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POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

Prospectus

Board Certification in Paediatric Nephrology

(To be effective from the year 2015)

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1. Background and Justification/Introduction

The Board of Study in Paediatrics (BOSP), from its inception in 1980, has endeavoured meticulously to train and provide our country with well trained Board Certified Specialists in General Paediatrics. The BOSP can now justifiably be proud of its achievements and of all of its efforts towards providing specialist paediatric services in all areas of Sri Lanka. Currently, Board Certified Specialist General Paediatricians provide specialist paediatric services in all areas of the country.

Although general paediatricians are able to provide optimal cover for the majority of clinical problems that come up in paediatrics, ultra-specialist care and high-powered services are required in certain well-defined specialised areas. To cater to this need, over the last few years, the BOSP has commenced, in stages, training programmes for different sub-specialties in paediatrics. There are several sub-specialties that are incorporated into the current training programmes of the Board of Study in Paediatrics. Up to the present time, these include Paediatric Cardiology, Paediatric Neurology, Paediatric Nephrology, Paediatric Intensive Care, Paediatric Endocrinology and Neonatology. These have been introduced from time to time to cater to the identified needs and requirements of the country in providing comprehensive ultra-specialist care to the paediatric population.

Few decades ago many children with complicated kidney diseases were regarded as having grave prognoses. While development of chronic dialysis and paediatric transplantation programs have offered survival chances to children with end stage renal disease, many children with acute renal failure- who succumbed to their illnesses previously – are also blessed with hope of life with the availability of acute renal replacement therapies. In addition, with modern management strategies, a large proportion of children with complicated renal diseases can lead a good quality life with minimum risk of going into end stage renal failure. However all these children need continuous support and to provide services of this nature, it is of paramount importance to have well-structured systems and services which are supervised by paediatric nephrology specialists. Appropriately selected, properly trained, exquisitely competent and holistically caring paediatric nephrologists would be able to satisfy the needs of the country in providing the best possible state-of-the-art care and follow up for those children with renal disorders who need expert attention. This document is the final proposal for inclusion of paediatric nephrology as a sub-specialty leading to ultimate Board Certification as Paediatric Nephrologists.

2. Eligibility for entry into training programme

Applicants should have passed the MD Paediatrics Examination and should not be already Board Certified by the PGIM in any specialty or subspecialty or have already applied to be enrolled in the training programme in any other subspecialty.

3. Selection process for training programme

The candidates will be selected on the merit based ranking results of the Final MD (Paediatrics) Examination. The positions available will be offered to the candidates by the BOSP based on the recommendations made by the Ministry of Health. The candidates, on the basis of the order of merit, would make the appropriate selection for training in paediatric nephrology.

4. Number to be selected for training

Within one month of successful completion of MD Paediatrics Examination, the candidates will be offered the training positions in paediatric nephrology, based on the recommendations made by the Ministry of Health. Order of merit in the MD examination will be taken into consideration when selecting trainees. Once the selection is made, the candidate would come under the general purview of the Special Committee of the BOS Paediatrics that deals with paediatric nephrology. Each candidate would be allocated to a “Professional Mentor” from the BOSP and would be guided by that personality right throughout the training programme.

5. Outcomes, competences and Learning objectives at the end of the Programme

The program is designed for the trainees to experience a continuum of learning in clinical paediatric nephrology, adult nephrology, and other related disciplines with progressive acquisition of research skills. The curriculum that has been planned and elucidated later on in this document has incorporated a myriad of training activities that need to be undertaken over the full period of training. It is expected that the fully trained product would be up-to-date with all recent developments and would be in a position to provide holistic care for those children who need the expertise of a specialist paediatric nephrologist.

The eighteen months local training would provide a basic foundation which would be amplified and reinforced during the two year foreign training period. The stint abroad would also provide exposure to some of the technologies as well as most modern forms of diagnosis and treatment services currently unavailable in Sri Lanka and also provide all necessary amenities to embark on a good research endeavour. Towards that end, it is thought that a period of overseas training is absolutely necessary and should be two years with the current local training facilities.

Proposed Outcome

The qualified specialist is expected:

1. To be clinically competent in the diagnosis and, acute and long term management of newborns, infants, and children with kidney disorders and related conditions

2. To have acquired the skills, professionalism and knowledge necessary to establish and guide a paediatric nephrology service, including dialysis and kidney transplantation;
3. To possess the life-long habits of learning the science and the art of renal medicine through research

The ultimate aim is to establish an island wide provision of specialized nephrology services with these highly trained experts.

6. Structure of the Training Programme

6.1. Duration of training

The entire Paediatric Nephrology Sub-Specialist Training Programme consists of three and half years.

Local training-	18 months
Overseas training -	24 months

6.2. Local Training

6.2.1. Paediatric nephrology

Training is in one or more centres under two trainers who are approved by the BOSP.

The trainees will be trained in other relevant medical specialties mentioned below during the local training period. They can master these specialties as clinical attachments, attending to referrals, joint discussions, integrated ward classes, journal clubs or by participating in scientific forums. Both the trainee and the supervisor should plan the ancillary training to achieve the learning objectives without compromising the clinical paediatric nephrology training.

Paediatric intensive care

Neonatal intensive care

Cardiothoracic intensive care

Paediatric Radiology

Paediatric Urology

Microbiology

Renal genetics

Renal biopsy histopathology

Research in renal medicine

Renal pharmacology

6.2.2. Adult Nephrology

Trainees will be released for adult nephrology training for a period of 4 weeks. During this period they are expected to get further training in the following areas.

- Acute and chronic haemo- dialysis
- Acute and chronic peritoneal dialysis
- Renal transplantation

- Renal emergencies
- Procedures such as renal biopsy, vascular access, PD catheter insertion

Trainees need to get actively involved in the adult transplant programme including first 24 hour post transplant monitoring, and attending the dialysis and post transplant clinics. They need to pay more attention to areas where there is limited exposure in the paediatric centre. Trainees are also advised to maximally utilize this period to gain more procedural skills.

6.2.3. Critical-care Nephrology

The nephrology trainees should actively be involved in the management of patients with renal problems in PICU, NICU and cardiothoracic ICU. They are expected to learn acute emergencies in paediatric/neonatal nephrology such as acute renal failure, fluid-electrolyte and acid-base problems and hypertensive emergencies and also acute presentations of congenital renal problems. They should learn the fundamentals of airway management during these encounters to enable to interpret the acid base issues and also to decide on fluid regimes accordingly. They should gain more procedural skills such as arterial line and central line insertions.

6.3. Foreign Training

The overseas training requirement of paediatric nephrology is 24 months at a centre of excellence, where paediatric nephrology transplant and dialysis training opportunities exist. The centre should invariably fulfill the other criteria mentioned under “Minimum requirements for institutions offering paediatric nephrology training and need to be approved by the BOSP”.

The aims of the overseas training are for the trainees to get the experience of a properly developed paediatric nephrology, dialysis and transplant programme, further refine the clinical and procedural skills, professionalism, inter personal and communication skills, knowledge and understanding of research and also to experience the new advancements of renal medicine.

In view of possible logistical difficulties of securing a training position continuously for two years, it may be necessary to arrange the training in more than one centre and may even be in two countries.

7. Training Content and Curriculum

Details of the curriculum and the content areas are given in the ***annexure I***

8. Learning activities and Learner Support System

8.1. Joint discussions

Trainees should participate in the joint discussions with collaborating specialists i.e., urologists, radiologists and histopathologists once in 2 weeks. Arrangements should also be made for the trainees to attend the joint discussions and other teaching sessions held in the adult nephrology centre.

