Appendix 4: Index Procedures

Index procedures are of significant importance for patient safety and demonstrate a safe breadth of practice. The following are the skillset for an emergency safe surgeon in Paediatric Surgery.

By certification (the end of phase 3) there should be documented evidence of performance at the level of a day-one consultant for the index procedures.

The levels shown in the table below refer to both:

the syllabus standards for technical skills (see appendix 2 for the full list of levels)

3. Can do whole but may need assistance
4. Competent to do without assistance, including complications

and

the PBA performance level (see PBA form for the full list of levels)

Level 2 a: Guidance required for most/all of the procedure (or part performed)
b: Guidance or intervention required for key steps only
Level 3 a: Procedure performed with minimal guidance or intervention (needed occasional help)
b: Procedure performed competently without guidance or intervention but lacked fluency
Level 4 a: Procedure performed fluently without guidance or intervention
b: As 4a and was able to anticipate, avoid and/or deal with common problems/complications

Appendix 4: Index Procedures

Index procedures are of significant importance for patient safety and demonstrate a safe breadth of practice. The following are the skillset for an emergency safe surgeon in Paediatric Surgery.

By certification (the end of phase 3) there should be documented evidence of performance at the level of a day-one consultant for the index procedures.

The levels shown in the table below refer to both:

the syllabus standards for technical skills (see appendix 2 for the full list of levels)

3. Can do whole but may need assistance
4. Competent to do without assistance, including complications

and

the PBA performance level (see PBA form for the full list of levels)

Level 2 a: Guidance required for most/all of the procedure (or part performed)
b: Guidance or intervention required for key steps only
Level 3 a: Procedure performed with minimal guidance or intervention (needed occasional help)
b: Procedure performed competently without guidance or intervention but lacked fluency
Level 4 a: Procedure performed fluently without guidance or intervention
b: As 4a and was able to anticipate, avoid and/or deal with common problems/complications

		Level	Experience	Performed, Performed under supervision, taught
General Surgery	Circumcision	4	30	30
	Inguinal herniotomy, Ligation PPV	4	150	75
	Orchidopexy	4	60	40
	Laparoscopy for impalpable testes	4	26	16
	Repair of epigastric hernia, repair of umbilical/supra-umbilical hernia	4	10	5
	Pyloromyotomy (open or laparoscopic)	4	20	10
	Appendicectomy (open or laparoscopic)	4	60	40
	Diagnostic laparoscopy for abdominal pathology	4	10	10
Neonatal Surgery	Repair of oesophageal atresia/Tracheo-oesophageal Fistula	3	10	4
	Repair of diaphragmatic hernia/eventration	4	10	6
	Repair of abdominal wall defects (gastroschisis, exomphalos)	4	15	9
	Surgery to correct malrotation	4	6	4
	Surgery to correct duodenal atresia	4	6	4
	Surgery for small intestinal pathology (NEC, creation and closure of ileostomy) intestinal atresia, meconium ileus,	4	20	14
	Neonatal colorectal surgery (NEC, colonic atresia, colostomy)/anoplasty/Closure of stoma	4	20	14
	Repair of neonatal inguinal hernia	4	25	15

Urology	Exploration Acute Scrotum (Torted Hydatid; Torsion testis)	4	25	20
	Cystourethroscopy SPC insertion PUV resection	4 4 3	30 5 3	15 5 2
	Ureteric access STING/Stent	3	11	6
	Hypospadias repair	3	40	5
	Pyeloplasty (open or laparoscopic) or Nephrectomy (open or lap)	3	22	8
	Reconstructive urology: Bladder Augmentation, Mitrofanoff	2	1	1
	Peritoneal dialysis catheter insertion	3	2	1
Gastro-intestinal	Upper GI endoscopy and biopsy; Insertion PEG/Gastrostomy	4	50	30
	Fundoplication	3	5	3
	Small bowel resection	4	10	6
	Small / large bowel stoma formation Small / large bowel stoma closure ACE formation	4 4 3	10 10 10	6 6 3
	Laparotomy: e.g. for adhesions; Intussusception etc	4	11	6
	PSARP	3	8	2
	Pull through for Hirschsprungs	3	6	2
Thoracic	Chest drain insertion Pleural debridement Empyema; Lung biopsy/resection; Thoracotomy/VATS	4 3	10 2	5 2

Oncology	Tumour resection (Wilms, Resection Neuroblastoma; Saccrococcygeal teratoma)	3	14	2
	Tumour biopsy (open/laparoscopic/thoracoscopic)	3	8	4
	Lymph node biopsy	4	7	5
Access	Central Venous access (open/percutaneous/portacath)	4	48	25
Trauma	Trauma laparotomy; packing of abdomen simulated (cadaveric course)	4 or Simulated 4	1	1
	Trauma Thoracotomy; Clam-shell, simulated (cadaveric course)	3 or Simulated 4	1	1
Total			1990	1300

Experience means all cases trainee scrubbed for: In the elogbook this would include: Assisted (A), Supervised trainer scrubbed (STS) , Supervised trainer unscrubbed (STU), Performed in part by trainee (PPT), Performed (P), Taught (T), Performed with consultant colleague (PCC), Performed assisted by Trainee (PAT). It would not include observed cases. These numbers are indicative only, as trainees would not normally be expected to have achieved sufficient experience to be able to manage the range of pathology they encounter unless these numbers were met by the time of certification.

Performed these are cases the trainee was the main surgeon. In the elogbook this would include: Supervised trainer scrubbed (STS) , Supervised trainer unscrubbed (STU), Performed (P), Taught (T), Performed with consultant colleague (PCC) only. It excludes cases where the trainee only assisted, or assisted for part of the case. These numbers are indicative only, as trainees would not normally be expected to have achieved sufficient experience to be able to manage the range of pathology they encounter unless these numbers were met by the time of certification.

Total cases

Total assisted, performed, performed under assistance, taught	Lower Quartile	1990
Total performed, performed under assistance, taught	Lower Quartile	1300

Neonatal cases

Total assisted, performed, performed under assistance, taught	112
Total performed, performed under assistance, taught	72

The range of cases is very wide in paediatric surgery, but an over-all experience is important. The table at the top is for total experience (all cases) and the lower table specifically neonatal experience. The total numbers for neonates gives an idea of how extensive the experience has been for a trainee: if a trainee has managed to have 150 neonates in total and performed 110 then if there is one area where they do not quite meet the target, compensation will be possible. 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. If they are short of an index PBA, but only have experience of 100 neonates in total and performed only 60, their global experience will be seen as inadequate.