia and fulfilling the minimum standards required by the Board of Urology before becoming eligible for registration with the National Specialist Registry (NSR) as a Urology Specialist.

## **6.2 OBJECTIVES**

- Maturing into a consultant and leader by gaining experience under supervision
- Contribute to advancement of fraternity through research, teaching and training
- Life-long learning

## **6.3 MINIMUM STANDARDS (after obtaining FRCSG (Urol))**

1. Lead at least 1 clinical activity for 1 year or more e.g. multidisciplinary meeting, clinical audit, mortality/morbidity review, hospital or loco-regional CME session.
2. Lead a Special Interest Group (SIG) for at least 1 year

OR

Participate in 2 or more SIGs for at least 1 year

- a. Uro-Oncology
- b. Robotic assisted and minimally invasive surgery
- c. Endourology
- d. Paediatric Urology
- e. Andrology

- f. Reconstructive Urology
  - g. Female Urology
  - h. Functional Urology
  - i. Urological Infections
  - j. Transplant
3. Organize 2 Advanced Urology Course (AUC) in 2 years
- OR
- Participate in 4 or more (AUCs) in 2 years
- OR
- Organize 1 or more AND participate in 2 or more AUCs in 2 years
4. Successfully present (oral/poster \* excluding case report) at 2 scientific meetings within the 2 years leading up to specialist registration (NSR). A formal fellowship period of 6 months or more is highly desirable (a report from the supervisor must be submitted to the Board at the end of the Fellowship)
5. Actively participate in at least 1 YOUTH activity per year e.g. YOUTH session in MUC, UAA or other regional association meetings, viva preparatory course
6. Encourage to attend at least 1 course per year to develop their subspecialty interest

#### **6.4 ASSESSMENT TOOL**

The candidate will be reviewed at the end of the 2 years by Board of Urology prior to NSR registration; necessary documents have to be submitted to the NSR urology committee.



**SECTION 7:**

**APPENDICES**

## **7.1 Appendices of Section 1**

- a. Trainee Feedback Form
- b. Public Private Partnership Document
- c. Application for Position of Urology Trainer
- d. Endorsement by Ministry of Health Malaysia

**TRAINEE FEEDBACK FORM (to be completed at the end of every 6 months)**

*All feedback provided is confidential and helps ascertain the standards of the training centres as well as of the trainers. It will help in improving the training of the future trainees. Please answer truthfully.*

Name: \_\_\_\_\_

Date : \_\_\_\_\_ Year of training: \_\_\_\_\_

Place of training: \_\_\_\_\_

Supervisor/s: \_\_\_\_\_

Please rate the following from 1 to 10 (1 being poor and 5 being excellent):

	1	2	3	4	5
	POOR	BELOW AVERAGE	SATISFACTORY	ABOVE AVERAGE	EXCELLENT
<b>Place of training</b>					
Facilities of the Training Centre					
Case Mix (Variety)					
Case Load (Volume)					
Opportunities to do Cases?					
Working Environment					
Support Staff					
Colleagues					

Supervisor					
Available when needed (OT / consults)					
Helps when required					
Teaches and discusses points / cases					
Easily approachable					
Gives regular constructive feedback					
Encourages research and discussion					
Allows free time when needed					
Is current with the latest updates					

Please provide any additional feedback for the trainer or training centre:

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Do you have any suggestions to improve the training at this centre?

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*Ruj. Tuan* :  
*Ruj. Kami* : KKM.500-5/3/14 JLD.3(27)  
*Tarikh* : 13 November 2017

YBhg. Dato' Dr. Rohan Malek Dato' Dr. Johan Thambu  
Pakar Perunding Kanan dan Ketua Jabatan  
Jabatan Urologi  
Hospital Selayang  
(selaku Ketua Perkhidmatan Surgeri Urologi KKM)

YBhg. Dato',

**MAKLUMBALAS KEMENTERIAN KESIHATAN MALAYSIA BERKENAAN  
DOKUMEN *PUBLIC PRIVATE PARTNERSHIP UROLOGY MALAYSIA* (PPPUM).**

Dengan hormatnya perkara di atas adalah dirujuk serta surat daripada pihak YBhg. Dato' bertarikh 30 Oktober 2017 [Ruj: (82)HS URO/730/08 Jld 9] adalah berkaitan.

