GARIS PANDUAN PROGRAM
DOKTOR PAKAR SURGERI PEDIATRIK UNIVERSITI KEBANGSAAN MALAYSIA
Edisi Jun 2025

ISI KANDUNGAN:

1. RINGKASAN PROGRAM DOKTOR PAKAR SURGERI PEDIATRIK UKM:

Tempoh pembelajaran ialah 4 tahun; tempoh maksima ialah 7 tahun. Program ini merupakan sistem terbuka.
Jadual Perincian Kursus:

Tahun 1: 6 Bulan di Hospital Canselor Tuanku Muhriz (HCTM)/Hospital Pakar Kanak-Kanak (HPKK) dan 6 Bulan di Hospital Tuanku Azizah (HTA) KL

Tahun 2: 6 Bulan di Pusat Perubatan Universiti Malaya (PPUM), 3 Bulan rotasi endoskopi di Hospital Kementerian Kesihatan Malaysia (KKM) yang diiktiraf atau di HCTM/HPKK dan 3 bulan rotasi PICU and NICU di mana-mana Hospital yang diiktiraf.

Tahun 3: 1 tahun di Hospital KKM yang diiktiraf

Tahun 4: 6 bulan di Hospital KKM yang diiktiraf/HTA dan 6 bulan di HCTM/HPKK.

2. TENAGA PENGAJAR DOKTOR PAKAR SURGERI PEDIATRIK UKM:

Semua tenaga pengajar mestilah memenuhi syarat-syarat yang telah dipersetujui oleh Jawatankuasa Kepakaran (JK) Surgeri Pediatrik atau *Paediatric Surgery Conjoined Committee.*

<u>Pakar Perunding Kanan/Pakar Perunding/Pakar Surgeri Pediatrik UKM:</u>

1. Dr. Marjmin Osman (Penyelaras Program Doktor Pakar Surgeri Pediatrik UKM).
2. Dr. Azrina Syarizad Binti Kuthubul Zaman.
3. Dr. Lim Li Yi (paediatrik urologi)

<u>Pakar Perunding Kanan/Pakar Perunding/Pakar Surgeri Am UKM (membantu penyelidikan):</u>

4. Profesor Madya Dr. Shahrun Niza Abdullah Suhaimi
5. Profesor Madya Dr. Azlanuddin Azman
6. Dr. Mohammad Azim Md Idris

Pakar Perunding Kanan Sambilan Surgeri Pediatrik/ Pediatrik Urologi UKM:

7. Dr. Zuraidah Ibrahim

Pakar Perunding Kanan/Pakar Perunding/Pakar Surgeri Pediatrik KKM:

8. Dr. Mohd Yusof Abdullah (Hospital Tunku Azizah, Kuala Lumpur)
9. Dr. Mohd Tarmizi Nor (Hospital Raja Perempuan Zainab II Kota Bharu, Kelantan)
10. Dr. Hazlina Khalid (Hospital Wanita & Kanak-Kanak Likas, Sabah)
11. Dr. Nurdaliza Binti Md Badaruddin (Hospital Raja Permaisuri Bainun Ipoh, Perak)
12. Dr. Junaidah binti Hassan (Hospital Sultanah Bahiyah Alor Setar, Kedah)
13. Dr. Chin Yen Ming (Hospital Umum Sarawak)
14. Pakar Perunding di mana-mana Hospital KKM yang diiktiraf.

Pakar Perunding Kanan/Pakar Perunding/Pakar PPUM:

15. Profesor Madya Dr. Shireen Anne Nah
16. Profesor Madya Dr. Anand a/l Sanmugam
17. Dr. Srihari Singaravel

Jabatan Pediatrik UKM:

18. Profesor Madya Dr. Shareena Ishak (NICU)
19. Dr. Wan Nurul Huda Binti Wan Mat Zin (NICU)
20. Dr. Lee Pei Chuan (PICU)
21. Dr. Chong Jia Yueh (PICU)

Jabatan Radiologi PPUKM:

22. Profesor Dr. Hamzaini Abdul Hamid (Radiologi Pediatrik)
23. Profesor Madya Dr. Faizah Mat Zaki (Radiologi Pediatrik)
24. Dr. Erica Wong (Radiologi Pediatrik)
25. Dr. Isa Azzaki bin Zainal (Radiologi Pediatrik Intervensi)

Jabatan Anestisiologi:

26. Profesor Dr Felicia Lim (Bius Pediatrik)
27. Dr. Rufina Tan (Bius Pediatrik)

Jabatan Patologi:

28. Profesor Dr. Tan Geok Chin (Patologi Perinatal dan Am)
29. Dr. Suria Hayati Md Pauzi (Patologi Am)

3. PANDUAN PEMBELAJARAN DOKTOR PAKAR SURGERI PEDIATRIK UKM:

Objektif Pendidikan program ialah menghasilkan:

1. Doktor Pakar Pediatrik Surgeri yang mempraktikkan pengetahuan saintifik serta kemahiran praktikal dan numerikal dengan menggunakan teknologi digital dalam bidang surgeri pediatrik.