8.2. Integrated ward classes

These are case oriented learning sessions which should provide a forum to discuss interesting diagnostic and management problems, and to review the literature on timely and on controversial issues. The relevant specialties eg surgeon, intensivist, radiologist, histopathologist, chemical pathologist, microbiologist, physiologist, pharmacologist and genetic specialist should be invited for these sessions.

8.3. Journal clubs

The primary goal of the journal club is to better the trainee's ability to critically evaluate the medical literature and learn to apply the knowledge to clinic practice. In leading the journal club discussion, the trainee should first discuss issues specific to the article, including:

1. Research question asked and main outcome of interest
2. Methodology used: case-control study, case series, randomized trial, etc.
3. Subjects used including inclusion and exclusion criteria
4. How the study was done and how the outcome of interest was measured
5. Describe the results of the study and statistical tests used
6. What conclusions were drawn by the authors

8.4. Patient review conferences and patient care conferences

The trainees should participate and lead regular patient review conferences, including assessment of patients and formulation of plans with other members of the pediatric/adult nephrology team. They should also participate and lead the patient care conferences with medical and non-medical personnel, including dietary management, counseling and psychological issues involved with pediatric renal patients

8.5. Continuous medical education

Trainees are advised to utilize all the opportunities to participate in courses, lectures and workshops on dialysis, continuous renal replacement therapies and transplantation and also in research seminars in both pediatric and adult nephrology services. They should participate in at least one regional or international forum during their training period.

8.6. Research Project

Successful performance and presentation of a **second research project**, directly relevant to paediatric nephrology is a **mandatory requirement** to be eligible for the PBCA, in addition to the research project that may have been carried out during the general paediatric training. The research project could be undertaken at any time, either in Sri Lanka or abroad. It may be either hospital based or community based and could include clinical, epidemiological, genetic or immunological components. It may be observational or interventional in type.

The candidate should do the initial design, obtain ethical approval, involved in data collection and analysis and should write the initial draft of the manuscript.

The study proposal must be **assessed and approved by the BOS before embarking on the proposed study**. Appropriate ethics approval and, where an intervention is concerned, registration with the clinical trials registry should be obtained.

It should be submitted either as a completed research report along with a soft copy to be assessed and approved by the BOS or as a first author publication of a full paper in a peer-reviewed journal (preferably indexed).

Please refer to the General Paediatrics Prospectus for the following

1. Format for submission of the research proposal
2. Assessment of project report by 02 reviewers
3. Scientific meetings for presentation and journals for publication of research

8.7. Clinical Audit

As a part of foreign training, it is a mandatory requirement for the trainee to do a comprehensive Clinical Audit and formally present it. This is in addition to the prescribed Research Project. Documentary evidence of such an audit presentation must be provided to the BOSP.

9. Trainers and Training Units

Training Units

Training in paediatric nephrology should be based at established units accredited by the BOS, which offer a full range of diagnostic and treatment facilities for acute and chronic renal conditions including paediatric renal transplantation and dialysis.

Until all these requirements are implemented there will be a flexible transition period during which there will be gradual changes from the existing training programme.

Details of Trainers

Board certified specialists with special interest in paediatric nephrology or a board certified

paediatric nephrologist with at least 03 years of experience after board certification will be appointed as trainers.

Responsibilities of a trainer

Within the 18 months local training period the institution should ensure that:

1. The trainee is spending the major part of his or her time in paediatric nephrology.
2. The trainee is fully acquainted with the theoretical aspects of paediatric nephrology listed in “The Learning Objectives”
3. Whilst under training the trainee performs the procedures listed so that they can be performed independently and safely after accreditation.
4. Discussions concerning patient care are held regularly.
5. Joint discussions with collaborating specialists e.g. surgeons, radiologists, histopathologists, are held regularly
6. The trainee is involved in the preparation of children and their families for dialysis and renal transplantation.
7. The trainee has sufficient access to high quality paediatric nephrological literature which is discussed regularly.
8. All relevant equipment is of sufficiently high quality to allow good training.
9. The trainee becomes familiar with counseling of patients with different nephro/urological conditions, patients in ESRD and also genetic counseling for hereditary renal diseases.
10. The trainee is given sufficient time and opportunity to undertake research in the field of paediatric nephrology and to present the findings at scientific meetings and publish them in reputable journals.

10. Monitoring progress

10.1. Progress reports

Each completed section of the training programme should be followed by the submission of a Progress Report by the supervisor / trainer.

Refer annexure II

These reports should be received by the PGIM within one month of completing the relevant section of training.

The onus of ensuring that these reports are sent in time to the PGIM is entirely on the trainees. They should liaise with the trainers and make sure that the reports are received by the PGIM in time. This includes local as well as foreign training.

Any grade more than 3 would be a satisfactory evaluation result. The grading of less than 3 would be considered to constitute an adverse report.

Unsatisfactory progress reports will be discussed at the Board of Study and contents will be communicated to the trainee and the subsequent trainer/s, where this is deemed necessary for support purposes. The trainee/s will be informed of the steps taken-which may involve advice, guidance, lengthening or repetition of the said training.

Satisfactory Progress Reports are a mandatory requirement to qualify for the Pre – Board Certification Assessment.

10.2. In Service Training Assessment (ISTA) during local training

The trainee is expected to complete the following assessments during this period.

1. Multisource Feedback (MSF) - 2
2. Case based Discussions (CBD) - 12 minutes per CBD -12
3. Mini clinical evaluation (MCE) -2
4. Discharge Summaries & Letters (DSL) -10
5. Evaluation of Teaching Skills - (ETS) - 2
6. Communication Skills (CS) - 2

Refer Annexure III for assessment ISTA forms

Training Component	In Service Assessment
Local training 1 st 9 months	MSF (1), CBD (4), MCE (1), DSL (3), ETS (1), CS (1)
Local training 2 nd 9 months	MSF (1), CBD (4), MCE (1), DSL (4), ETS (1), CS (1)
Overseas training	CBD (4), DSL (3)

10.3. Log book

Trainees are responsible for maintaining the Log Book. It is designed to ensure that there are no gaps in knowledge and that all areas have been covered with hands on experience in that area and not just from reading or formal teaching.

Refer annexure V

11. Eligibility for Pre – Board Certification Assessment (PBCA)

The following criteria have to be fulfilled to be eligible to appear for the PBCA.

1. Satisfactory completion of all components of training
2. Successful completion, presentation and publication of the Research Project
3. Satisfactory progress reports of local and overseas training
4. Satisfactorily completed PTR forms

12. Format of Pre Board Certification Assessment (PBCA)

Assessment tool- Portfolio

The PBCA should be based on assessment of portfolio maintained by the trainee during the period of post MD training. Content of the portfolio should encompass all of learning outcomes mentioned below and contains evidence of achievement of these outcomes by the trainee.

1. Subject expertise
2. Teaching
3. Research and Audit
4. Ethics and medico legal issues
5. Information technology
6. Lifelong learning
7. Reflective practice

Refer annexure V for details

Portfolio Assessment

The candidates are expected to maintain a Portfolio from the commencement of training programme on a continuous basis. They are expected to update it at regular intervals. The responsibility of ensuring such remains with the trainees. The Trainer (at each respective stage) is expected to supervise and direct the trainee on compilation of the document.

When the trainees are eligible for PBCA three (3) copies of the completed portfolio should be submitted to the examination branch of PGIM. The PBCA should take the form of a final, summative assessment of the trainee's portfolio, carried out by two independent examiners from the relevant subspecialty, appointed by BOS and approved by the Senate of the University of Colombo. A third examiner will be nominated by the BOS from the field of adult nephrology.

