Pediatric Surgery: TTD EPA #1

Assessing and recognizing critical illness in pediatric patients

Key Features:
- This EPA focuses on interpreting the findings of a history and physical examination of a child (between ages 1-15) and recognizing that they are critically ill.
- This includes interpretation of vital sign abnormalities and their implications in pediatric patients.
- This EPA may be observed in various clinical settings and in simulation.

Assessment Plan:
Direct observation or case review by pediatric surgeon or senior resident, may include input from other health professionals

Use Form 1. Form collects information on:
- Setting: ER; inpatient; PICU; clinic; simulation

Collect 2 observations of achievement
- No more than 1 in simulation
- 2 different observers
- At least 1 pediatric surgeon

Relevant Milestones:

1 ME 2.1 Recognize instability and medical acuity in a clinical presentation

2 ME 2.2 Perform a history and physical exam relevant to the presentation in a timely manner

3 ME 2.1 Provide assessment and initial stabilization of ABCs

4 ME 1.4 Recognize urgent problems and seek assistance

5 ME 1.6 Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making

6 ME 2.2 Develop a differential diagnosis

7 COL 1.3 Acknowledge and integrate input and/or recommendations from other
health care professionals

8  **COM 1.4** Identify, verify, and validate a patient’s/family’s non-verbal cues

9  **COM 2.3** Identify and consider parental/care-giver concerns regarding the patient’s condition
Pediatric Surgery: TTD EPA #2

Communicating with pediatric patients and their families using appropriate language

Key Features:
- This EPA focuses on the application of communication skills to effectively gather and convey information to children of all ages and their families.
- This may include providing information about the diagnosis and/or treatment plan.
- This EPA may be observed in any clinical setting or in simulation.

Assessment Plan:

Direct observation by pediatric surgeon or senior resident

Use Form 1. Form collects information on:
- Setting: ER; inpatient; PICU; clinic; simulation
- Age (write in):

Collect 2 observations of achievement
- At least 1 in clinical setting
- 2 different observers

Relevant Milestones:

1. COM 1.1 Introduce oneself and explain one’s role in the interprofessional team
2. ME 2.2 Synthesize clinical information to formulate a summary of the case
3. COM 3.1 Convey information about medical course and/or management plan clearly and accurately
4. COM 3.1 Use appropriate language and avoid medical jargon
5. COM 3.1 Use strategies to verify and validate the understanding of the family and/or caregiver(s)
6. COM 1.4 Respond to non-verbal communication and use appropriate non-verbal behaviours to enhance communication
7. COM 1.5 Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are affecting an interaction and respond appropriately
Pediatric Surgery: TTD EPA #3

Providing handover

Key Features:
- This EPA focuses on verbal and written communication with other health professionals, including anticipatory guidance, during transitions of care.
- This EPA may be observed during handovers of the inpatient service list or in simulation.

Assessment Plan:
Direct observation by pediatric surgeon, senior resident, or nurse practitioner

Use Form 1. Form collects information on:
- Setting: inpatient; simulation

Collect 2 observations of achievement
- No more than 1 in simulation
- 2 different observers

Relevant Milestones:
1 ME 4.1 Establish plans for ongoing care, including follow-up on investigations and response to treatment
2 COL 3.1 Identify appropriate time, context and content for effective handover
3 COL 3.2 Summarize patient issues providing rationale for key decisions
4 COL 3.2 Provide anticipatory guidance for results of outstanding investigations and/or next steps for management
5 COL 3.2 Communicate effectively with the receiving physician(s), clarifying issues as needed
6 ME 5.2 Use structured handover tools and strategies to enhance patient safety
Pediatric Surgery: TTD EPA #4
Performing an appendectomy in children more than 5 yrs of age

Key Features:
- This EPA focuses on the application of skills achieved in General Surgery training in the setting of a child more than 5 years of age

Assessment Plan:
Direct observation by pediatric surgeon or senior resident
Use Form 2. Form collects information on:
- Case: simple; perforated
Collect 2 observations of achievement
- At least 1 perforated
- 2 different observers

Relevant Milestones:
1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required
2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications
3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them
4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues
5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended
6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7. ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement
8. COL 1.2 Professional and effective communication/utilization of staff
9. ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: TTD EPA #5

Opening and closing abdominal incisions

Key Features:
- This EPA focuses on the basic surgical skills of opening and closing an incision, as applied to infants, toddlers and children.
- At this stage this does not include neonates.
- This EPA may be observed in any abdominal surgery.

Assessment Plan:

Direct observation by pediatric surgeon or senior resident

Use Form 2. Form collects information on:
- Case: elective; emergent
- Complexity: first laparotomy; redo; conversion

Collect 2 observations of achievement
- 2 different observers

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7. ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8. COL 1.2 Professional and effective communication/utilization of staff
9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Foundations EPA #1

Providing surgical consultation for pediatric and neonatal patients

Key Features:
- This EPA focuses on performing a clinical assessment, ordering and/or interpreting investigations, making a diagnosis and developing a management plan that may include medical or surgical intervention for patients with common presentations.
- This EPA may be observed in the clinic, inpatient, and emergency department setting.

