PAEDIATRIC SURGERY PROFORMA

Domain: O - Objective / K - Knowledge / CS - Clinical skills / TS - Technical skills

MAIN CURRICULUM (attachment 5)

Section	Page	Change	Reason
3.5.1	11	Addition of generic paragraphs on Genomics, Clinical Informatics and Sustainability.	These paragraphs have been included in surgical curricula to emphasise the importance of emerging areas in healthcare, ensuring that trainees remain adaptable and informed as surgical practice evolves.
5.4	33	Certification Requirements for Management and Leadership – added that evidence of an understanding of management structures and challenges of the health service should be <u>across relevant health services and the variations between nations</u>	In response to lay/patient feedback, there is a recognised need to strengthen trainees' understanding of the structure and functioning of health systems across the UK. Knowledge limited to the trainee's immediate training jurisdiction may not sufficiently prepare them for the realities of working within or alongside other devolved health systems.
5.4	34	In Clinical experience section – added wording – 'To ensure opportunities to acquire the breadth of curricular competencies in a variety of learning environments and cultures, trainees should, where geographically possible, complete a training programme that includes rotation through multiple units or sites. This recognises the importance of an ability to constructively compare different approaches to delivering surgical patient care and work-based cultures'	Addition to ensure optimal exposure and learning from different training cultures and environments, as well as clarifying the need for full curricula coverage. This is consistent with other curricula, namely Urology, Plastic Surgery and Otolaryngology
Throughout		• Amended cover page and additional authors related to this curriculum update	General editorial updates

	• Health Education England (HEE) replaced with NHS England (update) • HEE local offices removed (update) • Corrected hyperlinks (updates)	

SYLLABUS

- The original syllabus format had previously been ordered by **Topic** while the new format is ordered by **Category**.
- Across the whole syllabus, skill levels have been added where not specified or moved into specific columns representing the three critical progression points in specialty training; ST4, ST6, ST8 for better clarity and guidance.

Category	Syllabus topic	Domain (O / K / CS / TS)	Describe the change	Reason for change
General Surgery of Childhood		O		
		K		
		CS		
	Groin conditions	TS	Preputioplasty and Circumcision removed and added in the Urology section Procedure name change – from Undescended testis is Orchidopexy	These are operations on the foreskin and, along with other penile surgery belong in the Urology section. Orchidopexy is the name of the operation undertaken for undescended testis. Hence the precise terminology replaces the generic term.
	Abdominal wall pathologies	TS		
	Head and Neck swellings	TS	Thyroglossal and branchial cysts levels down staged	Done predominantly by ENT. While knowledge and clinical skills are essential and maintained at level 4, technical skills dropped to 2. Trainee logbooks showing inadequate numbers and

				competency at level 2 cross checked with ENT syllabus which includes level 4 competency for these procedures. Ref: level 4 competency in ENT syllabus
	Access	TS	Simulation recommended Central venous line removal added as a separate procedure instead of insertion/removal PD catheter insertion/- removal removed	Done by IR in some centres reducing the operative experience Because skill set differs for the two Added to Renal failure section of Urology where it is more appropriate
Gastrointestinal		O		
		K	Understanding of functional GI obstruction added	Added this section. Functional GI obstruction is common in children with significant symptom burden and can present to or be referred to surgeons. Hence, knowledge, understanding and surgical treatment where indicated is of importance.
		CS		
	Pyloric Stenosis			
	Gastro-oesophageal reflux		Fundoplication Level 3 from 4	Complex surgery for significant gastro-oesophageal reflux. Infrequently performed in some centres where naso-jejunal feeding is being preferred . Also with subspecialisation, mainly done by upper GI surgeons

			Gastrostomy added (insertion/removal/closure)	Commonly done procedure needed a separate mention.
	Abdominal pain	TS	Deleted Colonoscopy / Sigmoidoscopy	It features in inflammatory bowel conditions.
	Constipation	TS	Anal stretch removed ACE level 4 from 3 'EUA and' added to Manual evacuation	Not a routine surgical procedure Common operation, level 4 expected EUA is an examination under anaesthesia and always done before Manual evacuation so more clarity given to the procedure.
	Gastro-intestinal bleeding	TS	Added Sigmoidoscopy to OGD	Wish to address upper and lower gi bleed because OGD only addresses the top end while this change addresses both upper and lower gi bleeding.
	Intestinal obstruction	TS		
	Inflammatory bowel disease	TS	Colonoscopy/Sigmoidoscopy-3 instead of 4 & Numbers reduced	A changing trend in practice. In many units, lower GI endoscopies are performed by Paed Gastroenterologists.
	Short bowel syndrome	TS		
	Liver/biliary disease	TS	Added pancreas / spleen to this category of procedures Choledochal cyst added (specialist centre) and skill level reduced from 2 to 1 at ST7-8 Skill level for Kasai procedure (specialist centre) also reduced as above Added Splenectomy procedure Added Pancreatic lesions procedure	These procedures were missed out in previous syllabus Done in specialised centres only
Urology		O		