2. Bahagian ini ingin merakamkan ucapan tahniah kepada YBhg. Dato' atas pelaksanaan Program Latihan Kepakaran *Parallel Pathway* bagi Surgeri Urologi sejak tahun 2016 dengan kerjasama Lembaga Urologi Malaysia dan *The Royal College of Surgeons of Glasgow*. Bahagian ini juga ingin merakamkan ucapan terima kasih atas dokumen inisiatif *Public Private Partnership Urology Malaysia* yang telah dilampirkan bersama surat yang telah dinyatakan sebelum ini.

3. Untuk makluman YBhg. Dato', Bahagian ini telah pun meneliti dokumen inisiatif tersebut dan berpandangan bahawa tiada halangan dari Bahagian ini untuk inisiatif ini dilancarkan pada 21 November 2017 selagi pelaksanaannya di fasiliti perubatan KKM yang telah dikenalpasti sebagai hospital pengajar untuk Program Latihan Kepakaran *Parallel Pathway* bagi Surgeri Urologi mematuhi peraturan dan pekeliling sedia ada.



CERTIFIED TO ISO 9001:2008  
CERT. NO.: AR 4702



CERTIFIED TO ISO 9001:2008  
CERT. NO.: AR 4702



CERTIFIED TO ISO 9001:2008  
CERT. NO.: AR 4702

4. Bagi usul supaya pakar perubatan bukan kerajaan yang menjadi *trainer* kepada Pegawai Perubatan KKM dalam Program Latihan Kepakaran *Parallel Pathway* (Surgeri Urologi) dan ingin mengadakan sesi pengajaran secara hands-on dengan memberikan rawatan atau menyelia (*supervise*) perawatan pesakit pesakit, Bahagian ini bersetuju dengan cadangan agar pakar perubatan yang berkenaan perlu memohon "credentialing and privileging" daripada hospital yang terlibat, serta juga perlu untuk memenuhi syarat-syarat lain seperti peraturan sedia ada termasuklah:

- 4.1 Mempunyai Sijil Pendaftaran Tahunan yang sah dan mengandungi hospital KKM yang dipilih sebagai tempat amalan tambahan;
- 4.2 Mendapat kelulusan khas daripada Ketua Pengarah Kesihatan untuk mengamal sebagai Pegawai Perubatan Kerajaan berdasarkan Seksyen 34c Akta Perubatan 1971 (Pindaan 2012) serta;
- 4.3 Mempunyai *medical indemnity* sebelum dibenarkan mengamal di fasiliti KKM.

5. Untuk makluman YBhg. Dato' juga, Bahagian ini tiada halangan untuk Pegawai Perubatan KKM dalam Program Latihan Kepakaran *Parallel Pathway* (Surgeri Urologi) untuk menjalani latihan secara pemerhatian atau *observation* (tiada penglibatan dalam rawatan pesakit secara *hands-on*) di fasiliti perubatan swasta di bawah tunjuk ajar *trainer* yang telah dilantik selagi pelaksanaan latihan tersebut mematuhi peraturan dan pekeliling sedia ada.

6. Susulan itu, sukacita dapat pihak YBhg. Dato' untuk mengemukakan senarai terkini nama-nama pakar perubatan yang telah dilantik Lembaga Urologi Malaysia sebagai *trainer* untuk Program Latihan Kepakaran *Parallel Pathway* (Surgeri Urologi) dari masa ke semasa bagi tujuan pemantauan di pihak kami.

7. Sukacita dikemukakan untuk makluman dan perhatian YBhg. Dato'.

Sekian, terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

Saya yang menurut perintah,



**(DATO' DR. HJ AZMAN BIN HJ. ABU BAKAR)**

Pengarah Perkembangan Perubatan  
Bahagian Perkembangan Perubatan  
Kementerian Kesihatan Malaysia

s.k - Ketua Pengarah Kesihatan Malaysia

To,

President,  
Malaysian Urological Association

**REF: APPLICATION FOR POSITION OF UROLOGY TRAINER**

Name:.....

Hospital of Practice:.....

.....

I would like to hereby apply for the position of **Urology Trainer** with the Malaysian Board of Urology.

I have informed my hospital of practice on my intention to participate in the Public Private Partnership programme for Urology Training in Malaysia in the following MOH Hospital :

1. ....

I will participate in the following (please indicate):

1. Teaching (Tutorial/Case Discussion/Ward Rounds/AUC/Seminar):  
Yes/No
2. Clinical Supervision: Yes/No

I have read and agree to all the terms and conditions stipulated in the PPPUM document (prepared by MUA dated 16/9/17) and MOH letter (KKM500-5/3/14JLD.3(27) dated 13/11/17)

Yours Truly

.....