2. Doktor Pakar Surgeri Pediatrik yang berkebolehan untuk memimpin, berkomunikasi, berinteraksi dan berkolaborasi dengan berkesan dalam menguruskan perkhidmatan penjagaan kesihatan pesakit surgeri pediatrik secara efektif.

3. Doktor Pakar Surgeri Pediatrik yang menunjukkan sifat komited terhadap keperluan pembangunan peribadi, pembelajaran sepanjang hayat dalam bidang surgeri pediatrik dan mempunyai minda keusahawan.

4. Doktor Pakar Surgeri Pediatrik yang bersikap profesional dan mengamalkan nilai etika, moral dan budaya yang tinggi dalam perkhidmatan pada masyarakat.

Hasil Pembelajaran Program ialah:

1. Menjelaskan ilmu pengetahuan tentang pembedahan pediatrik dan rumusan rawatan pesakit surgeri pediatrik.

2. Mengaplikasikan rawatan berdasarkan amalan perubatan terbaik untuk bidang surgeri pediatrik.

3. Mempamerkan kemahiran klinikal semasa menjalankan pembedahan dan prosedur ke atas pesakit surgeri pediatrik.

4. Menunjukkan keupayaan berinteraksi dan bekerjasama dengan ahli kumpulan multidisiplin.

5. Menyampaikan pengetahuan dan penemuan penyelidikan terkini dalam bidang surgeri pediatrik.

6. Mengintegrasikan pelbagai bentuk maklumat, media dan teknologi digital dalam bidang surgeri pediatrik.

7. Mentafsir data dan maklumat penyelidikan surgeri pediatrik.

8. Mempamerkan ciri pemimpin beretika dalam tugasan klinikal dan pentadbiran surgeri pediatrik.

9. Mempamerkan keupayaan pembelajaran sepanjang hayat dalam bidang surgeri pediatrik.

10. Mempamerkan inovasi keusahawanan dalam bidang surgeri pediatrik.

11. Menunjukkan etika perubatan yang baik dan tahap profesionalisme yang tinggi dalam bidang surgeri pediatrik.

Struktur kurikulum adalah berdasarkan kurikulum di dalam dokumen *National Postgraduate Medical Curriculum Paediatric Surgery training curriculum.*

1. **PANDUAN PENILAIAN DOKTOR PAKAR SURGERI PEDIATRIK UKM:**
   Penilaian berterusan amat penting untuk setiap calon. Setiap calon akan hanya dibenarkan menduduki peperiksaan bahagian 1 atau 2 sekiranya calon telah lulus penilaian berterusan. Calon yang gagal tidak akan dibenarkan menduduki peperiksaan.

   ' Workplace Based Assessment' terdiri daripada;

   a) 4 CBD
   b) 4 Mini-cex
   c) 1 DOPS
   d) 3 PBA
   e) 1 Mini test (atas talian)
   f) MSF (atas talian)
   g) Laporan Penyelia

Penilaian akan dibuat setiap 6 bulan oleh penyelia (*supervisor*) pelajar. Bagi *posting* yang melibatkan calon berada di hospital tertentu selama hanya 6 bulan, penilaian separa penggal (*mid-term* assessment) akan dijalankan iaitu setelah 3 bulan. Ini akan mempermudahkan peluang *remedial* sekiranya perlu. **Calon-calon adalah diingat untuk berjumpa penyelia masing-masing sekurang-kurangnya 2 kali dalam posting, berbincanglah dengan penyelia untuk memperbaiki kelemahan. Penilaian berterusan yang lulus bermaksud calon-calon beroleh pengesahan bahawa calon telah dinilai sebagai *"safe trainee and should continue further training in paediatric surgery"***

Berikut adalah isi kandungan penilaian berterusan yang membawa kepada keperluan penilaian setiap 6 bulan untuk setiap calon.

CASE BASED DISCUSSION ASSESSMENT FORM

DOCTOR OF PAEDIATRIC SURGERY

FACULTY OF MEDICINE, UKM

This is an official document which assesses the clinical competency of a trainee in day to day clinical practice. The assessment may be performed at the bedside or in clinic as the trainee engages in clinical practice with patients. This form must be completed by the trainee and the supervisor as soon as the assessment is completed. The supervisor is to provide feedback to the trainee and document the outcome of the assessment. Once completed, this form must be returned to the Department of Surgery UKM Medical Centre.

GENERAL INFORMATION

(To be completed in BLOCK LETTERS)

Trainee name:	Assessor name:
Year of training:	Date of assessment:
Training centre:	

Summary of the case

CLINICAL ENCOUNTER INFORMATION

Clinical setting	• Ward • Clinic • A&E • OT
Focus of clinical encounter	• Record keeping • Clinical assessment • Management • Professionalism
Complexity of case	• Low • Average • High

Domain of assessment	Poor	Average	Good	N/A
Clinical assessment of patient				
Interpreting available investigations				
Management				
Follow up and future planning				
Overall clinical judgement				
Medical record keeping				
Communication and referral				
Professionalism				

Medical record keeping	Legible; signed; dated; appropriate to the problem; understandable in relation to and in sequence with other entries; helps the next clinician give effective and appropriate care.
Clinical assessment	Understands the patient's story; clinical assessments are based on appropriate questioning and examination.
Investigation and referral	Discusses the rationale for investigations and necessary referrals; understands why diagnostic studies were ordered or performed, risks and benefits were relevant to the differential diagnosis.
Treatment	Discusses the rationale for the treatment, including the risks and benefits.
Follow-up and future planning	Discusses the rationale for the formulation of the management plan including follow-up.
Professionalism	Discusses the care of this patient as recorded, demonstrated respect, compassion, empathy and established trust; discusses the patient's needs for comfort, respect, confidentiality was addressed; record demonstrated an ethical approach, and awareness of any relevant legal frameworks; has insight into own limitations.