The overall assessment should be based on each of the main sections, which should be assessed as satisfactory or not on overall basis.

The portfolio will be marked by the examiners using the rating scale. The candidate will have to secure a minimum of 5 or more for all seven (7) components mentioned above at each examiner's assessment.

The trainee will be called for a *Viva voce* examination during which he/she will be questioned on the portfolio.

(For Portfolio Assessment Report - **Refer annexure V**)

PBCA failed candidate

- A trainee who fails on the Portfolio assessment will be advised in writing by the panel on exactly how the portfolio could be improved. In such a case, the necessary corrections and amendments have to be made by the trainee and the portfolio submitted to the PGIM within 3-6 months to be assessed by same panel of examiners and a *viva voce* based on the resubmitted portfolio. A trainee, who still fails, would undergo a third

portfolio evaluation and viva voce by a different panel of examiners appointed by the BOS within two months.

- If the trainee is successful at the second assessment and viva voce, the date of Board Certification will be backdated as done routinely. **If unsuccessful even at the second evaluation, the date of Board certification will be the date of passing the subsequent PBCA following further training for a minimum period of 6 months in a unit selected by the BOS.**

13. Board Certification

A trainee who has successfully completed the PBCA is eligible for board certification as a Specialist in Paediatric Nephrology on the recommendation of the BOS in Paediatrics.

The trainee is required to do a PowerPoint presentation of 10- 15 minutes, to the BOS which should be based on local and overseas training received, together with a component indicating the future mission and vision of the trainee.

14. Recommended reading

Books

1. Paediatric Nephrology (Recommended book of reference)
Ellis D. Avner, William E Harmon, Patrick Niaudet
Published by Lippincott Williams & Wilkins
2. Comprehensive Paediatric Nephrology:
By Denis F. Geary, Franz Schaefer
Published by Mosby Elsevier
3. Clinical Paediatric Nephrology
Nicholas Webb, Robert Postlethwaite
Published by Oxford University Press
4. Paediatric Dialysis
Warady, Bradley A (et al.)
5. Hand book of Kidney Transplantation
Gabriel M Danovitch
Published by Lippincott Williams & Wilkins
6. Hand book of Dialysis
John T. Daugirdas, Peter Gerard Blake, Todd S. Ing
Lippincott Williams & Wilkins
7. Silva's Diagnostic Renal Pathology
Xin J Zhiou et al.
Published by Cambridge University Press
8. Paediatric Nephrology in the ICU
Jens Goebel, Micheael J G Somers
Published by Springer

Journals

There are many peer reviewed journals which focus on adult and paediatric nephrology, renal transplant, urology and dialysis. Best quality evidence in paediatric nephrology can be found in most of these journals and trainees should make an effort to read articles on selected topics. “Paediatric Nephrology – from Springer” (the official journal of International Paediatric Nephrology Association) is highly recommended.

Contributors to development and revision of prospectus

Portfolio

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Log book

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Annexure 1

Training Content and Curriculum

The broad core objectives of the entire training programme are as follows:

- ***Patient care***

The ultimate aim is to provide comprehensive specialised services to children with renal disorders. The trainees are expected to acquire the expertise in dealing with the very many renal disorders in paediatric practice and be able to handle the sensitive issues concerning these children and their families. They would need to determine the infrastructure facilities required to provide optimal services and make personal and fervent efforts to acquire them into the specialised units through the agencies that are responsible for the provision of these amenities.

- ***Medical knowledge***

It is expected that the trainees should acquire extensive and up-to-date knowledge on pediatric renal medicine during the course of the training programme. Wide reading and critical thinking together with reflective documentation would be essential attributes that should be developed during the programme.

- ***Interpersonal and communication skills***

It is most likely that the work of the Paediatric Nephrologist would involve a multi-disciplinary approach in many instances and therefore proper communication with all relevant healthcare personnel with whom they need to have a constant dialogue is crucial to the provision of optimal services

The trainees should also acquire the necessary skills and attitudes in maintaining a dialogue with the affected children, their parents and care-givers. Development of empathy and understanding of the problems faced by them would be an essential prerequisite to being a competent and successful clinician.

- ***Professionalism***

It is envisaged that the trainees would act and behave in a most professional manner in all dealings with senior and junior colleagues and others involved in the management of their patients. This is of paramount importance to secure the services of several other medical and para-medical categories of staff in the provision of comprehensive care to these children.

These attitudes and skills need to be carefully nurtured during the training programme.

- ***Practice-based and Evidence-based approach***

Since the art and science of paediatric renal medicine is rapidly changing in nature, it is of vital importance for the trainees to be updated on current research work and newest

practices. Although evidence-based medicine is the cornerstone on which optimal care is based, a practice-based approach may be appropriate in certain circumstances. The skills based on both approaches need to be developed during the training programme.

This section provides an overview of the clinical and academic competences and skills a nephrology trainee is expected to achieve during different stages of training in 1) Patient care 2) Medical knowledge, 3) Interpersonal and communication skills, 4) Professionalism, and 5) Practice based and evidence based learning. For practical purposes the stages of training is categorized as 1) local training 0-12 months, 2) local training 13 – 15 months and, 3) local training 16-18 months and overseas training.

1. Patient care

Local training 0-12 months

1.1. Technical procedures

- Renal biopsy:
 - Learn the indications for and also obtain the ability to perform ultrasound guided percutaneous native kidney biopsies and kidney transplant biopsies under supervision.
 - Be able to obtain the consent for biopsy.
 - Be able to appropriately manage the complications of the procedure.
 - Learn the basic interpretation of the histology specimens in light microscopy, immunofluorescence, electron microscopy and immune-histochemical staining.
- Urinalysis:
 - Learn the analysis, interpretation and limitations of the urinary sediment, and its correlation with pathological entities.
- Imaging studies:
 - Learn the indications, interpretation, correlation and limitations of imaging tests used in the diagnosis and treatment of pediatric renal disorders. These include: renal ultrasound, magnetic resonance imaging, computerized tomography, renal angiogram, micturition cystourethrogram and nuclear medicine renal scans.
- Uro flow and urodynamic studies:
 - Learn the indications and interpretation of the results of uroflow and urodynamic studies
- Renal replacement therapies:
 - Learn the indications, principles and complications and develop the ability to supervise patients on acute and chronic peritoneal dialysis, acute and chronic hemodialysis, plasmapheresis, and continuous renal replacement therapy.
 - Be able to handle central line dysfunction and maintain sterility

1.2. Clinical evaluation and management

- General scope
 1. Be able to obtain a complete history of paediatric and renal characteristics including relevant information of the perinatal events, past medical problems and the relevant family history. Learning to obtain information from the patients (when appropriate) and also from other family members.
 2. Be able to perform a full physical examination including genitourinary system.
 3. Be able to present effectively orally and in writing the findings of the pediatric and renal history and physical examination, a complete differential diagnosis, and be able to select the most likely diagnosis and plan of investigation and treatment.
 4. Be able to write accurate and methodical pediatric renal progress notes in a legible style.
 5. Be able to provide concise and complete clinical reports and discharge summaries for inpatients and monthly review summaries for patients with end-stage renal disease and other complicated renal disorders.