Date:



PEJABAT KETUA PENGARAH KESIHATAN  
(OFFICE OF DIRECTOR GENERAL OF HEALTH)  
KEMENTERIAN KESIHATAN MALAYSIA  
(MINISTRY OF HEALTH, MALAYSIA)  
BLOK E7, ARAS 12, PARCEL E,  
PUSAT Pentadbiran Kerajaan Persekutuan  
62590 PUTRAJAYA WP

Telefon  
Fax

88832534/88832545  
88895542

Ruj. Tuan :

Ruj. Kami : Bil (112)dlm KKM 87  
P13/221 Bng.3

Tarikh 10 Oktober 2005



Y. Bhg. Dato' Dr. Sahabuddin Bin Raja Mohamed  
Ketua Jabatan Urologi  
Hospital Kuala Lumpur.

Y. Bhg. Dato'

**Pengiktirafan KKM Untuk Program Latihan Kepakaran Urologi "Board Of Urology"**

Dengan hormatnya merujuk kepada surat Y. Bhg. Dato' mengenai perkara diatas.

2. Saya tiada halangan dan bersetuju untuk mengiktiraf latihan dan "exit certification" yang di kendalikan oleh Lembaga Urologi.

Sekian, terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

**"PENYAYANG, BEKERJA BERPASUKAN DAN PROFESIONALISMA  
ADALAH BUDAYA KERJA KITA"**

(DATUK DR. MOHD. ISMAIL MERICAN)  
Ketua Pengarah Kesihatan, Malaysia  
Kementerian Kesihatan Malaysia.



## **7.2 Appendices of Section 2**

- a. Application Forms
- b. Professional Reference Forms
- c. Entry Examination Format
- d. Entry Viva Format

## APPLICATION FORM

1. Name of the candidate (*in black letters*): \_\_\_\_\_
2. Date of birth: \_\_\_\_\_ 3. Identification Card No: \_\_\_\_\_
4. Address for Communication: \_\_\_\_\_  
E - mail: \_\_\_\_\_ Mobile No: \_\_\_\_\_ Tel No: \_\_\_\_\_
5. Permanent Address: \_\_\_\_\_
6. Nationality: \_\_\_\_\_
7. Marital Status: Married / Single  
 If married, name of spouse: \_\_\_\_\_

8. Professional Examinations passed:

Name of the examination:	University / Board	Year

**NOTE:** Please attach attested copies of all certificates, and marks if available.

9. Details of Posting

From	To	Supervisor(s): Institution

10. Full Registration No: \_\_\_\_\_

Date: \_\_\_\_\_

11. Details of Postings after housemanship

Posting	Hospital / Institution	Month / Year	
		From	To

12. Details of present employment (if any): \_\_\_\_\_

Name and full address of Hospital: \_\_\_\_\_

Post held with date: \_\_\_\_\_

Tenure of appointment (contract/ permanent): \_\_\_\_\_

13. Courses / Conferences attended:

a. Local / National

No	Course	Organiser	Date	Duration

b. International / Regional

No	Course	Institution	Date

14. Presentations:

No	Presentation Topic	Oral / Poster	Conference	Date

15. Publications:

- 1.
- 2.
- 3.
- 4.

Declaration;

I declare that I have read the information leaflet and that all the information furnished above by me are true. All the attested certified copies of certificates / mark sheets are attached. In case of any information furnished by me above is found wrong at any time, my candidature for the examination / selection to the course may be cancelled.

## PROFESSIONAL REFERENCE FORM

### SECTION I

*(To be completed by the applicant)*

Name of Reference: \_\_\_\_\_

Professional evaluation concerning:[Applicant's full name, including any other name(s) used]: \_\_\_\_\_

*We have received an application for entry into the Training in Urology from the above - named and pictured individual stating that she/he has named you as a professional reference.*

*The reference should check the accuracy of the information above and change or complete as appropriate.*

**Attach or  
scan  
applicant's  
picture here.**

**Note to Referee: Please ensure compliance with the following before writing a report for this applicant.**

- 1. Referee must have a post - graduate qualification recognized in Malaysia*
- 2. Referee must be a peer or senior professionally*
- 3. Referee must have qualified as a specialist in the specialty for a minimum of 2 years*
- 4. Referee must have worked with/had the opportunity to observe the applicant professionally, for at least 3months.*

### SECTION II

*(To be completed by the individual providing the reference)*

*Please state your observation on the applicant's ability and suitability for Training in Urology together with any other information which might assist us in making a decision. (Please use separate sheet, if necessary)*

Your comments will be treated with strict confidence. This report will in no circumstances be viewed by the applicant.