Strengths	Weaknesses

Feedback (strength / weaknesses)	
Agreed remedial action	

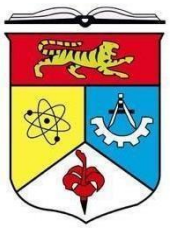
Trainee's signature

Assessor's Signature

Date:

Date:

MINI-CEX EXAMINATION ASSESSMENT FORM



DOCTOR OF PAEDIATRIC SURGERY

FACULTY OF MEDICINE, UKM

This is an official document which assesses part of clinical competency of a trainee (in the form of mini clinical evaluation exercise) in day to day clinical practice.

The assessment may be performed at the bedside or in clinic as the trainee engages in clinical practice with patients. This form must be completed by the trainee and the supervisor as soon as the assessment is completed. The supervisor is to provide feedback to the trainee and document the outcome of the assessment. Once completed, this form must be returned to the Department of Surgery UKM Medical Centre.

GENERAL INFORMATION

(To be completed in BLOCK LETTERS)

Trainee name:	Assessor name:
Year of training:	Date of assessment:
Training centre:	

CLINICAL ENCOUNTER INFORMATION

New (pls tick)	**Diagnosis:**	**Follow up (pls tick)**	**Diagnosis:**

Complexity of case	• Low	• Average	• High

student must be assessed on part A and B

Part A: The student may be assessed on more than one component. The assessor will choose the performance level. **A = Very Good B = Good C = Acceptable D = Poor E = Not done**		
Component	Performance Level	
History taking		
Physical examination		
Communication skills		
Professional behaviour		

Part B: The student may be assessed more than one component. The assessor will choose the performance level **A = Very Good B = Good C = Acceptable D = Poor E = Not done**		
Component	Performance Level	
Clinical judgement		
Management		

Summary of the case:	
Strengths	
Weaknesses	
Feedback	
Agreed action	

Trainee's signature

Assessor's Signature

Date:

Date:

DIRECT OBSERVATION OF PROCEDURAL SKILLS ASSESSMENT FORM

DOCTOR OF PAEDIATRIC SURGERY

FACULTY OF MEDICINE, UKM

This is an official document which assesses the surgical competency of a trainee. This form must be completed by the trainee and the supervisor immediately after performing the surgical procedure being assessed. The supervisor is to provide feedback to the trainee and document the outcome of the assessment. Once completed, this form must be returned to the Department of Surgery UKM Medical Centre.

GENERAL INFORMATION

(To be completed in BLOCK LETTERS)

Trainee name:	Supervisor name:
Year of training:	Date of assessment:
Procedure assessed:	

Score: 1 = Poor, 2 = Unsatisfactory, 3 = Satisfactory, 4 = Good, 5 = Excellent; N/A = non- applicable

Domain	Score					
	1	2	3	4	5	NA
Preoperative preparation of patient before surgery or in theatre						
Correct procedure chosen or undertaken. Knowledge of alternatives						
Attention to safety (follows 'Safe Surgery Saves Lives'						
Appropriate positioning, surgical markings and draping						

Knowledge of surgical steps and operative flow (include assisting						
Handling of tissue and instruments						
Handling of needles and sutures including knot tying						
Handles intraoperative events/complications well						
Communicate and utilises assistant well						
Non operative technical skills section (e.g., professionalism, temperament and team interactions)						
Immediate post-operative management and post-operative plan clearly spelt out						

OVERALL COMMENTS:

Overall performance: POOR / UNSATISFACTORY / SATISFACTORY / GOOD / EXCELLENT

* a performance of poor or unsatisfactory requires reassessment

Trainee signature

Supervisor Signature

Date:

Date:

PROCEDURE BASED/ SKILLS ASSESSMENT FORM

Doctor of Paediatric Surgery Faculty of Medicine, UKM

This is an official document which assesses the surgical competency of a trainee. This form must be completed by the trainee and the supervisor immediately after performing the surgical procedure being assessed. The supervisor is to provide feedback to the trainee and document the outcome of the assessment. Once completed, this form must be returned to the Department of Surgery UKM Medical Centre.