Evaluation and management of patients with acute kidney injury (AKI), chronic kidney disease (CKD) and end stage renal disease (ESRF)

1. Be able to evaluate neonates, infants and children with AKI to identify the underlying cause/causes
2. Be able to differentiate the underlying glomerular and tubular nature of the illness
3. Be able to evaluate a patient who acutely presents with renal impairment to identify whether he is having AKI, acute exacerbation of CKD or ESRF
4. Be able to prescribe individualized fluid regimes
5. Be able to prescribe medications appropriately
6. Be able to manage electrolyte and acidification disturbances,
7. Be able to identify the need of dialysis and select an appropriate dialysis modality for an individual patient
8. Be able to draw the appropriate investigation plan for an individual
9. Be able to make management decisions for patients with multi-organ failure or other systemic diseases
10. Longitudinal follow-up of patients will provide acquisition of skills in the areas of nutrition and growth and replacement therapies (dialysis, control of secondary hyperparathyroidism, prevention of anemia of chronic renal failure, optimization of growth).

Evaluation and management of renal transplant recipient:

1. Be able to arrange the transplant work up of the recipients and the donors
2. Be able to decide on fluid regimes of the post transplant recipients
3. Be able to follow various immune-suppression protocols and also be able to make appropriate decisions at different clinical scenarios

4. Be able to identify the acute emergencies during the immediate post transplant period and also during the long run and be able to take timely actions
Longitudinal assessment of post transplant children will help the trainee to learn to optimize immunosuppressive therapy to reduce the risks of rejection of the graft while minimizing the drug toxicity. This includes prevention or early detection of infections, promotion of adequate nutrition and optimization of growth and development.

Local training 13-15 months

1. Learn the various protocols in the treatment of common and uncommon pediatric nephrology disorders, dialysis and renal transplantation while understanding the underlying rationale, and be able to apply them meticulously.
2. Be able to provide competent independent pediatric nephrology consultation in inpatient or outpatient settings.
3. Be able to obtain pediatric renal history, perform a full physical examination and formulate diagnosis and differential diagnosis and lay out a proper plan for further evaluation and treatment in a timely and cost effective manner.
4. Be able to discern the important from the unimportant in clinical pediatric nephrology.

Local training 16-18 months and during overseas training

1. Refine the clinical and procedural skills developed in the previous years.
2. Understand the sensitive issues related to patients and their families and be able to provide the best effective care within an individualized family frame
3. Provide effective and professional consultation to referring physicians
4. Understand evidence based and cost-conscious strategies to develop effective care.
5. Develop the ability to lead the multidisciplinary renal team under the supervision of the attending physician.

2. Medical knowledge

Local training 0-12 months

1. Learn the characteristics, presentation, investigation, diagnosis and treatment of pediatric patients with wide variety renal conditions.
2. Learn the embryogenesis, fetal and post natal growth and functional maturation of the genitourinary system and understand the basis of different developmental anomalies
3. Learn the changes of renal function, blood pressure patterns and fluid and electrolyte physiology from the neonatal period to adolescence and be able to assess the progression of the pathologies in an age appropriate manner

4. Learn the indications, side-effects, contraindications, and the duration of therapy of major drugs used commonly in pediatric nephrology. These include corticosteroids, anti-hypertensives, antibiotics and immunosuppressive agents, among others.
5. Recognize the patterns of presentation of acute versus chronic renal failure.
6. Learn the principles, therapy and psychosocial implications of end-stage renal disease in children.

Local training 13-15 months

1. Learn the characteristics, presentations, methods of diagnosis, and treatments of the uncommon paediatric renal diseases.
2. Learn and understand the rational use of common drugs in renal medicine
3. Learn basic epidemiology and investigational skills to understand clinical studies of pediatric renal diseases or to further pursue an area of research in this field.
4. Ability to identify the controversies in treatment of pediatric nephrology disorders, formulate the pros and cons, support a clinical decision based upon current literature and standards of care and discuss the options with the other members of the pediatric nephrology team.

Local training 16-18 months and during overseas training

1. Refine the knowledge acquired during the previous stages
2. Learn medical ethics as it applies to pediatric nephrology
3. Learn the unusual presentations, pathophysiology, and epidemiology of the common pediatric nephrology disorders.

3. Interpersonal and communication skills

Local training 0-12 months

1. Ability to interact with professional colleagues for the care of the renal patient:
Eg: pediatric urologist for the child with obstructive uropathy,
radiologist/intervention radiologists for diagnosis or intervention,
pediatric subspecialists for renal patients with other systems affected besides the genitourinary tract.
2. Ability to interact with non-physician colleagues including renal and dialysis nurses, secretaries, occupational therapists, dieticians, pharmacists, social workers, psychologists and school personnel (teachers, child guidance specialists)
3. Counseling of patients and families regarding nephro-urological conditions with significant clinical sequelae, genetic renal disorders, patients reaching end stage renal disease, patients on chronic dialysis, patients on transplantation, critically ill patients and patients on palliative care

Local training 13-15 months

1. Further develop the abilities to interact with physician and non-physician colleagues
2. Ability to lead a team including a more junior medical officers to effectively evaluate and treat in patients with pediatric renal disorders
3. Ability to present clinical patient care or pediatric nephrology lectures to colleagues

Local training 16-18 months and during overseas training

1. Refine the skills developed during the previous years
2. Be able to interact effectively with administrative personnel and to deal the administrative issues efficiently

4. Professionalism

Local training 0-12 months

1. Ability to establish a professional relationship with pediatric nephrology patients, their families, care givers and support personnel.
2. Ability to relate to pediatric nephrology patients and their families and caregivers with compassion, respect and integrity.
3. Ability to relate well to other members of the health care team.
4. Ability to accept and integrate constructive criticisms pertaining to clinical skills, pediatric nephrology knowledge and interpersonal skills.

Local training 13-15 months

Ability to form appropriate and constructive professional relationships with colleagues.

Local training 16-18 months and during overseas training

Develop a collegial attitude with fellow investigators, technicians and support personnel.

5. Practice based and evidence based learning

1. Ability to recognize one's own limitation in knowledge or clinical skills and seek assistance from a more senior fellow or from experts
2. Ability to teach pediatric nephrology and pediatric care to medical students, junior doctors and nurses.
3. Participation in patient care conferences with medical and non-medical personnel, including counseling and psychological issues involved with pediatric renal patients.
4. Participation in regular pediatric renal patient review conferences, including assessment of patient care and formulation of a plan in concert with other members of the pediatric nephrology team.
5. Participation in the review with the renal pathologist following each renal biopsy and in the renal pathology conferences including native kidney and kidney transplant biopsies.

6. Participation in renal courses, lectures and workshops including regional, national and international conferences on nephrology, dialysis, continuous renal replacement therapies, and transplantation.
7. Participation in research seminars from both pediatric and adult nephrology services to learn the scope of the research available
8. Learn the methodology and rigors of preparing and submitting a manuscript.
9. Identification of researchers with projects of similar interests and research pursuits for potential collaboration.
10. Develop a clinical or basic research project with hypothesis, objectives and research design.
11. Acquire methods for appropriate statistical design and analysis of research data.
12. Recognize good and poor research methodology and be able to appraise the literature in pediatric nephrology critically.
13. Develop self-education skills to be able to continue professional development following completion of training.
14. Maintain a current, up-to-date knowledge of major national and international protocols in the treatment of pediatric nephrology diseases and provide a critical analysis of the methodologies of these projects.
15. Knowledge of the current research needs and upcoming therapies in pediatric nephrology, dialysis and transplantation.
16. Ability to independently prepare and present lectures on common pediatric nephrology topics to post graduate trainees or pediatricians or family physicians in the community.

Areas of expertise

This section provides a detail description of the different areas of Paediatric Nephrology which trainees are expected to expertise by the end of the training period before they are board certified.