Assessment Plan:

Direct observation or case review by pediatric surgeon

Use Form 1. Form collects information on:
- Observation: direct; case review
- Case mix: neonate with acute abdomen; neonate with congenital malformation; child with acute abdomen/bowel obstruction; child with newly diagnosed malignancy; new outpatient pediatric surgery consult; other presentation
- Setting: ER; inpatient; clinic

Collect 5 observations of achievement
- At least 1 direct observation
- At least 1 each of the case mix
- At least 2 observers

Relevant Milestones:

1. ME 2.2 Elicit a history, including the perinatal history as relevant
2. ME 2.2 Perform the physical exam in a manner that minimizes discomfort or distress, without excluding key elements
3. ME 2.2 Adapt the clinical assessment to the child’s age and development
4. ME 2.2 Select and/or interpret investigations
5. ME 2.2 Select further investigations, considering the limitations of blood volume on laboratory testing and the challenges of medical imaging in children
6. ME 2.4 Develop a plan for management which may include observation, surgery and/or non-operative intervention
7. COM 3.1 Share information and explanations that are clear, accurate and timely with the patient and family
8. COM 4.3 Answer questions from the patient and/or family
9  P 1.1 Exhibit appropriate professional behaviours
Pediatric Surgery: Foundations EPA #2

Providing initial management for patients who are clinically unstable

Key Features:
- This EPA focuses on assessing and developing a management plan for clinically unstable infants and children up to 10 years of age.
- This EPA does not include unstable neonate patients.
- This EPA may be observed on the ward and in the PICU, emergency department or in simulation.

Assessment Plan:
Direct observation and/or case review by pediatric surgeon, ER physician, intensivist, or senior resident

Use Form 1. Form collects information on:
- Case mix: trauma; sepsis; acute abdomen; oncology; other
- Observation: direct; case review
- Setting: clinical; simulation

Collect 2 observations of achievement
- At least 1 direct observation
- At least 1 in clinical setting
- At least 1 pediatric surgery observer

Relevant Milestones:
1. ME 2.2 Focus the assessment of a critically ill patient, performing it in a time-effective manner without excluding key elements
2. ME 2.2 Select and/or interpret investigations
3. ME 2.4 Develop and implement an initial management plan
4. ME 3.3 Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources
5. ME 1.4 Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance
6. ME 4.1 Determine the need, timing and priority of referral to another physician
7. COL 3.2 Organize the handover of care to the most appropriate physician or health care setting
Pediatric Surgery: Foundations EPA #3

Leading the team caring for patients on the pediatric surgery service, including supervision and teaching of junior trainees

Key Features:
- This EPA focuses on communication, professionalism and leadership applied to the coordination of care for a group of patients, in collaboration with the interprofessional team.
- This includes rounding and making decisions about inpatient care, organizing, teaching and assessing junior trainees, collaborating with other health care professionals and participating in interdisciplinary care.

Assessment Plan:

Direct and indirect observation by pediatric surgeon or senior resident; may include input from other health care professionals (nurse, student, junior resident, other health care provider)

Use Form 1

Collect 2 observations of achievement
  - 2 different observers

Relevant Milestones:

1 ME 1.1 Demonstrate responsibility and accountability for decisions regarding patient care
2 ME 1.5 Carry out professional duties in the face of multiple competing demands
3 ME 1.5 Prioritize patients on the basis of clinical presentations
4 COL 1.2 Delegate responsibilities to members of the health care team appropriate to their scope of practice and level of expertise
5 L 2.1 Allocate health care resources for optimal patient care
6 HA 1.1 Facilitate timely patient access to services and resources
7 S 3.4 Integrate best evidence and clinical expertise into decision-making
8 ME 2.4 Develop and implement management plans
9 COL 1.3 Communicate effectively with physicians and other health care professionals
10 L 4.1 Integrate supervisory and teaching responsibilities into the overall management of the clinical service

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11 L 4.2 Run the service efficiently, safely, and effectively

12 S 2.2 Ensure a safe learning environment for all members of the team
Pediatric Surgery: Foundations EPA #4

Identifying, managing, disclosing, and documenting adverse events and complications

Key Features:
- This EPA focuses on the response to an individual patient who has experienced a patient safety incident.
- Examples include medication errors, procedural complications, or miscommunication between teams regarding treatment plan.