General Information

(To be completed in BLOCK LETTERS)

Trainee name:	Supervisor name:
Year of training:	Date of assessment:
Procedure assessed:	

Score:N = Not observed or not appropriate **U** = Unsatisfactory **S** = Satisfactory

Competencies and Definitions	**Score N / U / S**	**Comments**
Consent		
Demonstrates sound knowledge of indications and contraindications including alternatives to surgery		
Demonstrates awareness of sequelae of operative or non-operative management		
Demonstrates sound knowledge of complications of surgery		

Explains the perioperative process to the patient and/or relatives or carers and checks understanding		
Explains likely outcome and time to recovery and checks understanding		
Pre – operative preparation		
Demonstrates recognition of anatomical and pathological abnormalities (and relevant co-morbidities) and selects appropriate operative strategies/techniques to deal with these e.g. nutritional status		
Demonstrates ability to make reasoned choice of appropriate equipment, materials or devices (if any) taking into account appropriate investigations e.g. x-rays		
Checks materials, equipment and device requirements with operating room staff		
Ensures the operation site is marked where applicable		
Checks patient records, personally reviews investigations		
Pre operative preparation		
Checks in theatre that consent has been obtained		
Gives effective briefing to theatre team		
Ensures proper and safe positioning of the patient on the operating table		
Demonstrates careful skin preparation		
Demonstrates careful draping of the patient's operative field		
Ensures general equipment and materials are deployed safely (e.g. catheter, diathermy)		
Ensures appropriate drugs administered		
Arranges for and deploys specialist supporting equipment (e.g. ***Stoma bag***) effectively		
Exposure and closure		
Demonstrates knowledge of optimum skin incision / portal / access		
Achieves an adequate exposure through purposeful dissection in correct tissue planes and identifies all structures correctly		
Completes a sound wound repair where appropriate		
Protects the wound with dressings, splints and drains where appropriate		

Intra operative Technique		

Follows an agreed, logical sequence or protocol for the procedure		
Consistently handles tissue well with minimal damage		
Controls bleeding promptly by an appropriate method		
Demonstrates a sound technique of knots and sutures/staples		
Uses instruments appropriately and safely		
Proceeds at appropriate pace with economy of movement		
Anticipates and responds appropriately to variation e.g. anatomy		
Deals calmly and effectively with unexpected events/complications		
Uses assistant(s) to the best advantage at all times		
Communicates clearly and consistently with the scrub team		
Communicates clearly and consistently with the anaesthetist		
Post operative management		
Ensures the patient is transferred safely from the operating table to bed		
Constructs a clear operation note		
Records clear and appropriate post operative instructions		
Deals with specimens. Labels and orientates specimens appropriately		

Global Summary		
Level at which completed elements of the PBA were performed		**Tick as appropriate**
Level 0	Insufficient evidence observed to support a judgement	
Level 1	Unable to perform the procedure under supervision	
Level 2	Able to perform the procedure under supervision	

Level 3	Able to perform the procedure with minimum supervision (would need occasional help)	
Level 4	Competent to perform the procedure unsupervised (could deal with complications)	

Feedback / Comments
Strength and weakness:
Plan for improvement
Agreed action

Trainee signature

Supervisor Signature

Date:

Date:

TRAINEE ASSESSMENT FORM (FORM A)

UNIVERSITI KEBANGSAAN MALAYSIA
National University of Malaysia

DOCTOR OF PAEDIATRIC SURGERY

FACULTY OF MEDICINE, UKM

This is an official document which needs to be completed at the end of a placement by each supervisor. The trainee must have a formal meeting with the supervisor to discuss the his/ her performance. The signed and completed form must to be returned to Department of Surgery, UKM Medical Centre to be retained in the trainee's file.

GENERAL INFORMATION

(To be completed in BLOCK CAPITAL by trainee before meeting with the supervisor)

Supervisor name:		Specialty:	
Trainee name:		Date of assessment:	
Hospital		Training year	1 2 3 4
Assessment period		Annual leave taken	

WORK BASED ASSESSMENT

WBA	Dates (1st 3 months)	Dates (2nd 3 months)	Comment
Case Based Discussion	1.	1.	
	2.	2.	
DOPS	1.	1.	
Mini CEX	1.	1.	
	2.	2.	
	3.	3.	
PBA	1.	1.	
	2.	2.	

Trainer Assessment

Criteria	Not Assessed	Poor	Average	Good	Excellent	**Comments**
A. Clinical skills						
- Patient management	N/A	1	2	3	4	
- Clinical judgement	N/A	1	2	3	4	
- Operative skills	N/A	1	2	3	4	
- Aftercare management	N/A	1	2	3	4	
B. Knowledge						
- Basic science	N/A	1	2	3	4	
- Clinical	N/A	1	2	3	4	
C. Attitude						
- Reliability	N/A	1	2	3	4	
- Self motivation	N/A	1	2	3	4	
- Leadership	N/A	1	2	3	4	
- Team working	N/A	1	2	3	4	
- Administration	N/A	1	2	3	4	
D. Communication skills						
- Informed consent	N/A	1	2	3	4	
- Bereavement	N/A	1	2	3	4	
- Breaking bad news	N/A	1	2	3	4	

(For any score of 1 or 2, please fill up **form B** with detailed information)

PPD ASSESSMENT

Rating	0	1	2	3	4	5
Attributes	Not assessed	Poor	Borderline	Satisfactory	Good	Excellent