Basic sciences in Nephrology

- Important issues in embryogenesis of genitourinary system and the normal anatomy
- Functional maturation of kidneys from fetal life to adult hood
- Normal tubular function
- Fluid, electrolyte, calcium, phosphate, acid base and endocrine control of kidneys in neonates, infants and children
- Structural adaptation of kidneys to reduced renal mass and clinical consequences
- Adaptive responses of kidneys to fluid and electrolyte disturbances
- Disorders of kidneys and endocrine diseases that cause fluid electrolyte disturbance
- Assessment of glomerular filtration rate

Congenital and inherited disorders

- Pathogenesis of developmental disorders of renal parenchyma
- Recognize multiple malformation syndromes associated with developmental renal disorders
- Renal manifestations of metabolic diseases
- Aetiologies, pattern of inheritance, genetics, and diagnostic approach of inherited cystic disorders, and tubulopathies
- Long term follow up work for each disease entity addressing the specific clinical sequel

Glomerular disorders

- Structure of the glomerular capillary wall and mesangium
- The aetiology, pathophysiology, and genetic and immunological basis of glomerular diseases
- Differentiation of idiopathic nephrotic syndrome from other glomerulopathies
- Various modes of presentations
- Approach to rapidly proliferative glomerular nephritis
- Rational use of various therapeutic strategies eg immunosuppressive agents, cytotoxic drugs, immunoglobulin, plasmapheresis and dialysis

Vascular disorders

- Current classification of childhood vasculitis, and systemic lupus erythematosus
- Extra renal manifestations of vasculitides and connective tissue disorders
- Uncommon presentations of vasculitides, SLE and HSP
- Life threatening emergencies of vascular disorders
- Ability to differentiate a vasculitic process from sepsis
- Appropriate use of tissue diagnosis from other organs
- Disorders that comprise the HUS-TTP disease spectrum; their aetiology, genetics, multi-system clinical manifestation, pathogenesis and outcome
- Understand specific treatment strategies and their timing in different vascular disorders

Interstitial nephritis

- Understand the disease spectrum of acute and chronic tubulointerstitial nephritis and the disease sequel
- Identify acute tubulointerstitial nephritis as a cause of acute renal failure in children

Urinary tract infection and urological disorders

- Up to date knowledge of current concepts in the management of childhood UTI
- Understand the role of the nephrologist in management of children with urological disorders

- Evaluation of a child for improvement after diagnosis and following the corrective surgery of a urological problem
- Medical complications associated with urological problems

Urinary tract structure and disorders of micturition

- Physiology of bladder function and the normal acquisition of bladder control
- Pathophysiology, important urologic consequences and medical complications associated with neuropathic bladder
- Evaluation of a child with bladder dysfunction secondary to neuropathic bladder, or disturbances of anatomy of lower urinary tract or acquired functional disorders.
- Interpretation of urodynamic studies
- Appropriate pharmacological and urological intervention of different types of bladder dysfunction
- Understand the importance of the multidisciplinary approach in the management of these children.

Haematuria and Proteinuria

- Causes of and appropriate investigations for, haematuria and proteinuria
- Glomerular and tubular handling of protein
- Differentiate between pathological and physiological causes, and develop a diagnostic care pathway

Hypertension

- Defining hypertension according to normal blood pressure data in children, infants and neonates
- Blood pressure measurement using different methods and different devices; their advantages and limitations
- Mechanisms causing primary (essential) and secondary hypertension and age specific aetiologies.
- Diagnostic work up for each age group and rational use of antihypertensive drugs
- Management of hypertensive emergencies and long term complications

Nephrolithiasis and Nephrocalcinosis

- Aetiology of renal stone formation and nephrocalcinosis, including underlying metabolic and genetic disorders
- Radiological investigations and metabolic screening
- Acute and chronic medical and surgical management of renal stones including lithotripsy

Acute kidney injury

- Evaluation of neonates, infants and children with acute renal failure (ARF) to identify the underlying cause/causes
- Differentiation of a child with ARF, acute exacerbation of chronic renal failure (CRF) or end stage renal failure (ESRF)
- Ability to understand the underlying glomerular and tubular nature of the illness
- Prescription of individualized fluid regimes
- Management of electrolyte, calcium, and acidification disturbances, hypertension and nutrition
- Indications of dialysis and selection of the modality
- Decision making to perform appropriate investigations including renal biopsy
- Specific management of patients with multi-organ failure or other systemic diseases

Chronic kidney disease (CKD)

- Classification of CKD and its limitations in children
- The different aetiologies of CKD, presentation, clinical course and prognosis of diseases
- Pathophysiology and management of systemic complications, including renal osteodystrophy, anaemia, hypertension, and acidosis
- Strategies to slow the progression of the kidney disease
- Management of growth and nutrition, including the use of enteral feeding and growth hormone
- Cardiovascular risk factors including hyperlipidaemia and hypertension
- Counsel children, young people and families on the diagnosis and implications of permanent kidney failure, including the need for dialysis and transplantation
- Learn and understand the international recommendations in managing children with chronic kidney diseases, including KDOQI guidelines

Renal replacement therapy

Management of patients on chronic dialysis

- Monitoring the dialysis adequacy, growth and nutrition
- Fluid management and dietary modification according to the dialysis modality and individual patient
- Psychosocial support

Haemodialysis

- Principles of haemodialysis and its comparison with other methods of dialysis
- Management of different forms of vascular access, and their complications, working with dialysis nurses, vascular surgeons and interventional radiologists
- Performances of different dialysis machines; advantages and problems
- Prescription of haemodialysis for individual patients

- Monitoring dialysis adequacy and tailoring the regime for individual patients
- Identification of procedure related, patient related and machine related complications
- Emergencies associated with haemodialysis: Identification and management
- Intradialytic nutrition

Peritoneal Dialysis

Principles of peritoneal dialysis, the different available modalities and the advantages and disadvantages compared to haemodialysis

- Surgical procedure of insertion of peritoneal dialysis catheters
- Acute and chronic peritoneal dialysis prescription
- Performance of peritoneal equilibration test (PET) and monitoring the dialysis adequacy and tailoring the regime for individual patients
- Ability to diagnose and manage the complications of peritoneal dialysis, and of peritoneal dialysis access, working with dialysis nurses, and surgeons
- International guidelines on management of peritonitis and catheter related infections

Plasmapheresis and continuous renal replacement therapy

- Principles of continuous renal replacement therapy and plasmapheresis: indications, techniques and complications
- Renal replacement therapy and plasmapheresis: prescription and management
- Co-operative and collaborative work with dialysis nurses, access surgeons and interventional radiologists, and other specialties including PICU staff and laboratory staff
- Be able to assess the clinical response
- Excretion of various drugs and timing and dosing of drugs in relation to the procedure

Transplantation

- Advantages and disadvantages of cadaveric versus live-related donor transplantation, the advantages and disadvantages of pre-emptive transplantation
- Selection of cadaveric donors and preservation of organs obtained
- Principles of matching recipient and donor, the immunological basis of graft rejection and tolerance, the importance of blood group and HLA matching and donor-recipient cross matching
- Team approach in transplant work-up: working with transplant surgeons and co-ordinators, intensivists, anaesthetists and tissue-typing and other laboratories.
- Assessment for the suitability of a patient for renal transplant and donor selection including the statutory regulations
- Anatomy and basic surgical procedures involved in transplantation, their complications and treatment
- Anatomical and functional differences of a transplanted kidney

- Management of fluid and electrolyte balance and blood pressure in the peri-operative transplant period
- In detail knowledge of different immunosuppressive protocols used in transplantation, their mechanisms of action, monitoring their benefits and side-effects
- Pathophysiology of acute complications; diagnosis and management
- Anticipated long term complications, related to the transplant, drugs, and primary illness
- Cardiovascular complications of post transplant patients
- Counseling of patients regarding fluid, diet, drugs and behaviour
- Important issues related to adolescence which leads to non compliance and rejection