Present professional position:  
\_\_\_\_\_

My response are based on (check all appropriate responses)

- Direct observation
- Review of accumulated information and reports about the practitioner's performance

*I know the applicant (check the most accurate response):*

Very well  Well  Casually  Personally  Professionally

I do not personally know the applicant. [If checked, please skip the remaining questions in this section (Reference relationship with the applicant) and go directly to Section III (Professional knowledge, skills and attitude)]

Please answer the following questions based on your personal knowledge and direct observations.

#### REFERNCE'S RELATIONSHIP WITH THE APPLICANT

1. How long have you known the applicant?

\_\_\_\_\_

2. During what time period did you have the opportunity to directly observe the applicant's practice of medicine?

\_\_\_\_\_

\_\_\_\_\_

3. In what setting(s) did you observe the applicant (e.g., office, hospital, training program)?

\_\_\_\_\_

\_\_\_\_\_

4. Was the applicant active in your organization?

Yes  No

How frequently did you observe the applicant?

Daily  Weekly  Monthly  Infrequently

Comment:

5. Were you previously, are you now, or are you to become related to the applicant as family or through a professional partnership or financial association?

Yes  No

If yes, please explain:

### SECTION III

#### PROFESSIONAL KNOWLEDGE, SKILLS AND ATTITUDE

If you do not have adequate knowledge to answer a particular question, please indicate "Unable to Evaluate (UE)"

	Excellent	Good	Average	Unable to evaluate
<b>Medical knowledge</b> <ul style="list-style-type: none"> <li>• Basic medical/ clinical knowledge</li> </ul> BA <ul style="list-style-type: none"> <li>• Technical and clinical skills</li> </ul>				
<b>Clinical judgement</b> <ul style="list-style-type: none"> <li>• Basic clinical judgement</li> <li>• Availability and thoroughness of patient care</li> <li>• Appropriate and timely use of consultants</li> <li>• Quality / appropriateness of patient care outcomes Average</li> <li>• Appropriateness of resources use (e.g., admissions, procedures, length of stay and tests)</li> <li>• Clinical pertinence and completeness of medical record documentation</li> </ul>				
<b>Communication skills</b> <ul style="list-style-type: none"> <li>• Overall communication skills</li> <li>• Verbal and written fluency in English</li> </ul> BA <ul style="list-style-type: none"> <li>• Clarity / eligibility of records</li> <li>• Responsiveness to patient needs</li> </ul>	-			
<b>Interpersonal skills</b> <ul style="list-style-type: none"> <li>• Ability to work with members of healthcare team</li> <li>• Rapport with patients</li> </ul> BA <ul style="list-style-type: none"> <li>• Rapport with families</li> <li>• Rapport with hospital staff</li> </ul>	-			

<p><b>Professionalism</b></p> <ul style="list-style-type: none"> <li>• Timely documentation of medical record</li> <li>• Participation in medical staff organization activities (e.g., committees, leadership positions)</li> <li>• Participation in continuing medical education</li> </ul> <p>BA</p> <ul style="list-style-type: none"> <li>• Demonstration of ethical standards in treatment</li> <li>• Maintenance of patient confidentiality</li> <li>• Fulfilment of clinical emergency department call responsibilities</li> </ul>	-			
---	---	--	--	--

2. On review of the applicant's application for Training in Urology, do you find the applicant suitable for a career in Urology and in keeping with your knowledge of the applicant's experience and clinical activity at your organization?

Yes     No

If no, please explain:

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3. Have you ever observed or been informed of any physical, mental, emotional, or behavioural issues the applicant has or had that could potentially affect his or her ability to be a trainee under the Training in Urology?

Yes     No     No information

If no, please explain:

---



---

4. To the best of your knowledge, have any of the following ever been denied, challenged, investigated, terminated, reduced, not renewed, limited, withdrawn from or resignation submitted, suspended, revoked, modified, placed on probation, relinquished, or voluntarily surrendered, or do you have knowledge of any such action that are pending?



Information	Yes	No	No information
License or registration			
Clinical privileges			
Hospital appointment			
Affiliation with any healthcare organization			
Professional status			
Employment or contract arrangement with any healthcare family			
Employment or contract arrangement with a physician group			

If yes, please explain:

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5. Do you know of any malpractice action instituted or in process against the applicant?