Good Clinical Practice						
Remains calm in stressful or high pressure situations and adopts a timely, rational approach Encourages feedback from all members of the team on safety issues Continues to be aware of one's own limitations, and operates within them Being accountable for their own decisions and actions Shows respect and behaves in accordance with Good Medical Practice	0	1	2	3	4	5
Probity and Ethics						
Recognizes and knows how to deal with unprofessional behaviour in clinical practice, taking into account local and national regulations Creates open and non-discriminatory professional working relationships with colleagues, awareness of the need to prevent bullying and harassment Acts as a positive role model in all aspects of communication Recognizes and responds to the causes of medical error Understands ethical obligations to patients and colleagues	0	1	2	3	4	5
Self Awareness and Self Management						
Demonstrates knowledge of tools and techniques for managing stress Able to identify one's own strengths, limitations and the impact of their behaviour Identifies own emotions and prejudices and understand how these can affect their judgement and behaviour Manage the impact of emotions on behaviour and actions Demonstrate knowledge of ways in which individual behaviours impact on others Demonstrate knowledge of techniques to facilitate and resolve conflict Demonstrate the ability to recognizes the manifestations of stress on self and others and know where and when to look for support	0	1	2	3	4	5

Quality and Safety Improvement						
Recognizes the necessity of monitoring performance to improve oneself Participates in safety improvement strategies such as critical incident reporting Develops reflection to achieve insight into own professional practice Demonstrates personal commitment to improve own performance in the light of feedback and assessment Engages with an open no blame culture Responds positively to outcomes of audit and quality improvement Co-operates with changes necessary to improve service quality and safety	0	1	2	3	4	5
Interpersonal Communication						
Recognizes and accept the responsibilities and role of the doctor in relation to other healthcare professionals Fosters an environment that supports open and transparent communication between team members Collaborates well with other members of a multidisciplinary team in managing patients Prevents and resolves conflict and enhances collaboration	0	1	2	3	4	5
Health advocacy						
Shows willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care Advises patients and their families on ways to maintain and/or improve their health Identify opportunities for advocacy and health promotion and respond appropriately Identify the determinants of health in the populations including barriers to access to care and resources	0	1	2	3	4	5

Conclusion

***This form will be deemed **invalid** if this section is not completed and will be returned to the trainee for correction by the supervisor

☐ **Satisfactory** in all aspect – Can proceed to further training

☐ **Satisfactory** to proceed, but the following areas of improvement have been identified and must be addressed in the next placement - This will constitute as a reminder (Please specify the reasons in **form B**)

☐ **Unsatisfactory** – To repeat training in this area – This will constitute as a warning. (Please specify the reasons in **form B**)

COMMENTS

Trainee signature | Supervisor signature | Head of department signature

Date: | Date: | Date:

TRAINEE ASSESSMENT FORM (FORM B)

CONFIDENTIA

UNIVERSITI KEBANGSAAN MALAYSIA
National University of Malaysia

DOCTOR OF PAEDIATRIC

SURGERY FACULTY OF

MEDICINE, UKM

This is an official document which needs to be completed at the end of a placement by the supervisor in **relation to the areas of concern** which has been identified in **Form A.** The completed form must be returned together with **form A** to the Department of Surgery, UKM Medical Centre to be retained in the trainee's file.

GENERAL INFORMATION

Supervisor name:		Specialty:	
Trainee name:		Date of assessment:	
Hospital		Training year	1 2 3 4
Assessment period			

A. Clinical skills	**Comments**
- Strength	
- Weakness	
- Areas for improvement	

- Recommendation	

B. Knowledge (Basic sciences /Clinical)	**Comments**
- Strength	
- Weakness	
- Areas for improvement	
- Recommendation	

C. Operative skills	**Comments**
- Strength	
- Weakness	
- Areas for improvement	
- Recommendation	

D. Attitude	Comments
- Strength	
- Weakness	
- Areas for improvement	
- Recommendation	

E. Communication skills	**Comments**
- Strength	
- Weakness	
- Areas for improvement	
- Recommendation	

Trainee signature Supervisor signature Head of department signature

Date: Date: Date

Calon-calon diperlukan menjalankan tugas atas panggilan sekurang-kurangnya 7 kali sebulan.

Penilaian berterusan juga melibatkan 2 buah buku log yang perlu dipenuhi oleh setiap calon. **Buku Log Tahunan** adalah dalam bentuk *census*. Calon tahun 1 perlu menunjukkan jumlah kes (*census*) pengendalian kes pembedahan yang sesuai dengan skil tahun 1, manakala calon tahun akhir pula perlu memasukkan jumlah kes yang dilakukan bagi setiap skil pembedahan yang sesuai untuk calon tahun akhir sepertimana yang tertera di bawah. **Buku Log Prosedur Bulanan** pula bertujuan memastikan calon-calon menjalankan audit skil dan kecekapan masing-masing dengan lebih terperinci termasuklah mendokumenkan sebarang laporan HPE kes biopsy yang dilakukan atau sebarang komplikasi atau *outcome* pesakit yang kurang baik.