		K		
		CS	Exstrophy and epispadias competence level reduced to 2 from 3 at ST8	Management is centralised to 2 specialist centres in the UK because of the complexity and based on the number of cases. Consultant performed surgery only in specialist centres usually after a post-CCT urology fellowship.
	Foreskin pathology	TS	Category heading – Foreskin pathology. Procedures - Preputioplasty and Circumcision added Moved from General Surgery section	More appropriate
	Urinary tract infection			
	Haematuria			
	Hypospadias		Skill levels changed	Proximal hypospadias is a consultant-delivered specialist operation done by paediatric urologists only.
	Upper tract obstruction (to include Pelvi-ureteric junction obstruction and Vesico-ureteric junction obstruction)		Nephrostomy insertion- open or perc- removed Heminephrectomy Down from level 4 to 3-	Done by IR- ultrasound guided Complex operation. With subspecialisation and fellowships, mainly done by those with Paed Urology as their interest
	Posterior urethral valves		Added 'Resection' of PUV, replacing the word ' Destruction'.	Resection is better terminology / more precise
	Urinary tract calculus disease			
	Bladder dysfunction (incl. neuropathic bladder)		Alongside Ureteric diversion, added 'undiversion'	Additional procedure was absent from previous syllabus - omission
	Renal failure		Added 'Specialist centre to heading' PD catheter added	Specialised centres provide this
	Bladder exstrophy (to include outlet anomalies e.g. epispadias)		Change to skill levels	Done only in specialist centres
	Duplication of urinary tract		Excision of ureterocele	Rarely performed procedure. Common procedure is Endoscopic

				puncture or incision of ureterocele which remains in the syllabus
	Urethral meatus			
	Epispadias			Done only in specialist centres
	Vesico-ureteric reflux			
Neonatal Surgery		O		
		K		
		CS		
	Oesophageal Atresia and Tracheo-oesophageal fistula	TS		
	Congenital diaphragmatic hernia	List order of procedures improved		
	Intestinal Atresias			
	Small bowel duplications			
	Meconium Ileus			
	Malrotation			
	Hirschsprungs disease		Rectal washout removed Trans-anal pull through – open or laparoscopically assisted -duplicate removed	Not a surgical procedure Duplicated, hence corrected
	Anorectal Malformations			
	Necrotising Enterocolitis			
	Neonatal Abdominal Wall Defects			
	Sacro coccygeal teratoma			
	Differences of sex development		Title changed from 'Disorders of sex development' to Differences of sex development. Cystovaginoscopy	In keeping with current terminology Added as a diagnostic procedure for DSD
	Antenatal management			
Oncology		O	Added 'To understand the MDT set up and role of surgeons as a member of the MDT'	Oncology in current day practice heavily relies on an MDT set up

				and the surgeon is an integral part of this.
		K		
		CS		
	Wilms Tumour			
	Neuroblastoma			
	Hepatoblastoma			
	Soft tissue tumours			
	Haematological malignancies			
	Benign tumours	TS	Ovarian cystectomy added	Leaning towards ovarian sparing surgery and is now the commoner operation compared to oophorectomy for benign conditions
	Generic procedures		Added 'open / laparoscopic' to Tumour biopsy	Some of the previously performed open biopsies can now be done laparoscopically.
Endocrine conditions		Category heading	Changed category heading to 'Endocrine including thyroid, parathyroid, pancreas'	To be more specific
		O		
		K		
		CS		
	Adrenal gland	TS	Heading changed to Adrenal. Procedure Adrenalectomy	To be specific.
	Disease of the thyroid gland	TS	Heading changed to Thyroid. Procedure Thyroidectomy	To be more specific
	Parathyroid disease	TS	Removed	Infrequently performed
	Diabetes	TS	Removed	Not relevant with regards to surgical skill
	Disorders of Growth	TS	Added 'and secondary sexual development' to 'Disorders of growth' Deleted OGD, Gastrostomy added	Both are linked and grouped This is a more precise procedure to deliver nutrition in disorders of growth