Yes    No    No information

If yes, please explain:

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**SECTION IV**

**SUMMARY**

I have reviewed the application for Training in Urology of the applicant and my recommendation concerning the application is as follows:

- I recommend the applicant for Training in Urology with no reservation.
- I recommend the applicant for Training in Urology with the reservations specified below.\*
- I do not recommend the applicant for Training in Urology.

\*Please explain any reservations or concerns.

---

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Please use this section for any additional comments, information or recommendations that may be relevant to our decision to accept the applicant into Training in Urology.

---

---

If you would like to discuss this applicant with someone from our organization, please call \_\_\_\_\_ at \_\_\_\_\_ and a mutually convenient time for a phone conversation will be arranged.

Reference provided by:

---

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Field of practice: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Please ensure that ALL of the above details are completed.  
Please return your completed report to the address below in an envelope marked CONFIDENTIAL.

## **Entrance Examination:**

### **1. OSCE (50%)**

OSCE (50 minutes) is based on 10 clinical scenarios/ slides. There will be 5 questions for each scenario and candidates are given 5 minutes for each scenario.

### **2. VIVA (50%)**

The viva will be conducted over 40 minutes and consist of 4 stations. Each candidate will have 10 minutes to a station. The stations will test on the following:

- Uro-Oncology
- Principles of Surgery ( includes suture material, infection, neoplasm, trauma and resuscitation, principles of clinical research, Uro Technology)
- Urology emergencies and acute care
- Lower Urinary Tract Symptoms / Functional urology
- There will be 2 examiners for each station and candidates will be marked independently.

### **3. Structured Interview**

The structured interview uses 2 selection tools, each contributing the following weightings to the overall score of 100.

- a. Curriculum vitae 40%
- b. Structured interview 60%

### **4. Curriculum Vitae ( CV )**

The Curriculum Vitae will be scored out of a potential 40 points. Components assessed in the CV include:

- a. Academic Qualifications- 10 points

- b. Publications and ongoing research activities- 10 points
- c. Presentations in Scientific Meetings- 10 points
- d. Prizes, awards, community services, leadership 10

**5. Interview format**

- a. Three urologists (appointed by board) will interview the candidate
- b. A candidate should be a team player with high integrity, professional, good work ethic, adhere to ethical code as outlined by MMC.

Areas assessed in the interview include applicants clinical experience and supervisors' reports , log book, publication and research interest, CPD points and courses attended. Candidates will also be assessed on their clinical judgement, communication skills, leadership and professionalism.

### **7.3 Appendices of Section 5**

1. Direct Observation of Procedural Skill Assessment Form
2. Case Based Assessment Form
3. Mini Clinical Examination (Mini-CEX) Assessment Form
4. Core Surgical Procedures
5. 360 degree assessment
6. Academic and Research Portfolio
7. Log Book
8. Marking Rubric for year-end assessment

## **DIRECT OBSERVATION OF PROCEDURAL SKILL**

### **ASSESSMENT FORM**

The objectives of observing the candidate performing a procedure

1. Observing the capability of the candidate performing the procedure.
2. Assessment of the candidates level of competency in performing the procedure.
3. Progression in the level of competency documented at various stages of training.

Role of an assessor:

1. Observe the candidate performing the procedure and provide feedback at the end of the session.
2. Assessment to be based on capability of the candidate to identify the correct indication for the procedure, adequately consenting the patient while maintaining excellent communication skill throughout procedure, preparation of the patient, acceptable skills in performing the procedure safely including aseptic techniques and finally giving a global assessment for the procedure demonstrated by the candidate.

Role of the candidate:

1. Identifies a procedure as recommended in the curriculum.
2. Chooses a venue and time agreeable to the assessor (candidate led).
3. Ensure patient's cooperation for the assessment.
4. Provide feedback on the entire assessment process.

Marking Scheme

Marking is from a scale of 1 to 9, with 1 indicating an extremely poor standard and a score of 9 indicates excellent standards.

A candidate is to be marked based on the following levels:

Level	Grade
Below par (below expected level for year of training)	1-3
Par (at expected level for year of training)	4-6
Above par (above expected level for year of training)	7-9
Global assessment	Indicate if the candidate is competent or not
Not observed	If any of the steps not observed with reason

Important notes:

1. Any score of 1-3 must be supported by comments and reasons by assessor.
2. Feedback should focus on what the candidate has done poorly and also done well to support your scoring.