MINISTRY OF HEALTH MALAYSIA

REVISED JUNE 2021: LOG BOOK MASTERS IN PAEDIATRIC SURGERY

CANDIDATE'S NAME AND MATRIC NO:

PROCEDURE	Core (C) Must Do / Year of Training	Mandatory Assisted (M) /Year of Training	Please fill in no of cases performed. The core (C) procedures must be done as Primary Surgeon in the particular year of training (SUPERVISED FOR C4). Therefore, to differentiate the no of cases according to the year of training, please ensure you use blue ink for year 1, green ink for year 2, red ink for year 3 and black ink for year 4.		
			PRIMARY SURGEON	**1st ASSISTANT**	**OBSERVER OR SECOND ASSISTANT**
CATEGORY I -: CORE PROCEDURES					
Insertion of urinary catheters	**C1**				
Peripheral intravenous catheter insertion	**C1**				
Nasogastric tube insertion	**C1**				
Oropharyngeal airway insertion	**C1**				
Prescribing oxygen therapy	**C1**				
Central venous insertion for child over 2 years	**C2**				
Central venous insertion for a child under 2 years (Past neonatal period)	**C4**				
Central venous insertion for a neonate		**M4**			
CATEGORY I -: General Procedures					
I& D of body abscesses excluding perianal	**C1**				
Lymph node biopsy excluding neck region	**C4**				
Lymph node biopsy neck region	**C4**				

Excision biopsy of subcutaneous lumps	**C2**				
Insertion of peritoneal dialysis catheter		**M4**			
Circumcision	**C1**				
Meatotomy		**M4**			

CATEGORY II -: Abdominal Surgery

Umbilical hernia repair		**M4**			
Surgery for omphalo-mesentric remnants		**M4**			
Inguinal hernia repair for a child over 2 years	**C2**				
Inguinal hernia for a child under 2 years	**C3**				
Surgery for hydrocoele	**C2**				
Surgery for undescended testis (palpable)	**C3**				
Pyloromyotomy	**C4**				
Open Appendectomy	**C1**				
Surgery for intestinal obstruction past the neonatal period	**C4**				
Operative reduction of intussusceptions	**C3**				

Resection of mesenteric & omental cysts		**M4**			
Small bowel resection with or without anastomosis past neonatal period	**C3**				
Creation of ileostomy	**C3**				
Closure of ileostomy	**C4**				
Creation of colostomy	**C3**				
Closure of colostomy	**C4**				
Large bowel resection & anastomosis		**M4**			
Rectal suction biopsy	**C1**				
Proctoscopy	**C3**				
Rectal polypectomy		**M4**			
Open rectal biopsy		**M4**			
Total and partial Splenectomy		**M4**			

CATEGORY III -: General Procedures

Excision of thyroglossal duct cyst		**M4**			
Excision of branchial cyst/fistula		**M4**			
Excision of periauricular sinus/cyst		**M4**			
Excision of Lymphatic Malformation		**M4**			

CATEGORY IV -: Thoracic Surgery

Excision of mediastinal tumors		**M4**			
Thoracotomy with or without lung lobectomy		**M4**			
Esophageal replacement		**M4**			
Endoscopy:					
1. Rigid/Flexible Bronchoscopy		**M4**			

CATEGORY V -: Neonatal Surgery (Abdominal)

Surgery for neonatal intestinal obstruction	**C3**				
Neonatal bowel anastomosis	**C4**				
Creation of colostomy for ARM	**C3**				
Repair of esophageal atresia & TEF (open)		**M4**			

Surgery for NEC	**C4**				
Rectal suction biopsy	**C1**				
Repair of diaphragmatic hernia	**C3**				
Repair of exomphalos minor	**C4**				
Repair of exomphalos major		**M4**			
Application of Silo for Gastroschisis	**C4**				
Repair of Gastroschisis		**M4**			

CATEGORY VI -: Liver/Biliary Tree

Surgery for biliary atresia		**M4**			
Surgery for choledochal cyst		**M4**			
Cholecystectomy (open)		**M4**			
Excision of hepatic tumors		**M4**			

CATEGORY VII: Pancreas

Internal drainage for pancreatic pseudocyst					
Distal pancreatic resection					
Exploration pancreatic duct & duct drainage or repair					
Pancreatic surgery for pancreatic tumours					

CATEGORY VIII: Renal Surgery

Surgery for ureteropelvic junction obstruction		**M4**			
Cystourethroscopy	**C4**				
Urethral dilatation	**C4**				
Surgery for urethral stricture		**M4**			
Fulguration of posterior urethral valve		**M4**			
Sting for vesico-ureteric reflux					
Vesico-ureteric reimplantation		**M4**			
Cystolithotomy					
Ureterolithotomy					
Nephrolithotomy					
Partial nephrectomy		**M4**			
Total nephrectomy	**C4**				
Urinary diversion: Temporary & permanent					
Augmentation cystoplasty					
Bladder neck reconstruction					
Surgery for urinary incontinence					
Bladder extrophy surgery					