Annexure II



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
BOARD OF STUDY IN PAEDIATRICS**



MD PAEDIATRIC NEPHROLOGY

PROGRESS REPORT

Important Information

- For each period of training all nominated supervisors are required to either complete an individual report or co-sign a report
- Training will not be certified without the final supervisor's report

TRAINEE'S DETAILS AND TRAINING POSITION

Full name of the trainee :
Report period from : to
Training position :

TRAINER'S DETAILS

Full name of trainer :
Qualifications :
Hospital :
E mail :

ASSESSMENT OF THE CURRENT PERIOD OF TRAINING

Please rate the trainee’s performance for each topic area by placing a rating of 1-5 (or N/A) in the box next to each topic area

- Rating Scale**
- 1 - Falls far short of expected standards
 - 2 - Falls short of expected standards
 - 3 - Consistent with level of training
 - 4 - Better than expected standards
 - 5 - Exceptional performance
 - N/A Not Applicable for this training period

Medical Knowledge Demonstrates up-to-date knowledge required to manage patients	
Application of Medical Knowledge Shows ability to use the knowledge and other derived evidence based information	
Procedural Skills Demonstrates ability to perform practical/ technical procedures	
Interpersonal/ Communication Skills Demonstrates ability to communicate with patients and their families	
Clinical Judgment Demonstrates ability to integrate cognitive and clinical skills, and consider alternatives in making diagnostic and therapeutic decisions	
Responsibility Accepts responsibility for own actions and understands the limitations of own knowledge and experience	
Punctuality	
Problem Solving Skills Critically assesses information, identifies major issues, makes timely decisions and acts upon them	
Humanistic Qualities Demonstrates integrity and compassion in patient care	
Respect Shows personal commitment to honouring the choices and rights of other persons	
Moral and Ethical Behaviour Exhibits high standards of moral and ethical behaviour towards patients and families	
Professional Attitudes and Behaviour Shows honesty at all times in their work, put patient welfare ahead of personal consideration	
Patient Management Shows wisdom in selecting treatment, adopt management to different circumstances	

Psychological Development Demonstrates ability to recognize and/ or respond to psychological aspects of illness	
Medical Care Effectively manages patients through integration of skills resulting in comprehensive high quality care	
Research Methodology Understands scientific methodology; participate in research studies by formulating and testing hypothesis and analysing the results	
Quality Assurance Demonstrates ability to initiate and evaluate Quality Assurance programmes	
Record Keeping Maintains complete and orderly records and up-to-date progress notes	
Discharge/ Planning Summaries Ensures that all problems are explained prior to discharge from hospital; prepare concise and prompt discharge summaries	
Reports Complete succinct and accurate reports without delay; communicates with referring practitioner for continuing care	
Relationships with Medical Staff Maintains the respect of his/ her colleagues	
Relationships with Health Professionals Demonstrates ability to work well and efficiently in the health care team; values the experience of others	
Relationships with Clerical Staff Relates easily to members of staff; maintains team spirit and encourages cooperation	
Organization Skills Demonstrates ability to plan, coordinate and complete administrative tasks associated with medical care	
Self-Assessment Accepts the limits of own competence and functions within own capabilities; seeks advice and assistance when appropriate; accepts criticism	
Continuing Education Shows a resourceful attitude towards continuing education to enhance quality of care	

Please comment on any **strengths and weaknesses** that the trainee displayed with regard to the above areas

Strengths:-

COMPONENTS OF TRAINING IN GENERAL PAEDIATRICS

Weaknesses:-

A.	Are you satisfied with the overall performance of the trainee during the period covered by this report?	
	If no, are there any specific factors which may have affected this trainee’s performance or do you have any reservations about performance?	
B.	Did the trainee take any leave during the period covered by this report?	
	If yes, please indicate the periods and types of leave and whether prior approval was obtained.	
TRAINER’S COMMENTS		

Trainee’s signature:	Date
Trainer’s Signature	Date

Annexure III



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



Case Based Discussion (CBD)

Trainee's name					
Date of assessment (dd/mm/yyyy)					
Training Centre					
Year of training:	1	2	3	4	
Clinical setting	OPD/Clinic		In-patient		Acute Admission
Clinical problem					
Focus of Clinical Encounter	History	Examination	Diagnosis	Management	Discussion
Other (Please specify)					

Please insert a brief clinical summary of the case below (e.g. 3 years old with macroscopic haematuria)

Please grade the below areas using the given scale:

Grading	Unsafe	Below Expectations	Borderline	Meets expectations	Above Expectations	Well above expectations	Unable to comment
	F	E	D	C	B	A	
History							
Clinical Assessment							
Problem identification							
Investigation							
Management							

**Overall performance	Unsafe	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
------------------------------	---------------	--------------------------	-------------------	--------------------------	--------------------------	-------------------------------

**** Mandatory : Please grade the overall performance of the trainee on CBD**

Areas of strengths/weaknesses	Suggestions for improvement/further development
Action agreed upon :-	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



MINI CLINICAL EVALUATION (MCE)

Trainee's name	:									
Date of assessment (dd/mm/yyyy)	:									
Training Centre	:									
Year of training:	:	1	2	3	4					
Clinical setting	:	OPD/Clinic	In-patient	Acute Admission						
Clinical problem	:									
Focus of Clinical Encounter	:	History	Examination	Diagnosis	Management	Discussion				
Other (Please specify)										

Please insert a brief clinical summary of the case below (e.g. 3 day old baby with respiratory distress):

Please grade the below areas using the given scale:

Grading	Unsafe	Below Expectations	Borderline	Meets expectations	Above Expectations	Well above expectations	Unable to comment
	F	E	D	C	B	A	
History Taking							
Communication Skills							
Examination							
Clinical Judgment							
Initial Management							
Professionalism							
Organization/ Efficiency							

**Overall performance	Unsafe	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
-----------------------	--------	-------------------	------------	-------------------	-------------------	------------------------

**** Mandatory : Please grade the overall performance of the trainee on MCE**

Areas of strength	Suggestion for development
Action agreed upon :-	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



MULTI SOURCE FEEDBACK (MSF)

Trainee's name :				
Date of assessment : (dd/mm/yyyy)				
Training Centre :				
Year of training: :	1	2	3	4

Length of working relationship (in months) :

You will be expected to provide a feedback on the work performance of the trainee with anonymous feedback of at least 2 members of the hospital staff (seniors, peers, juniors, nurses and other health professionals)

Grading	Unsafe	Below Expectations	Borderline	Meets expectations	Above Expectations	Well above expectations	Unable to comment
	F	E	D	C	B	A	
Ability to diagnose patient problems							
Ability to formulate appropriate management plans							
Ability to manage complex patients							
Awareness of his own limitations							
Responds to psychosocial aspects of patients							
Appropriate utilization of resources e.g. ordering investigations							
Ability to coordinate patient care							
Technical skills (appropriate to current practice)							
Ability to apply up-to-date / evidence based medicine							
Ability to manage time effectively / prioritize							
Ability to deal with stress							

Commitment to learning Willingness and effectiveness when teaching/training colleagues							
Communication with carers and/or family							
Ability to recognize and value the contribution of others							
Accessibility / reliability							
Leadership skills							
Punctuality							

**Overall performance	Unsafe	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
----------------------------------	--------	----------------------	------------	----------------------	----------------------	---------------------------