Assessment Plan:
Direct observation and/or case review by pediatric surgeon

Use Form 1. Form collects information on:
- Setting: clinical; simulation
- Observation: direct; case review

Collect 2 observations of achievement
- At least 1 clinical

Relevant Milestones:

1. **ME 5.1 Recognize the occurrence of a patient safety incident**
2. **ME 5.1 Prioritize the initial medical response to a harmful patient safety incident to mitigate further injury**
3. **ME 5.1 Document harmful patient safety incidents as per institutional processes**
4. **COM 3.2 Communicate the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents**
5. **COM 3.2 Apologize appropriately for a harmful patient safety incident**
6. **COM 3.2 Plan and document follow-up to a harmful patient safety incident**
7. **P 4.3 Debrief the team after a patient safety incident**
Pediatric Surgery: Foundations EPA #5

Obtaining informed consent and assent

Key Features:
- This EPA focuses on the application of communication skills to effectively explain the risks and benefits of a procedure or the administration of blood products.
- This EPA includes determining the capacity of the patient to provide assent.
- This EPA can be observed in any clinical setting, and in the discussion of any procedure or proposed transfusion. It may also be observed in simulation.

Assessment Plan:
Direct observation by pediatric surgeon or senior resident

Use Form 1. Form collects information on:
- Age group: neonate; infant; toddler; child; adolescent
- Person providing consent/assent: patient; parent; legal guardian; substitute decision maker
- Setting: clinical; simulation

Collect 2 observations of achievement
- No more than 1 in simulation

Relevant Milestones:
1. **ME 1.3** Apply knowledge of the indications for, and techniques and complications of surgical procedures
2. **COM 3.1** Convey information about a proposed procedure or intervention clearly and accurately
3. **COM 3.1** Use appropriate language and avoid medical jargon
4. **COM 3.1** Use strategies to verify and validate the understanding of the family and/or caregiver(s)
5. **ME 2.3** Share concerns in a constructive and respectful manner about goals of care when they are not felt to be achievable
6. **COM 5.1** Document the consent/assent discussion in an accurate and complete manner
7. **P 3.1** Apply provincial laws governing practice as it pertains to consent and assent
Pediatric Surgery: Foundations EPA #6

Performing basic pediatric surgical procedures

Key Features:
- This EPA focuses on the application of skills achieved in General Surgery training in the setting of a pediatric patient.
- This EPA includes the following procedures: laparotomy (neonatal); MIS (except appendectomy >5 yrs); pyloromyotomy; bowel resection and anastomosis in infants and children (or non-neonatal); hernia repair in patients >1 yr; central venous access (not PICC); first line in child over 5 years old; and surgical enteral access.

Assessment Plan:

Direct observation by pediatric surgeon or senior resident

Use Form 2. Form collects information on:
- Procedure: laparotomy; MIS; pyloromyotomy; bowel resection and anastomosis; inguinal hernia repair; central venous access (not PICC); surgical enteral access; other procedure
- Age (write in):
- Presentation: urgent; elective

Collect 15 observations of achievement
- At least 1 each of the following procedures: neonatal laparotomy; MIS; bowel resection and anastomosis; central venous access; surgical enteral access
- At least 3 inguinal hernia repairs
- At least 2 pyloromyotomies
- At least 2 observations by pediatric surgeons

Relevant Milestones:

1 ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2 ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3 ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4 ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues
5 ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Foundations EPA #7

Providing post-operative care for patients with routine and complex post-operative courses

Key Features:
- This EPA focuses on the integration of clinical assessment skills and surgical expertise to make decisions about a patient’s early post-operative recovery and discharge from surgical care.
- This includes recognition of when the patient is experiencing an expected vs. unexpected post-operative course, as well as discharge planning and patient/parent education.
- This EPA must be observed in a clinical setting.

Assessment Plan:

Direct observation and/or case review by pediatric surgeon or senior resident

Use Form 1. Form collects information on:
- Setting: NICU; PICU; ward
- Complexity: simple; complex

Collect 4 observations of achievement
- At least 1 complex patient
- At least 2 observers
- At least 1 pediatric surgeon

Relevant Milestones:

1. ME 1.4 Perform a clinical assessment that addresses all relevant issues
2. ME 2.4 Provide routine post-operative management, including intravenous fluids, diet, wound care and medications
3. ME 2.4 Provide appropriate pain management
4. ME 4.1 Recognize and manage complications
5. ME 2.4 Develop and implement plans for discharge
6. COL 1.3 Integrate the patient’s perspective and context into the collaborative care plan
7. COM 3.1 Share information and explanations that are clear, accurate and timely with the patient and family
8. COL 1.2 Work effectively with other health care professionals
9. HA 1.1 Facilitate timely patient access to services and resources

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10 ME 4.1 Coordinate the availability of services and resources in the home, as well as follow-up care
Pediatric Surgery: Core EPA #1

Providing surgical consultation, including treatment and follow-up plan, for neonatal and pediatric patients

Key Features:
- This EPA builds on the consultation skills of the Foundations stage and focuses on the integration of clinical assessment and investigations to determine surgical indications, operative risk and available treatment options, and provide recommendations for surgical or non-operative management.
- This includes all neonatal and pediatric patient presentations.
- This EPA includes patients for whom the decision is to proceed to surgery, as well as those for whom the decision is medical management.