CATEGORY IX: Suprarenal Gland

Adrenalectomy					

CATEGORY X: External Genitalia Surgery

Meatotomy/Dilatation	**C4**				
Meatoplasty	**C4**				
Repair for distal penile hypospadias		**M4**			
Repair of midshaft hypospadias		**M4**			
Correction of penile chordee		**M4**			
Correction of penile torsion					
Repair of proximal and perineal hypospadias		**M4**			
Redo hypospadias repair		**M4**			

Repair of urethral fistula		**M4**			
Surgery for ambiguous genitalia					
Surgery for vaginal atresia & obstruction					
Vaginal reconstruction					
Surgery of cloacal anomalies		**M4**			
Surgery of urogenital sinuses					
Surgery for tumours of the genito-urinary system		**M4**			

CATEGORY XI: Large Bowel, Rectum and Anus

Pullthrough procedure for HD Endorectal pull through (Soave) Swenson procedure for Hirschsprung disease Duhamel procedure for Hirschsprung disease Trans- anal pull through		**M4**			
Anoplasty Posterior sagittal anorectoplasty Abdominoperineal pull through for ARM (Open)	**C4**	 **M4** **M4**			
Surgery for Fistula-in-ano		**M4**			

CATEGORY XII: Laparoscopic & Thoracoscopic Surgery

Laparoscopic appendectomy	**C4**				
Laparoscopic exploration & orchidopexy for intra-abdominal testis		**M4**			
Laparoscopic pyloromyotomy		**M4**			
Diagnostic Laparoscopic exploration for acute abdomen		**M4**			
Laparoscopic exploration for trauma					
Laparoscopic cholecystectomy					
Laparoscopic excision of ovarian cysts		**M4**			
Laparoscopic excision of abdominal masses					

Laparoscopic procedures that include intra- corporeal knotting		**M4**			
Laparoscopic bowel resection & intra-corporeal anastomosis					
Laparoscopic splenectomy					
Laparoscopic pull through		**M4**			
Laparoscopic Nephrectomy					
Laparoscopic Pyeloplasty					
Laparoscopic abdominal tumour biopsy					
Laparoscopic supra renal tumour excision					
Laparoscopic repair of diaphragmatic hernia					
Thoracoscopic lung biopsy					
Thoracoscopic lobectomy/sequestered lung					
Thoracoscopic repair of diaphragmatic hernia					
Thoracoscopic repair of diaphragmatic eventration					
Thoracoscopic excision of bronchogenic cyst					
Thoracoscopic repair of esophageal atresia & TEF					

CATEGORY XIII: Neck Surgery

Thyroid Surgery					
Parathyroid Surgery					

CATEGORY XIV: Upper and Lower GI Endoscopy

Diagnostic OGDS	**C4**				
Therapeutic OGDS		**M4**			
Diagnostic Colonoscopy	**C4**				
Therapeutic Colonoscopy		**M4**			

CATEGORY XV -: ADDITIONAL PROCEDURES

By signing below, I acknowledge that the log book is a true and accurate record of my clinical experience:

……	……
Candidate's Signature	Date
……	……
Year 1: Supervisor's Name and Signature	Date
……	……
Year 2: Supervisor's Name and Signature	Date
……	……
Year 3: Supervisor's Name and Signature	Date
……	……
Year 4: Supervisor's Name and Signature	Date

LOG BOOK FOR MONTHLY PROCEDURAL MASTERS IN PAEDIATRIC SURGERY

Name of Candidate: _____ **Matric No:** _____

PROCEDURAL LOG BOOK FOR MM/YY: _____/_____

No	Pt's Name	Pt's DOB	Pt's URN	Pt: M/ F	Date of Op	Name of Op/Procedure	Indication for Op/Procedure	Name of Surgeons/Assistants	Remarks (Observe only, Complications, HPE etc)

Verified by: ----------

Supervisor's Name and Date

5. PANDUAN PEPERIKSAAN DOKTOR PAKAR SURGERI PEDIATRIK UKM:

a) Hanya calon-calon yang lulus penilaian berterusan dibenarkan menduduki Peperiksaan Bahagian 1 atau Bahagian 2. Peperiksaan Bahagian 1 dan 2 adalah merupakan peperiksaan bersama JK Surgeri Pediatrik.

b) Sistem pembelajaran terbahagi kepada 2 Fasa. Fasa 1 tamat selepas calon lulus Peperiksaan Bahagian 1. Fasa 2 bermula selepas calon lulus Peperiksaan Bahagian 1 dan terdiri daripada 3 tahun klinikal (6 semester).

c) Peperiksaan Bahagian 1 merupakan peperiksaan bersama Universiti Malaya diambil pada akhir Tahun 1. Ianya melibatkan soalan-soalan meliputi *embryology, applied anatomy, applied physiology, principles of surgery* dan *clinical pathology*. Terdapat komponen teori dan klinikal dalam peperiksaan bahagian 1. Komponen teori adalah dalam bentuk *One Best Answer* dan/atau EMQ. Bahagian Klinikal terdapat 1 komponen. Komponen klinikal adalah dalam bentuk Viva (*principles of surgery, applied physiology*, *surgical pathology* dan *applied anatomy*). Calon wajib lulus bahagian teori untuk menduduki bahagian klinikal. Setiap calon perlu lulus kesemua komponen teori dan klinikal untuk memenuhi syarat lulus Bahagian 1 Doktor Pakar Surgeri Pediatrik UKM. Setiap calon hanya dibenarkan menduduki semula peperiksaan sebanyak 2 cubaan lagi (setiap 6 bulan). Jika masih gagal, calon akan diberhentikan.