**** Mandatory for the trainer to complete**

Trainer's comments:	Suggestion for development
Action agreed upon	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's :
comments

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



DIRECTLY OBSERVED PROCEDURAL SKILLS (DOPS)

Trainee's name	:							
Date of assessment (dd/mm/yyyy)	:							
Training Centre	:							
Year of training:	:	1	2	3	4			
Clinical setting	:	Ward-patient		ETU/OPD		Intensive Care unit		
Other (Please specify)	:							

Please insert a brief summary of the procedure observed

Please grade the below areas using the given scale:

	Unsafe	Below Expectations	Borderline	Meets Expectations	Above Expectations	Well above Expectations	Unable to comment
	F	E	D	C	B	A	
Demonstrates understanding of indications relevant anatomy, technique of procedure							
Obtains informed consent							
Demonstrate appropriate preparation pre-procedure							
Appropriate anaesthesia/sedation							
Technical ability							
Aseptic technique							
Seeks help where appropriate							
Post procedure management							
Communication skills							
Consideration of patient/professionalism							

Overall ability to perform procedure							
--------------------------------------	--	--	--	--	--	--	--

**Overall performance	Unsafe	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
------------------------------	--------	-------------------	------------	-------------------	-------------------	------------------------

**** Mandatory for the trainer to complete**

Trainer's comments:	Suggestion for development
Action agreed upon	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



ASSESSMENT OF TEACHING SKILLS

Trainee's name	:							
Date of assessment (dd/mm/yyyy)	:							
Training Centre	:							
Year of training:	:	1	2	3	4			
Clinical setting	:	Ward-patient	ETU/OPD	Intensive Care unit				
Other (Please specify)	:							

Please insert a brief summary of the teaching skill assessed

--

Please grade the below areas using the given scale:

	Unsafe	Below Expectations	Borderline	Meets expectations	Above Expectations	Well above expectations	Unable to comment
	F	E	D	C	B	A	
Clarity and Organization (all sessions)							
Presents material in a logical sequence							
Summarizes major points of lesson							
Method of communication medium							
Demonstration of physical signs							
Effective communication							
Projects voice clearly, with intonation; easily heard							
Demonstrates and stimulates enthusiasm							

Varied explanations for complex and difficult scenarios							
material, using examples to clarify points							
Defines unfamiliar terms, concepts and principles							
Listens to students' questions and comments							
Interaction with students							
Information up-to-date							
Demonstrates advanced preparation for teaching sessions							

**Overall performance	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
------------------------------	-------------------	------------	-------------------	-------------------	------------------------

**** Mandatory for the trainer to complete**

Areas of strength	Suggestion for development
Action agreed upon	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



COMMUNICATION SKILLS

Trainee's name	:						
Date of assessment (dd/mm/yyyy)	:						
Training Centre	:						
Year of training:	:	1	2	3	4		
Clinical setting	:	Ward-patient	ETU/OPD	Intensive Care unit			
Other (Please specify)							

Please insert a brief summary of the communication scenario assessed

Please grade the below areas using the given scale:

	Unsafe	Below Expectations	Borderline	Meets Expectations	Above Expectations	Well above Expectations	Unable to comment
	F	E	D	C	B	A	
Conduct of Interview							
Introduction, clarifies role							
Rapport							
Empathy and respect							
Appropriate explanation and negotiation							
Clear explanation, no jargon							
Assessment prior knowledge of patient							
Appropriate questioning style							
Explores and responds to concerns and feelings							
Summarises and checks understanding							
Offer support and plan the management							

Time for questions							
Accuracy of information given							
Appropriate selection of information							
Accuracy of information							

**Overall performance	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
------------------------------	--------------------------	-------------------	--------------------------	--------------------------	-------------------------------

**** Mandatory for the trainer to complete**

Areas of strength	Suggestion for development
Action agreed upon	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____



**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA
IN SERVICE TRAINING ASSESSMENT
MD PAEDIATRIC NEPHROLOGY**



Discharge Summaries, Referrals & Letters (DSRL)

Trainee's name :							
Date of assessment : (dd/mm/yyyy)							
Training Centre :							
Year of training: :	1	2	3	4			
Clinical setting :	Ward-patient		ETU/OPD		Intensive Care unit		
Other (Please specify)							

Please insert a brief summary of the scenario assessed

--

Please grade the below areas using the given scale:

	Unsafe	Below Expectations	Borderline	Meets Expectations	Above Expectations	Well above Expectations	Unable to comment
	F	E	D	C	B	A	
Problem List							
Is there a medical problem list?							
Are any obvious and significant problems omitted?							
Are any irrelevant problems listed?							
History							
Is there a record of the family's current concerns being sought of clarified?							
Is the document history appropriate to the problems and questions?							
Examination							
Is the documented examination appropriate to the problems and questions?							

Overall assessment							
Is the current state of health or progress clearly outlined?							
Are the family's problems or questions addressed?							
Is/are the referring doctor's questions addressed?							
Is a clear plan of investigation or non-investigation recorded?							
Are the reasons for the above plan adequately justified?							
Are all the known treatments, or absence of treatment, recorded clearly?							
Are all the doses clearly stated in formal units?							
Is adequate justification given for any changes to treatment?							
Is there an adequate record of information shared with the family?							
Follow up							
Is it clear whether or not hospital follow-up is planned?							
Is the purpose of follow up adequately justified?							
Clarity							
Is there much unnecessary information?							
Does the structure of the letter flow logically?							
Are there any sentences you do not understand?							

**Overall performance	Below Expectation	Borderline	Meets Expectation	Above Expectation	Well above Expectation
------------------------------	--------------------------	-------------------	--------------------------	--------------------------	-------------------------------

**** Mandatory for the trainer to complete**

Areas of strength	Suggestion for development
Agreed action	

Assessor's position : Consultant Senior Registrar

Assessor's signature : _____ Assessor's Name : _____

Trainee's comments :

Trainee's signature : _____

Annexure IV

Portfolio

Content of the portfolio should encompass all of learning outcomes mentioned below and contains evidence of achievement of these outcomes by the trainee.

1. Subject expertise
2. Teaching
3. Research and Audit
4. Ethics and medico legal issues
5. Information technology
6. Lifelong learning
7. Reflective practice

Subject expertise

- Progress reports from supervisors on a prescribed format
- ISTA forms
- Log of procedures carried out
- This section must include evidence that the trainee has acquired the essential knowledge, skills and competencies related to the subspecialty

Teaching

- Undergraduates
- Postgraduates
- Ancillary health staff

Research and audit relevant to specialty or subspecialty

- Research papers published
- Abstracts of presentations

Ethics and Medico – legal issues

- Completed Professionalism Observation Forms (from integrated learning component of Professionalism Strand)
- Completed PTR forms

PTR forms (***Refer General Paediatric Prospectus***) should be completed according to the instructions and submitted to the PGIM every six months by the trainee. A satisfactory PTR report is a requirement for PBCA.

Information technology

- Participation in training programmes /workshops
- Evidence of searching for information and application of findings in practice

Life- long learning

- Participation in conferences and meetings

Reflective practice the fundamental basis of Portfolio maintenance is reflective practice which is an important tool in postgraduate training.

Reflective practice consists of:-

Focused self-assessment

Reflecting on experience

Reflecting on strengths, weaknesses and areas for development

Design of own strategies that leads to improvement in practice

- Narration of at least one learning event experienced by the trainee, in relation to each of the above outcomes, with reflection on what and how the trainee learned from this experience.

The trainee is expected to continue updating the portfolio during the local and foreign training.