Assessment Plan:

Direct observation or case review by pediatric surgeon

Use Form 1. Form collects information on:
- Setting: inpatient; outpatient
- Case mix: neonate with acute abdomen; neonate with congenital malformation; child with acute abdomen/bowel obstruction; child with newly diagnosed malignancy; new outpatient pediatric surgery consult

Collect 5 observations of achievement
- At least 1 each of the case mix
- At least 2 different observers

Relevant Milestones:

1 ME 1.4 Perform a clinical assessment that addresses all relevant issues

2 ME 2.2 Focus the clinical encounter, performing it in a time-effective manner without excluding key elements

3 ME 2.2 Select and/or interpret investigations

4 ME 2.2 Synthesize patient information to assess indications and risk of surgery

5 ME 2.4 Develop and implement management plans that consider all of the patient’s health problems and context

6 S 3.4 Integrate best evidence and clinical expertise into decision-making

7 COM 3.1 Provide information on diagnosis and prognosis clearly and compassionately

8 ME 3.2 Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and
9 **COM 1.5** Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are affecting an interaction and respond appropriately

10 **COM 5.1** Document the clinical encounter to convey clinical reasoning, rationale for decisions and/or recommendations
Pediatric Surgery: Core EPA #2

Performing prenatal consultations

Key Features:
- This EPA focuses on assessment and diagnosis, as well as effective communication with the family and interprofessional team regarding prognosis and treatment options.
- This may include working with the interprofessional team to determine the setting for delivery, and the resources needed to provide care for the mother and baby(ies).
- This EPA may be observed in any clinical setting.

Assessment Plan:

Direct observation and/or case review by pediatric surgeon

Use Form 1. Form collects information on:
- Case mix: abdominal wall defect; CPAM; CDH; bowel obstruction/polyhydramnios; other presentation
- Observation: direct; case review

Collect 2 observations of achievement
- At least 1 direct observation
- At least 2 observers

Relevant Milestones:

1. ME 1.4 Perform a clinical assessment, incorporating prenatal investigations, to address all relevant issues
2. ME 2.2 Select and/or interpret investigations
3. COM 3.1 Provide information on diagnosis and prognosis clearly and compassionately
4. COM 1.5 Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are affecting an interaction and respond appropriately
5. ME 2.3 Work with the patient’s family to establish goals of care
6. ME 2.4 Develop a management plan that aligns with the goals of care
7. COL 1.3 Communicate effectively with physicians and other health care professionals
8. HA 1.1 Facilitate access to bereavement support for a patient’s family, as appropriate
9. P 1.3 Recognize and respond to ethical issues
Pediatric Surgery: Core EPA #3

Facilitating the transition to adult care

Key Features:
- This EPA focuses on applying knowledge of the long-term natural history of the condition and the need for specific follow-up, monitoring and/or screening, as appropriate.
- It also includes identifying the timing of referral and the appropriate health care provider (e.g. adult specialist or primary care) for ongoing care, and arranging the necessary follow-up.

Assessment Plan:
Direct observation or case review by pediatric surgeon
Use Form 1
Collect 1 observation of achievement

Relevant Milestones:
1. ME 1.3 Apply knowledge of the natural history of conditions relevant to Pediatric Surgery
2. ME 2.2 Assess the need and timing of transition from pediatric to adult care
3. ME 2.4 Determine the setting of care appropriate for the patient’s health needs
4. ME 4.1 Establish plans for ongoing care that include monitoring health status and anticipate the progression of the patient’s condition
5. COL 3.2 Summarize the clinical case in a transfer summary, including guidance for management of ongoing issues
6. HA 1.1 Facilitate timely patient access to services and resources
Pediatric Surgery: Core EPA #4

Contributing surgical expertise to the collaborative care of patients who are critically ill

Key Features:
- This EPA focuses on the pediatric surgeon’s role as a consultant in critical care settings (e.g. NICU and PICU).
- This includes prioritizing interventions and developing treatment plans for critically ill patients, including those who have experienced trauma and those with complex postoperative care.
- This EPA includes effective communication and collaboration with the critical care team and other health care professionals.

Assessment Plan:

Direct observation and/or case review by pediatric surgeon, neonatologist, or intensivist (i.e. not fellows); may include input from members of the interprofessional team

Use Form 1. Form collects information on:
- Case mix: trauma; oncology; sepsis; acute abdomen; other
- Setting: ER; NICU; PICU; other
- Includes input from (select all that apply): other physician; nurse; respiratory technician; social worker; other health care professional
- Observation: direct; case review

Collect 2 observations of achievement
- At least 1 complex trauma
- At least 2 observers
- At least 1 direct observation

Relevant Milestones:

1 ME 1.1 Demonstrate responsibility and accountability for patient care within the boundaries and expectations of the consultant role