d) Peperiksaan Bahagian 2 Doktor Pakar Surgeri Pediatrik UKM juga merupakan Peperiksaan bersama Universiti Malaya. Ianya meliputi bahagian teori dan klinikal. Bahagian Teori melibatkan soalan-soalan nota pendek yang meliputi subjek *principles of surgery, clinical pathology* dan *surgical management and treatment*, *research* dan *innovation*. Manakala bahagian klinikal pula mempunyai 4 komponen iaitu *modified long case*, *short cases, ward rounds* dan *viva (applied physiology and intensive care, operative surgery, applied radiology)*. Calon-calon wajib lulus bahagian teori untuk menduduki bahagian klinikal. Calon-calon hendaklah lulus bahagian teori dan kesemua komponen klinikal untuk layak lulus bahagian 2 Program Doktor Pakar Surgeri Pediatrik UKM. Setiap calon yang mengulang peperiksaan Bahagian 2, dibenarkan menduduki semula peperiksaan setiap 6 bulan sehingga tempoh maksima pengajian Sarjana Surgeri Pediatrik iaitu 7 tahun tercapai tertakluk kepada kemajuan calon-calon dan lulus *continuous assessment* setiap semester yang ditunda.

e) Setiap keputusan samada calon lulus atau tidak akan dibentangkan kepada JK Surgeri Pediatrik dan diperakukan oleh pihak Fakulti Perubatan dan Senat UKM.

f) Calon-calon diperlukan lulus bahagian penyelidikan yang membawa 10% peratusan markah akhir Bahagian 2. Setiap calon diwajibkan menjalankan satu tajuk penyelidikan yang diluluskan oleh Jawatankuasa Etika Penyelidikan UKM dan Sekretariat Penyelidikan PPUKM. Setiap calon akan diberikan seorang penyelaras untuk tujuan penyelidikan dan penerbitan manuskrip sebaik sahaja lulus Bahagian 1 Peperiksaan Doktor Pakar Surgeri Pediatrik UKM.

g) Setiap calon perlu lulus modul penyelidikan setiap semester selepas lulus Peperiksaan Bahagian 1 dan memasuki Fasa 2 pembelajaran program (bagi calon-calon yang lulus Peperiksaan Bahagian 1 pada akhir semester 2, akan memulakan Fasa 2 Program pada semester 3 hingga semester 8). Penilaian penyelidikan adalah seperti berikut:

   i. Semester 3: Telah menghasilkan 100% proposal penyelidikan, telah membentangkan proposal di Jabatan dan menghantar proposal ke JK Etika Penyelidikan UKM.
   ii. Semester 4: Telah mendapat kelulusan JK Etika Penyelidikan UKM dan Sekretariat Penyelidikan PPUKM untuk memulakan pengumpulan data.
   iii. Semester 5: Melengkapkan pengumpulan data.
   iv. Semester 6: Analisa data bermula dan mula menghasilkan manuskrip.
   v. Semester 7: Menghantar laporan lengkap untuk Pemeriksa dalaman (termasuk Pemeriksa dari JK Kepakaran) bagi kelulusan sebelum memasuki Semester 8.

h) Calon-calon perlu menghasilkan sekurang-kurangnya satu manuskrip untuk penerbitan dalam jurnal Berwasit atau membuat pembentangan di mana-mana persidangan saintifik.

5. PANDUAN BUKU RUJUKAN DAN ILMIAH SARJANA SURGERI PEDIATRIK UKM:

Buku Teks:

Anatomy:

1. Skandalakis' Surgical Anatomy
2. Last's Anatomy Regional and Applied
3. Embryology for Surgeons, Gray, Stephen W.

Physiology:

1. Ganong Physiology
2. MRCS Part A: Essential Revision Notes Book 1 and 2
3. MRCS Applied Basic Sciences and Clinical Topics

Pathology:

1. Robbins and Cotran Pathologic Basis of Disease.
2. Surgical Pathology: Rosai and Ackerman's

Principles of Surgery:

1. Basic Surgical Techniques: RM Kirk
2. Care of the Critically Ill Surgical Patient: Iain D Anderson
3. Basic Techniques in Pediatric Surgery: Robert Carachi
4. Operative Paediatric Surgery: Lewis Spitz

Paediatric Surgery:

1. Pediatric Surgery: William J Norton.
2. Case Studies in Paediatric Surgery: Lawrence Moss.
3. Essentials of Paediatric Urology: Duffy.
4. Paediatric Surgery: Keith W Ashcraft.

a) Jurnal dan Rujukan Tambahan:

4. Seminars in Pediatric Surgery
5. Journal in Pediatric Surgery
6. Pediatric Surgery International
7. Jurnal-Jurnal Surgeri Berkaitan