Prior to the Pre-Board Certification Assessment (PBCA), a panel of two examiners appointed by the BOS will assess the completed portfolio. A satisfactory Portfolio Assessment Report is a mandatory requirement for the PBCA.

For further details refer General Paediatrics Prospectus.

Portfolio Assessment Report

Subject expertise, teaching, research and Audit, ethics and medico legal issues, information technology and lifelong learning will be assessed according to the rating scale mentioned below.

	Marks/10
Fail	3
Borderline	4
Pass	5
Good pass	6
Excellent pass	7+

Reflective practice will be assessed according to the following rating scale given below.

		Marks/10
Fail	Has not completed Reflective cycle	3
Borderline	Has only described the learning experience	4
Pass	Analysed the reasons for the experience & the reasons for outcome	5
Good Pass	Evaluated how the outcome could have been different if a different course of action was taken	6
Excellent Pass	Provided high quality evidence for implementing changes	7+

Annexure V

**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO
Sri Lanka**

Postgraduate Training in Paediatrics Nephrology

Log Book

CONTENTS

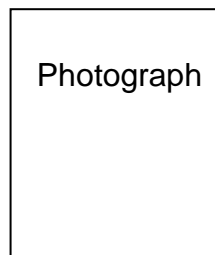
Profile

1. Local training
 - General Nephrology
 - Acute kidney injury
 - Chronic kidney disease
 - Renal replacement therapy
 - Communication skills
 - Procedures
 - Investigations
 - Additional appointments

2. Foreign training
 - General Nephrology
 - Acute kidney injury
 - Chronic kidney disease
 - Renal replacement therapy
 - Communication skills
 - Procedures
 - Investigations

3. Presentations, journal clubs etc.
4. Continuous medical education
5. Membership of societies
6. Research project
7. Audits
8. Annexure

Profile



Full Name :
Date of Birth :
Permanent address :
Telephone/mobile number :
E mail address :
Date of passing MD Paediatrics Part :
1
Date of passing MD Paediatrics Part :
2

Local training in Paediatric Nephrology

Centre :
Supervising Consultant :
Duration :

Foreign training in Paediatric Nephrology

Centre :
Supervising Consultant :
Duration :

Postgraduate Institute of Medicine
 Postgraduate Training in Paediatric Nephrology
 Local Training

General Nephrology

Indicate the number of cases of each of the following conditions you have seen during your period of training. These need not be children from initial diagnosis but should be cases which have been useful in increasing your understanding of paediatric nephrology.

Condition	Number of cases
Urinary tract infection	
Structural malformation of the urinary tract	
Renal tubular or metabolic disorder	
Nephrotic syndrome	
Glomerulonephritis	
Haemolytic uraemic syndrome	
Vasculitis	
Interstitial nephritis	
Haematuria &/or proteinuria	
Newly diagnosed hypertension	
Nephrolithiasis & nephrocalcinosis	
Genetic disorder	

 Signature of the
 supervisor

 Date

Postgraduate Institute of Medicine
 Postgraduate Training in Paediatric Nephrology

Acute Kidney Injury / Critical Care Nephrology

Condition	Number of cases
Cases of acute kidney injury you have been involved in managing	
Cases with acute renal failure in an intensive care unit you have managed	
Neonates with acute kidney injury you have been involved in treating	

 Signature of the
 supervisor

 Date

Postgraduate Institute of Medicine
 Postgraduate Training in Paediatric Nephrology

Chronic Kidney Disease

Indicate the number of cases of each of the following conditions you have seen or managed during your period of training.

Condition	Number of cases
Children with chronic renal failure (GFR < 30ml/min/1.73m ²)	
Your involvement in discussing dialysis options for newly diagnosed patients with end-stage renal failure	
Your involvement on advising transplant options for newly diagnosed patients with end-stage renal failure	

 Signature of the
 supervisor

 Date

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Renal replacement therapy

Peritoneal dialysis

Condition	Number of cases
Patients on manual peritoneal dialysis you have managed	
Patients on automated peritoneal dialysis you have managed	
Patients on chronic ambulatory peritoneal dialysis you have supervised	
Management of exit site infections	
Management of peritonitis	
Management of ultrafiltration failure	

Haemodialysis

Condition	Number of cases
Patients on acute haemodialysis	
Patients on chronic haemodialysis	
Management of intradialytic complications	
Management of central line infections	
Management of other complications related to vascular access	
Patients on Continuous renal replacement therapy	
Patients on plasmapheresis	
Other therapies ,eg; immunoadsorption	

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Renal transplantation

Indicate the number of patients you have been involved in managing in the following situations

Condition	Number of cases
Pre-transplant evaluation	
Preparation of a patient for a transplant	
Management of patients for the first 12 hours after a transplant	
Patients you have followed up after a transplant	
Management of acute rejection episodes after transplant	
Management of severe infection in a transplant recipient	
Patients with combined liver kidney transplant	

Signature of the
supervisor

Date

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Communication skills

	Number of Cases
Your involvement in breaking bad news to parents	
Your involvement in counselling of patients /parents regarding the implications of newly diagnosed end stage renal failure	

Signature of the
supervisor

Date

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Procedures

Please complete the forms given in Annexure V A for a maximum of 40biopsies you perform and Annexure VB for a maximum of 10 acute vascular catheters you insert.

Procedure	Number
Native renal biopsies	
Transplant renal biopsies	
Insertion of stiff peritoneal dialysis catheter	
If your unit policy is to have stiff peritoneal dialysis catheters inserted in theatre, have you been present in one of these occasions?(please tick)	
Insertion of acute vascular access catheters	
If you unit policy is to have acute vascular access catheters inserted in theatre, have you been present in one of these occasions? (please tick)	
Ultrasonography of the renal allograft	
Observe a transplant operation	
Observe a haemodialysis machine being set up	
Observe a CRRT machine being set up	
Observe a peritoneal dialysis machine being set up	
Observe a PET test being performed	
Observe insertion of a permanent vascular catheter	
Observe insertion of a coiled OD catheter with tunnelling	

 Signature of the
 supervisor

 Date

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Investigations

Investigation	Signature
Renal ultrasound scan	
DMSA	
DTPA or MAG 3	
Intravenous urogram	
Micturating cystourethrogram	
CT scan	
MRI scan	
Angiography	
Urodynamic assessment	
Video urodynamic assessment	

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Additional appointments

Adult Nephrology

Centre:

Supervisor:

Signature:

Paediatric Intensive Care

Centre:

Supervisor:

Signature

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Scientific presentations

Date	Presentation/ Journal clubs	Signature

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Continuous medical education

Trainees are advised to participate in courses, lectures, meetings, workshops and research seminars in nephrology, dialysis and transplantation in both paediatric and adult nephrology. They are encouraged to participate in at least one regional or international conference during their training.

Date	Lecture/course/meeting/workshop/seminar/conference	Signature

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Membership of societies relevant to nephrology

Year	Society	Position held	Signature of supervisor

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Research project

Title:

Co-authors if any:

Centre:

Period:

Meeting /seminar/conference:

Journal citation:

Signature of supervisor:

Date:

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Research project

Title:

Co-authors if any:

Centre:

Period:

Meeting /seminar/conference:

Journal citation:

Signature

Date

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Research project

Title :

Co-authors if any :

Centre :

Period :

Meeting /seminar/conference :

Journal citation :

Signature

Date

Annexure V-A - Renal Biopsy Audit Form (Detail first 40 biopsies)

	BHT /clinic Number	N/T	No passes	No core	Complications
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Annexure V-B

Audit form for acute vascular catheter insertion

	Date	BHT/clinic No	Age	Site	Indication	Complications	Signature
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							