2 ME 1.4 Perform a clinical assessment that addresses all relevant issues

3 ME 2.4 Develop and implement management plans that consider all of the patient’s health problems and context

4 ME 2.4 Develop a plan for management which may include observation, surgery and/or non-operative intervention

5 ME 3.1 Integrate planned procedures and therapies into the overall plan of care
6  **S 3.4** Integrate best evidence and clinical expertise into decision-making

7  **COL 1.3** Contribute to quality patient care by sharing medical expertise

8  **COL 1.3** Communicate **effectively** with physicians and other health care professionals

9  **COL 2.2** Work effectively with other health care professionals to develop plans for clinical care when there are differences in opinion and/or recommendations

10 **P 1.1** Exhibit appropriate professional behaviours

11 **L 2.1** Allocate health care resources for optimal patient care

12 **HA 1.1** Facilitate timely patient access to services and resources
Pediatric Surgery: Core EPA #5

Resuscitating and stabilizing pediatric patients who are critically ill

Key Features:
- This EPA focuses on resuscitation and stabilization of a critically ill pediatric patient of any age as the leader of an interdisciplinary team.
- This includes all causes of critical illness, examples include sepsis and trauma.
- This EPA may be observed in the NICU, PICU, emergency room, and simulation.

Assessment Plan:
Direct observation by pediatric surgeon, trauma team leader, neonatologist, intensivist, or emergency physician

Use Form 1. Form collects information on:
- Case mix: trauma; sepsis; acute abdomen; oncology; other
- Setting: ER; PICU; NICU; simulation
- Age group: neonate; infant; toddler; child; adolescent

Collect 4 observations of achievement
- At least 1 case of trauma
- No more than 2 in simulation
- At least 1 neonate
- At least 2 faculty
- At least 1 surgeon

Relevant Milestones:
1. ME 2.4 Assess clinical status and adjust resuscitative and diagnostic efforts as appropriate
2. L 4.2 Establish clear leadership in resuscitative efforts
3. COL 1.2 Delegate tasks and direct team members to aid in resuscitation
4. ME 2.4 Manage hemodynamic support and monitoring
5. ME 2.4 Manage non-invasive and/or invasive ventilation
6. ME 5.2 Demonstrate situational awareness, avoid fixation error
7. ME 3.1 Integrate planned procedures or therapies into resuscitative efforts
8. ME 4.1 Ask for additional assistance and/or other services when indicated
9. P 4.1 Maintain professional clinical performance in demanding or stressful clinical settings
10 ME 1.4 Act decisively and maintain control in critical situations

11 ME 2.4 Recognize when ongoing resuscitation efforts are no longer effective and should be discontinued

12 COL 1.2 Use closed loop communication

13 COL 1.3 Participate and/or lead debriefing of an event with the health care team
Pediatric Surgery: Core EPA #6
Performing head and neck procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various conditions.
- Examples include: thyroglossal duct cyst, branchial cleft cyst, thyroid surgery, lymphadenopathy, and lymphovascular malformations.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon or other pediatric surgical specialist

Use Form 2. Form collects information on:
- Condition: thyroglossal duct cyst; branchial cleft cyst; thyroid surgery; lymphadenopathy; lymphovascular malformation; other condition

Collect 4 observations of achievement
- At least 2 different conditions

Relevant Milestones:

1 ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2 ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3 ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4 ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5 ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #7

Performing surgical procedures for patients with transesophageal fistula and esophageal atresia

Key Features:
- The technical skills of this EPA include: performance and interpretation of rigid bronchoscopy, if applicable; identification, dissection, and control of TEF; identification and dissection of proximal and distal pouches; performance of the esophageal anastomosis; and assessment of tension and need for ancillary techniques for anastomosis, if applicable.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2

Collect 2 observations of achievement

Relevant Milestones:

1 ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2 ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3 ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4 ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5 ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #8

Performing surgical procedures for patients with congenital lung lesions

Key Features:
- The technical skills of this EPA include: identification of lobar anatomy and performance of lobar dissection; identification, dissection and control of vascular structures; identification, dissection and control of bronchial structures; and application of strategies and techniques for the prevention and management of post-operative air-leaks.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2

Collect 2 observations of achievement

Relevant Milestones:

1. **ME 3.1 Pre-procedure plan:** Gather/assess required information to reach diagnosis and determine correct procedure required

2. **ME 3.4 Case preparation:** Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. **ME 1.3 Knowledge of specific procedural steps:** Understands steps of procedure, potential risks, and means to avoid/overcome them

4. **ME 3.4 Technical performance:** Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. **ME 3.4 Visuospatial skills:** 3D spatial orientation and able to position instruments/hardware where intended

6. **ME 3.4 Efficiency and flow:** Obvious planned course of procedure with economy of movement and flow

7. **ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement**
8  COL 1.2 Professional and effective communication/utilization of staff

9  ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #9

Performing surgical procedures for patients with a congenital diaphragmatic hernia

Key Features:
- The technical skills of this EPA include: reduction of hernia contents using proper atraumatic technique; identification and mobilization of the diaphragm remnant; appropriate decision-making regarding primary or patch closure; and closure of the defect, including patch choice and technique (as applicable).
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon
Use Form 2
Collect 2 observations of achievement