1. Name of candidate (*in black letters*): \_\_\_\_\_
2. Name of Accessor: \_\_\_\_\_
3. Date: \_\_\_\_\_
4. Venue: \_\_\_\_\_
5. Patient Information: \_\_\_\_\_
6. Level of Training (UT1-4) : \_\_\_\_\_
7. Procedure:

### Marking parameters and scales

Assessment parameters	Below par			Par			Above par		
	1	2	3	4	5	6	7	8	9
Scale									
Demonstrates understanding of indications, relevant anatomy, technique of procedure									
Ability to obtain informed consent									
Demonstrates appropriate preparation pre- procedure									
Appropriate administration of analgesia or safe sedation if required									
Sound technical skills									
Demonstrates adequate aseptic technique									
Knows when to call for help									
Post procedure notes and plan of management									
Communication skills									
Professionalism									

### Global Assessment

Competent		Not competent	
-----------	--	---------------	--

If not observed (state reason):



Assessor's comments:

Candidate's comments:

Signature of Assessor

Signature of candidate

Date:

Date:

## **CASE BASED DISCUSSION**

### **ASSESSMENT FORM**

A Case Based Discussion (CBD) is an assessment that enables the candidate to be assessed on the overall management of a patient presenting to the place of practice.

The objectives of CBD:

1. Ensure the candidate has adequate knowledge and application of of these knowledge to a clinical scenario.
2. Improve the candidates' capability in making accurate decisions in managing the patient.
3. Give feedback to the candidate in order to identify weak areas and improve subsequently.
4. Encourage discussion of a case with assessor to improve communication, presentation and exchange of knowledge.

Role of an assessor:

1. Choose a case based on knowledge that the candidate has been involved in the management of the patient. The case chosen could be informed by the candidate also.
2. Assessment to be based on quality of maintenance of the case records, proper taking of history, examination findings and interpretation of investigation findings, devise a management plan including following-up the patient.
3. Ensure the discussion is tailored to the level or year of training of the candidate.
4. Provide feedback to the candidate at end of discussion.

Role of the candidate:

1. Arrange a case with the agreement of the assessor for discussion.
2. Chooses a venue and time agreeable to the assessor (candidate led).
3. Ensure all records and investigations are available during the discussion.

4. Ensure assessment form for CBD is available.
5. Provide feedback on the entire assessment process.

#### Marking Scheme

Marking is from a scale of 1 to 9, with 1 indicating an extremely poor standard and a score of 9 indicates excellent standards.

A candidate is to be marked based on the following levels:

Level	Grade
Below par (below expected level for year of training)	1-3
Par (at expected level for year of training)	4-6
Above par (above expected level for year of training)	7-9
Global assessment	Indicate if the candidate is competent or not
Not observed	If any of the steps not observed with reason

#### Important notes:

1. Any score of 1-3 must be supported by comments and reasons by assessor.
2. Feedback should focus on what the candidate has done poorly and also done well to support your scoring. Include recommendation for improvement.

1. Name of candidate (*in black letters*): \_\_\_\_\_
2. Name of Accessor: \_\_\_\_\_
3. Date: \_\_\_\_\_
4. Venue: \_\_\_\_\_
5. Year of training : \_\_\_\_\_
6. Case No. for year : \_\_\_\_\_
7. Complexity of case: Easy/ Moderate/ Difficult
8. Diagnosis/Problem discussed:

Marking parameters and scales

Assessment parameters	Below par			Par			Above par		
	1	2	3	4	5	6	7	8	9
Scale									
Maintenance of records									
Eliciting history									
Examination findings									
Ordering investigation and interpretation									
Treatment plan									
Planning follow-up									
Professionalism									

Quality of presentation									
Global assessment									

If not observed (state reason):

Assessors comments:

Candidates comment:

Signature of Assessor

Signature of candidate

Date:

Date:

## **MINI CLINICAL EXAMINATION (MINI-CEX)**

### **ASSESSMENT FORM**

A Mini-CEX is an assessment of a trainee at the workplace which gives the board an idea of the trainees performance in actual clinical situation. Assessment of each clinical component in the management of a patient allows the trainee to improve based on the feedback given by assessors.

Role of an assessor:

1. Choose a case after discussion with the candidate on the area of focus that needs to be addressed in curriculum.
2. Assessment to be based on history taking, physical examination, communication skills, investigating a patient, clinical judgement and professionalism.
3. Ensure the discussion is tailored to the level or year of training of the candidate. Also concentrating on area of focus for various cases selected keeping in mind to complete a wide range of cases.
4. Provide feedback to the candidate at end of discussion with suggestions on ways to improve.