	Disorders of secondary sexual development	TS	Subcutaneous mastectomy removed-removed Topic combined with above	Fewer and fewer centres doing it. Mostly performed by plastic surgeons Also not funded anymore on the NHS See above
Thoracic anomalies		Category heading	Category heading changed to 'Airway and Thoracic'	More appropriate as a subcategory
		O		
		K		
		CS		
	Chest wall anomalies	TS	'Repair of Pectus' changed to 'Repair of Pectus Excavatum / Carinatum'	More specific
	Congenital and acquired lung abnormalities including management of empyema	TS	Added Open/Thoracoscopic pleural debridement Insertion of percutaneous chest drain deleted	Precise procedure Done by interventional radiology
	Tracheal anomalies	TS		
	Inhaled /aspirated /ingested foreign body	TS		
Operative skills		Category heading	Category heading changed to 'Peri-operative – Preop / Intraop / Postop	Pre, Intra, postop care summarised to peri-operative care Felt to be unnecessary repetition
		O		
		K Preop Intraop Postop		
		CS Preop Intraop Postop	Changed to level 4 instead of level 3 at STY6	Trainees are expected to attain a level 4 in perioperative care to ensure patient safety.

			Added 'Communications skills for dealing with team members, patients and parents'	Communication skills with various teams are a key part of perioperative patient management hence specified.
		TS	Added 'Technical skills and procedures (including simulation) Open and laparoscopic operative skills appropriate for training'	A description of intraoperative skills required.
Trauma		Category heading	Whole section added	Section on trauma did not exist before. Paediatric trauma forms an important part of the Curriculum & clinical practice. Want this to be recognised and included. Hence added
Management	NHS Structure	O		
		K		
		CS		
	Trust/ Hospital/ Health	O		
		K		
		CS		
	Authority Managerial structures	O		
		K		
		CS		
	Leadership	O		
		K		
		CS		
	Supporting Training	O		
		K		
		CS		
	Interview process	O		
		K		
		CS		

APPENDICES

	Describe the change	**Reason for change**
Appendix 3: Critical Conditions	A revised list has been produced.	The original list has been reviewed, corrected, and refined for clarity and conciseness.
Appendix 4: Index Procedures	<u>General Surgery</u> CIRCUMCISION nos reduced Appendicectomy nos increased Laparoscopy for undescended testis as a separate procedure <u>Neonatal Surgery</u> Surgery for duodenal atresia & malrotation separated out as separate procedures <u>Urology</u> Cystourethroscopy; SPC insertion; PUV resection Ureteric access STING/Stent; Nephrostomy (open/perc) -	 Paediatric Surgeons are not doing as many circumcisions and ritual circumcisions are not funded by the NHS. Common procedure, numbers updated based on current Registrars' logbooks. Requires separate procedure status 2 different conditions Separated into two procedures with independent indicative numbers Separated into three procedures Nephrostomy removed - done by Interventional Radiologists Duplication

	Deleted Surgery for impalpable UDT (open or laparoscopic)	
	Peritoneal dialysis catheter insertion/removal	Removed 'removal' as this is not an index procedure
	<u>Gastro-intestinal</u>	
	Fundoplication etc	Removed 'etc'
	Small bowel resection etc	Removed 'etc'
	Small / large bowel stoma formation etc	Small / large bowel stoma formation
	Added Small / large bowel stoma closure	Separated from formation as this is a separate index procedure
	ACE formation	Moved out of Urology and placed here because it is a separate GI procedure Level 4 decreased to 3 in light of trainee feedback
	Laparotomy for adhesions; Intussusception etc	Re-worded for additional clarity to 'Laparotomy: e.g. for adhesions, intussusception etc' in light of trainee feedback
	<u>Thoracic</u>	
	Thoracic Surgery: Chest drain insertion; Pleural debridement Empyema; Lung biopsy/resection; Thoracotomy/VATS	Separated into Chest drain insertion and Pleural debridement Empyema; Lung biopsy/resection; Thoracotomy/VATS as they are of different complexities
		Table of total overall cases has been removed in light of trainee feedback

	Total cases table Neonatal cases table Final paragraph	 Total assisted, performed under assistance, taught – corrected from 110 to 112. Total performed, performed under assistance, taught - corrected from 68 to 72 in light of trainee feedback The following wording has been inserted into the final paragraph to improve clarification in light of trainee feedback: ‘There is no minimum number of PBAs required. However, trainees are expected to achieve at least 1 PBA at the level required for each index procedure’.