Relevant Milestones:

1 ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2 ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3 ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4 ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5 ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement
8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #10

Performing other thoracic procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various chest conditions.
- Examples include: congenital lung disease (e.g. CPAM, sequestration), diaphragm conditions (e.g. eventration), chest wall conditions (pectus carinatum/excavatum), and mediastinal lesions.
- This EPA does not include procedures for which there are separate EPAs, including TEF/EA, congenital lung lesions and CDH.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient's clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Condition (write in):

Collect 4 observations of achievement
- 2 chest wall conditions

Relevant Milestones:

1. **ME 3.1** Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. **ME 3.4** Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. **ME 1.3** Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. **ME 3.4** Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. **ME 3.4** Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended
6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #11

Performing surgical procedures for patients with an abdominal wall defect

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with an abdominal wall defect, including an omphalocele or gastroschisis.
- The technical skills of this EPA include: dissection of the omphalocele sac, identification of normal abdominal wall and complete fascial closure, as applicable; appropriate selection and application of silo with plan for safe reduction considering the abdominal domain, as applicable; and safe reduction and flap closure.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2

Collect 2 observations of achievement

Relevant Milestones:

1  ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2  ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3  ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4  ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5  ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6  ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #12

Performing surgical procedures for patients with a rotational anomaly

Key Features:
- The technical skills of this EPA include: detorsion of volvulus and evaluation of bowel viability, with resection as indicated; consideration of viable bowel length in decisions regarding resection, second look or palliation; recognition of anatomic findings and their implications; and safe exposition and division of Ladd’s bands and widening of the mesentery.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon
Use Form 2
Collect 2 observations of achievement

Relevant Milestones:
1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required
2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications
3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them
4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues
5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended
6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7. ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement
8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #13

Performing surgical procedures for patients with Hirschsprung’s disease

Key Features:
- The technical skills of this EPA include: identification of the ganglionated segment, including consultation with pathology; safe and efficient dissection specific to the perineal or abdominal approach; and appropriate anastomotic technique.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2

Collect 2 observations of achievement

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7. ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8. COL 1.2 Professional and effective communication/utilization of staff
9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #14

Performing surgical procedures for patients with duodenal atresia

Key Features:
- The technical skills of this EPA include: identification of the atretic segment and other associated intra-abdominal anomalies; safe duodenal repair, including management of duodenal web and proximal dilated segment; and identification of the indications for and placement of enteral feeding access, as applicable.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2

Collect 2 observations of achievement

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7. ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement
8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #15
Performing other GI procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various gastrointestinal conditions.
- Examples include any of the following as a definitive repair: anorectal malformation or other neonatal bowel obstruction (including atresia, duplication, meconium ileus, necrotizing enterocolitis).
- This EPA does not include conditions for which there are separate EPAs, including abdominal wall defects (omphalocele or gastroschisis), rotational anomalies, Hirschsprung’s disease, and duodenal atresia.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Case (write in):

Collect 7 observations of achievement
- Must include a range of cases

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended
6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #16

Performing hepatobiliary, pancreatic and splenic procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various conditions.
- Examples include: hepatobiliary disease (biliary atresia or choledochal cyst) and other cases (e.g. benign liver resection, splenic surgery, pancreatic resection, etc.)
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Case mix: splenic; pancreatic; biliary atresia/choledochal cyst; other condition

Collect 3 observations of achievement
- At least 1 each of the following: splenic case, pancreatic case, biliary atresia/choledochal cyst

Relevant Milestones:

1  ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2  ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3  ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4  ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5  ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6  ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #17

Performing genitourinary and gynecologic procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various conditions.
- Examples include: orchidopexy, testicular torsion, non-malignant ovarian pathology, inguinal hernia in infant <6 months of age.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon or other pediatric surgical specialist

Use Form 2. Form collects information on:
- Case mix: inguinal hernia <6 months of age; orchidopexy; testicular torsion; non-malignant ovarian pathology

Collect 9 observations of achievement
- At least 3 hernias in patients <6 months of age
- 2 of each other condition

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #18

Performing vascular access procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various conditions needing vascular access.
- These procedures include: central venous access, percutaneous or cut-down, temporary and permanent, and access for ECMO.
- This EPA may be observed in any clinical setting.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Procedure: tunneled line; other procedure
- Technical complexity: simple; intermediate; complex
- Age: ≤2 yrs; >2 yrs

Collect 2 observations of achievement
- At least 1 tunneled line
- 2 different observers
- At least 1 pediatric surgeon

Relevant Milestones:

1 ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2 ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3 ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4 ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5 ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended
6 ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow

7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #19

Performing surgical procedures for patients with Wilms tumour or neuroblastoma

Key Features:
- The technical skills of this EPA include: determination of the extent of resection, applying knowledge of biological risk stratification systems that aid in treatment decisions; appropriate strategy and technique for vascular control; resection/removal of contiguous organs or structures using sound rationale; and lymph node sampling as appropriate to the specific condition.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:

Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Case mix: Wilms tumour; neuroblastoma

Collect 4 observations of achievement
- At least 2 of each case

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core EPA #20

Performing other oncology procedures

Key Features:
- This EPA focuses on the surgical techniques and skills required to manage patients with various neoplastic conditions but does not include incisional biopsies.
- This includes resection for: hepatoblastoma, rhabdomyosarcoma, Ewing’s sarcoma, teratomas including sacrococcygeal, as well as other genitourinary, pulmonary, hepatic, and gastrointestinal tumours.
- This EPA does not include procedures for which there is a separate EPA, including Wilms tumour or neuroblastoma.
- In addition to technical skills this EPA focuses on intraoperative judgment with respect to the procedure, the patient’s clinical status and any changes during the procedure, technical challenges/unexpected findings and management of intraoperative complications/crises.

Assessment Plan:
Direct observation by pediatric surgeon

Use Form 2. Form collects information on:
- Case (write in):

Collect 6 observations of achievement

Relevant Milestones:

1. ME 3.1 Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required

2. ME 3.4 Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications

3. ME 1.3 Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them

4. ME 3.4 Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues

5. ME 3.4 Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended

6. ME 3.4 Efficiency and flow: Obvious planned course of procedure with economy of movement and flow
7 ME 3.4 Adjust plan/procedure as unexpected elements unfold, demonstrating surgical maturity and judgement

8 COL 1.2 Professional and effective communication/utilization of staff

9 ME 3.4 Post-procedure plan: Appropriate complete post-procedure plan
Pediatric Surgery: Core SA 1

Executing scholarly work relevant to Pediatric Surgery

Key Features:
- This EPA includes all aspects of performing scholarly work: identification of a question for investigation, literature review, data gathering, data analysis, reflective critique and dissemination.
- This may include scholarly research, quality improvement, or educational project relevant to pediatric surgery that is suitable for peer review publication or presentation at an academic meeting.
- Assessment is based on the submission of a completed scholarly project, and may also include observation of the presentation of the scholarly work at a local, national or international meeting.

Assessment Plan:

Review of resident’s submission of the completed scholarly project by research supervisor, program director, or delegate (i.e. research director)

Use Form 4

Collect 1 observation of achievement

Relevant Milestones:

1. **L 4.1** Organize work to manage clinical, scholarly, and other responsibilities
2. **S 4.4** Identify, consult, and collaborate with content experts and others in the conduct of scholarly work
3. **S 4.4** Collect data for a scholarly project
4. **S 4.4** Perform data analysis
5. **S 4.4** Integrate existing literature and findings of data collection
6. **S 4.4** Identify areas for further investigation
7. **S 4.5** Summarize and communicate the findings of research and scholarly inquiry
Pediatric Surgery: TTP EPA #1

Managing pediatric patients with surgical conditions in the outpatient setting

Key Features:
- This EPA integrates the resident’s medical decision-making abilities for individual cases with their abilities to function effectively in the outpatient setting; managing a clinic load, making appropriate clinical decisions, booking operative cases, staying on time and working effectively with other health professionals.
- This EPA may be observed in any outpatient clinic setting, with any patient mix.
- The observation of this EPA is based on at least a half day or full day of clinic.

Assessment Plan:
Direct and/or indirect observation by pediatric surgeon, with input from other health professionals
Use Form 1
Collect 2 observations of achievement
- 2 different observers

Relevant Milestones:
1. **ME 1.5** Carry out professional duties in the face of multiple, competing demands
2. **COM 2.2** Manage the flow and timing of clinical encounters
3. **ME 3.1** Determine the most appropriate procedures or therapies for the purpose of assessment and/or management
4. **ME 2.4** Establish patient-centred management plans
5. **S 3.4** Integrate best evidence and clinical expertise into decision-making
6. **L 2.1** Consider costs when choosing options for investigation or treatment
7. **HA 1.1** Work with patients to address the determinants of health that affect them and their access to needed health services or resources
8. **ME 1.6** Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice
9. **COM 5.1** Document clinical encounters in an accurate, complete and timely manner
10. **L 4.2** Book operative cases with appropriate urgency, duration, and equipment and patient preparation
11 L 4.1 Manage time effectively in the ambulatory clinic

12 L 4.1 Integrate supervisory and teaching responsibilities into the overall management of the clinic
Pediatric Surgery: TTP EPA #2

Managing patient care and clinical resources for the pediatric surgery service

Key Features:
- This EPA focuses on leading the provision of care for patients on an inpatient consultation and/or ward service, including new consults, admitted patients, transports and outside calls.
- This includes responsibility for medical decision-making across the breadth of clinical scenarios, and includes overseeing the care of patients and managing admissions, transfers and discharges.
- This also includes clinical administrative aspects such as the judicious use of resources in decisions about bed management and patient flow, and facilitating access to diagnostic tests and treatments.
- The observation of this EPA is based on a period of at least one month.