Role of the candidate:

1. Arrange a case with the agreement of the assessor for discussion.
2. Chooses a venue and time agreeable to the assessor (candidate led).
3. Ensure all records and investigations are available during the discussion.
4. Ensure assessment form for Mini-CEX is available.
5. Provide feedback on the entire assessment process.

## Marking Scheme

Marking is from a scale of 1 to 9, with 1 indicating an extremely poor standard and a score of 9 indicates excellent standards.

A candidate is to be marked based on the following levels:

Level	Grade
Below par (below expected level for year of training)	1-3
Par (at expected level for year of training)	4-6
Above par (above expected level for year of training)	7-9
Global assessment	Indicate if the candidate is competent or not
Not observed	If any of the steps not observed with reason

Important notes:

1. Any score of 1-3 must be supported by comments and reasons by assessor.
2. Feedback should focus on what the candidate has done poorly and also done well to support your scoring. Include recommendation for improvement.

1. Name of candidate (*in black letters*): \_\_\_\_\_
2. Name of Accessor: \_\_\_\_\_
3. Date: \_\_\_\_\_
4. Venue: Ward/Clinic/Daycare/OT/ED :
5. Year of training : \_\_\_\_\_
6. Case No. for year : \_\_\_\_\_
7. Area of focus:  
History/ examination/investigation/Management/Procedure/communication
8. Complexity of case: Easy/ Moderate/ Difficult



Marking parameters and scales

Assessment parameters	Below par			Par			Above par			Not observed
	1	2	3	4	5	6	7	8	9	
<b>Scale</b>										
<b>Eliciting history.</b> Able to take a proper history with all relevant information like risk factors, allergies, treatment, family history etc.										
<b>Examination.</b> Examines the patient after taking consent to do so. Examines with adequate skills, without causing discomfort to patient. Uses equipments appropriately.										
<b>Communication skills.</b> Maintains good overall communication with patient at all times. Ability to inform diagnosis, shows empathy, explain the plan of management and procedures if necessary.										
<b>Investigate.</b> Formulate a plan outlining the investigation required and know the relevance and interpret these results to arrive at working diagnosis.										
<b>Clinical judgement.</b> Ability to apply knowledge to arrive at diagnosis with differential diagnosis consolidating all the relevant information										

obtained.										
<b>Management of the patient.</b> Devise an overall plan of management including procedure and medical options, consenting, informing the patient and follow-up. Uses appropriate guidelines and literature to justify choice of treatment. Able to describe the procedure.										
<b>Professionalism and efficiency.</b> Conducts the whole session in a timely and comfortable fashion for all concerned.										
<b>Global assessment</b>										

If not observed (state reason):

Assessor's comments:

--

Candidate's comments:

Signature of Assessor

Signature of candidate

Date:

Date

**Core Surgical Procedures (Version 1.0)**

(To be assessed by **PBA**- Procedure Based Assessment)

	<b>Endo-urology</b>	<b>Open/Laparoscopy</b>
<b>UT1 1</b> <b>(11 procedures)</b>	Cystoscopy TRUS biopsy JJ stenting CBD insertion SPC insertion ESWL	Circumcision Orchidectomy (scrotal) Orchidectomy (inguinal) Hydrocele surgery Surgery for testicular torsion
<b>UT2 2</b> <b>(6 procedures)</b>	Ureteroscopy (rigid) TURBT Optical urethrotomy AVF	Vesicolithotomy Ureter reimplantation
<b>UT3 3</b> <b>(6 procedures)</b>	TURP Cystolitholapaxy BNI TUIP	Nephrectomy (open) Nephrectomy (Lap)
<b>UT4 4</b> <b>(3+4 procedures)</b>	PCNL  **Flexible URS	Nephro-ureterectomy Ileal conduit  **Radical cystectomy **Radical prostatectomy **Pyeloplasty

“\*\*” : Optional or up to the level of 1<sup>st</sup> assistant

**Total: 26 + 4 procedures**

Note:

1. The time for achieving the milestones is flexible.
2. The Board to decide on the level of competence for each procedure.

## **360<sup>0</sup> PERFORMANCE**

### **EVALUATION FOR**

360<sup>0</sup> Performance evaluation of a candidate assists the Malaysian Urological Board to appraise the overall attitude, behaviour, and communication throughout the appraisal period. This is not an exercise to assess the candidates' knowledge, skills and clinical capability.

This evaluation is from the point of view of superiors, nursing staff, colleagues and also staff below the grade of the candidate.