Assessment Plan:

Direct and indirect observation by pediatric surgeon, may include input from charge nurse, junior residents, medical students and/or other health care professionals

Use Form 1

Collect 2 observations of achievement
  - 2 different observers

Relevant Milestones:

1  L 4.1 Set priorities and manage time to fulfil diverse responsibilities

2  ME 1.1 Demonstrate responsibility and accountability for decisions regarding patient care, acting in the role of most responsible physician

3  S 3.4 Integrate best evidence and clinical expertise into decision-making

4  ME 2.4 Establish patient-centred management plans

5  HA 1.1 Facilitate timely patient access to services and resources

6  ME 4.1 Formulate and implement plans for discharge that include appropriate ongoing care and follow-up

7  L 2.1 Allocate health care resources for optimal patient care

8  COL 1.2 Work effectively with the interprofessional team

9  L 4.1 Integrate supervisory and teaching responsibilities into the overall management of the clinical service
Pediatric Surgery: TTP EPA #3

Coordinating, organizing, and executing the day’s list of core surgical procedures

Key Features:
- This EPA integrates the resident’s surgical abilities for individual cases with their abilities to function effectively as a surgeon: managing a case load, prioritizing, supervising junior learners, and working effectively with other health professionals.
- This EPA is observed in the OR, and can be of any case mix.

Assessment Plan:
Direct observation by pediatric surgeon
Use Form 1
Collect 2 observations of achievement
  - At least 2 different observers

Relevant Milestones:

1. **P 1.2** Prepare for surgical procedures, reviewing the list of planned operations
2. **ME 5.2** Lead the team in the use of the surgical safety checklist, or equivalent
3. **ME 3.4** Perform surgical procedures in a skillful and safe manner
4. **ME 3.4** Manage unexpected intraoperative findings and perioperative issues, adjusting the procedure and list of cases as appropriate
5. **COL 3.2** Transition patient care safely to the post-operative team
6. **ME 3.4** Establish plans for post-operative care
7. **COM 3.1** Convey information about the procedure, operative findings and patient status to the family
8. **COM 5.1** Document surgical procedures in an accurate, complete, timely and accessible manner
9. **P 4.1** Maintain professional clinical performance in demanding or stressful clinical settings
Pediatric Surgery: TTP EPA #4

Contributing surgical expertise as a member of an interprofessional team

Key Features
- This EPA focuses on shared decision-making with other health care professionals, and working effectively as a member of an interprofessional team. This may include any interprofessional team, examples include: tumour board and management of complex NICU/PICU patient.
- This EPA includes contributing medical expertise to the team discussion, advocating for the patient and demonstrating professional behavior.

Assessment Plan:

Direct observation by faculty (pediatric surgery and other disciplines)

Use Form 1

Collect 2 observations of achievement
- At least 1 non-pediatric surgeon

Relevant Milestones:

1 ME 1.3 Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentations in Pediatric Surgery

2 COL 1.1 Establish positive relationships with other members of the health care team

3 S 3.4 Integrate best evidence and clinical expertise into decision-making

4 COL 1.3 Share expertise to develop a care plan in collaboration with other physicians

5 COL 1.3 Communicate effectively with physicians and other health care professionals

6 L 2.1 Allocate health care resources for optimal patient care

7 COL 2.2 Achieve consensus when there are differences in recommendations provided by other health care professionals

8 P 1.1 Exhibit appropriate professional behaviours
Pediatric Surgery: TTP EPA #5

Managing the care of children with complex and/or challenging surgical conditions

Key Features:
- This EPA focuses on the application of pediatric surgical skills and decision-making to the most challenging and complex cases, including those where there is uncertainty in the diagnosis and/or management.
- This EPA includes engaging consultants as needed and preparing/coordinating the operative team.
- This EPA includes conditions of any etiology.

Assessment Plan:
Direct or indirect observation by pediatric surgeon
Use Form 1
Collect 1 observation of achievement

Relevant Milestones:
1 ME 2.2 Synthesize patient information
2 P 1.1 Identify limits in one’s own expertise
3 ME 4.1 Determine the need, timing and priority of referral to another physician
4 COL 1.2 Consult as needed with other physicians
5 ME 2.3 Establish goals of care in collaboration with the patient and family
6 ME 3.1 Determine the most appropriate procedures or therapies for the purpose of assessment and/or management
7 ME 2.4 Establish a patient-centred management plan despite limited, non-diagnostic, or conflicting clinical data
8 ME 2.4 Develop a plan to deal with clinical uncertainty
9 COM 3.1 Convey information related to the uncertainty in diagnosis and/or treatment in a clear, timely and transparent manner
10 COM 4.1 Facilitate discussions with the patient and family in a way that is respectful, non-judgmental, and culturally safe
11 COM 4.3 Use communication skills and strategies that help the patient/family make informed decisions