The appraiser need not reveal his/her name on the form to maintain confidentiality. The form will be handed over by the candidate's supervisor to te appraiser and once completed, should be passed back to the supervisor. The appraiser is encouraged to give comments at the end of the form specifically on areas that the candidate has done well, to stop certain behaviour and areas to improve with examples, if possible.

### **Marking Scheme**

Marking is from a scale of 1 to 5. A candidate is to be marked based on the following levels:

Level	Grade
Not Applicable	1
Strongly disagree	2
Disagree	3
Agree	4
Strongly agree	5

1. Name of candidate (*in black letters*): \_\_\_\_\_
2. Name of Assessor (Optional) & Post : \_\_\_\_\_
3. Date: \_\_\_\_\_
4. Relationship to candidate::
5. Year of training UT1/UT2/UT3/UT4:
6. Period of assessment: From \_\_\_\_\_ To \_\_\_\_\_

<b>Time Spent</b>	<b>Every Day</b>	<b>A few times a week</b>	<b>A few times a month</b>	<b>Every few months</b>	<b>NA (Never)</b>
Frequency of contact with candidate					

<b>Standard of Work</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
High quality of work output					
Work output is error-free					
Supports others to improve work output					

<b>Communication</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Excellent communication skill both oral and written					
Listens to others and values opinion					
Relays information and teaches others					

<b>Teamwork</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Team benefits from contribution					
Manages the team to produce better results					
Reliable member of the team					

<b>Leadership Qualities and Personality</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Presents a positive image to outsiders					
Is friendly and easy to work with					
Adapts well to change					
Has high professional and ethical standards					

Please provide additional comments in the space below

[Type comments here]

1. Attributes that the candidate does not have and might benefit if incorporated.
2. Attributes that may benefit the candidate if stopped.
3. Continuation of attributes noted to be done well by the candidate.



## **ACADEMIC PORTFOLIO**

An academic portfolio is a document that describes your development from the beginning of your career till present time. How is it different from your CV? The difference is that an academic portfolio highlights and gives brief description of important events and achievement in the CV. You are expected to give your aspirations and thoughts for the future.

The academic portfolio, when read together with your CV, shows your journey through the training, your achievements and your contributions to the society and management. This will improve your marketability and visibility when being considered for a post, promotion or awards.

Below are contents that are recommended for inclusion when the academic portfolio is prepared.

### **1. Table of Content**

Insert a table to show the contents of the portfolio document with the pages numbered for easy navigation.

### **2. Introduction**

A brief write-up should be written as an introduction into the portfolio.

### **3. Personal information**

This should contain your personal information with your position, place of work, specialty, contact information etc.

### **4. Academic qualification**

List all your academic qualification/degree. Insert a summary to highlight certain qualification that may be deemed advantageous to show the quality of your achievement. This part should be updated as new qualifications are achieved.

## **5. Work Experience**

This may be a repeat of the chronology of your work as shown in the CV but certain period of your working life may need description and highlighting to show your suitability and capability.

## **6. Specialty Training**

Highlight your path through the training over the 4- year training programme and post-exam achievements. This part may include important achievement in exams, rewards and courses during training. A brief summary at the end of this section is recommended.

## **7. Teaching activity**

Highlight all your teaching activity. Divide this category into quantity and quality. Under quantity, you can describe the teaching activity, the audience, methods used and the frequency. As for the quality, you can describe the feedback given by the audience if available or if any marking scheme used to rate your teaching. Include if you have been involved in curriculum development activities and describe your role. At the end, give a summary which may include your teaching philosophy.

## **8. Clinical Activity**

Highlight your achievement to improve the services in the place of your work. Show evidence of these improvements which can be your initiative in reducing waiting time in clinic, public awareness programmes or any other initiatives that brought about benefit all around. Include a summary of your thoughts and approaches that you would like implemented.

## **9. Research activity**

You may want to start this section with a brief summary of your philosophy again. Show the important researches that you are part of. Highlight your research outputs like publications. Indicate if you have successfully obtained grants and supervised

other candidates. Show your collaborations with other organisations for research purpose.

### **10. Administration and Leadership**

Highlight your membership of any committees and organisation. Describe your role and important achievement. Also show evidence of your leadership in running an organisation, organising programmes and workshop. Give a summary at the end.

### **11. Continuing Professional Development**

Important activity contributing to CPD should be listed. Briefly describe some which may be unique and contribute to major changes in your career.

### **12. Awards, Scholarship, Honours or Recognition**

This section describes all the important rewards that you might have achieved in your career.

### **13. Closing summary**