

THE COLLEGE OF
FAMILY PHYSICIANS
OF CANADA



LE COLLÈGE DES
MÉDECINS DE FAMILLE
DU CANADA

Priority Topics and Key Features for the Assessment of Competence in Enhanced Surgical Skills

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Introduction

The Board of Directors of the College of Family Physicians of Canada (CFPC) approved the initiative to develop Certificates of Added Competence (CACs) in Enhanced Surgical Skills (ESS) and Obstetrical Surgical Skills (OSS) in 2015. It is founded on the ultimate goal of improving access to high-quality surgery and maternity care close to home in rural areas.

The CFPC's Working Group on the Assessment of Competence in Enhanced Surgical Skills developed this collection of priority topics and key features for assessment from 2017 to 2019. This working group was established as a collaboration among family physicians with enhanced surgical skills; family physicians with obstetrical surgical skills; representatives of the Royal College of Physicians and Surgeons of Canada's Specialty Committees for General Surgery and for Obstetrics and Gynecology; representatives from the Canadian Association of General Surgeons and from the Society of Obstetricians and Gynaecologists of Canada; and a representative from the Society of Rural Physicians of Canada.

The goals of these priority topics and key features are:

- To guide the assessment of required knowledge and skills when determining competence for awarding CACs in ESS (for family physicians who provide a broad range of surgical procedures, including Cesarean sections) and OSS (for family physicians who provide Cesarean sections and advanced obstetrical care)
- To set national standards for CFPC accreditation; all ESS and OSS programs will need to show they are evaluating all their graduates on these assessable competencies

These priority topics and key features are not all encompassing and may not fully capture the extent of the role of the ESS physician. These roles may vary appropriately according to the resources, alternatives for care, and expectations of the community. A physician with ESS may practise as one or more individuals with enhanced skills in a small community or in a smaller regional centre in partnership with specialists.

The practice of a physician with ESS must also take into account:

- The desirability of maintaining or re-establishing high-quality services as close to patients' homes as is reasonably feasible, considering factors including, but not limited to, accessibility, minimizing disruption for the patient and family, respecting cultural issues, and reducing cost to the system and patients
- The strategic importance of a robust local surgical program in the sustainability of maternity care close to home in rural and remote areas

- The foundational competence of patient selection that includes the skill to collaborate effectively with the patient, local team, and regional network when deciding to provide care locally or transfer a patient to a higher level of care
- The emerging consensus that surgical care in rural communities is best delivered, reported, and assessed for quality within regional networks of care that include family physicians with ESS/OSS and specialist surgeons; these networks recognize that competency is a team-based attribute belonging to all of surgery, anesthesia, nursing, and institutional resources
- The robust potential for integrating remote presence technology to bring personnel from regional networks or programs into the team-based surgical and maternity care in rural areas
- The emerging paradigm that outcomes of care, whether attached to practitioners or to programs, actually belong to the entire region, and that the quality of outcomes is a measure of the triage efficacy and regional network function
- The necessity for physicians with ESS to deal with clinical situations that require them to exercise clinical courage and to assume the role (which may well be placed upon them) of the team leader and surgical first responder
- The role of physicians with ESS to advocate for both physician and team education and to lead regular quality improvement activities
- The role of physicians with ESS to identify and advocate for surgical services that can be provided locally and will improve the quality of care in the community

How the priority topics and key features were developed

The Working Group on the Assessment of Competence in Enhanced Surgical Skills (which has nine members) acted as the nominal group. They generated an initial list of priority topics through an individual survey followed by group discussion and consensus. The validation survey was sent to 196 family physicians who are interested in enhanced surgical skills; the working group recommended 48 and the rest were identified using the CFPC's Section of Communities of Practice in Family Medicine database (stratified to ensure diverse and balanced representation). The survey yielded a response rate of 19 per cent, with 37 completed surveys. The responses were coded independently and another list of priority topics was generated. The lists generated by the nominal group and the larger reference group were very similar, both in the topics named and the priorities assigned, with a strong positive correlation of 0.75. This original list included 22 priority topics.

Key features were developed and finalized for all topics using the nominal group technique, which included four iterations of individual comments, multiple in-person discussions, and consensus building. Through this iterative process key features for certain priority topics were combined and some were removed if overlap was detected, resulting in the final list of 17 priority topics. Deliberate attention was paid to avoiding the duplication of priority topics already included in the evaluation objectives for family medicine, unless a specific focus on enhanced surgical skills was identified through key feature generation. Successful candidates for CACs in ESS are expected to have acquired core competencies in family medicine, including the [six essential skills](#) and [procedures](#)¹.

In the construction of both the list of priority topics and the list of procedural skills, the working group was guided by one the largest and most established ESS programs—that of the University of Saskatchewan in Prince Albert—and by the national collaborative work accomplished over the past several years by working group members' respective organizations, including:

- The consensus curriculum papers published for ESS² and OSS³
- The Joint Position Paper on Rural Surgery and Operative Delivery⁴
- The Summit on Rural Surgery and Operative Delivery, held in Banff, Alberta, in 2016

¹ College of Family Physicians of Canada. *Defining competence for the purposes of certification by the College of Family Physicians of Canada*. Mississauga, ON: College of Family Physicians of Canada; 2010.

² Caron N, Iglesias S, Friesen R, Berjat V, Humber N, Falk R, et al. A proposal for the curriculum and evaluation for training rural family physicians in enhanced surgical skills. *Can J Surg*. 2015;58(6):419-421.

³ Burnett M, Iglesias S, Siverston J, Blake J, Woollard R, Ebert N, et al. A competency-based curriculum for training rural family physicians in operative delivery. *J Obstet Gynaecol Can*. 2017;39(6):474-477.

⁴ Iglesias S, Kornelsen J, Woollard R, Caron N, Warnock G, Friesen R, et al. Joint position paper on rural surgery and operative delivery. *Can J Rural Med*. 2015;20(4):129-138.

It is important to bear in mind that because there is great overlap between crucial competencies that are required for different priority topics, the tendency was to avoid repetition and list key features selectively. This is a living document that will be revisited regularly and updated to ensure its relevance.

How to use the priority topics and key features

It is important to note that materials in this booklet are intentionally selective and not comprehensive. Priority topics do not represent an extensive list of topics that should be covered in training but rather a selective list of areas for assessment that can help teachers/assessors infer overall competence in enhanced/obstetrical surgical skills. Key features represent the critical or essential steps in the resolution of a clinical situation or problem, so the achievement of underlying competencies can be inferred. Extrapolation of practice to reasonably related activities should be anticipated and is desirable. All key features refer to observable actions, not knowledge. They do not cover all necessary steps (e.g., history, physical examination, diagnosis, management), only those that are critical and most likely to be missed.

As such, the priority topics and their key features are not meant to be used in a checklist approach when assessing competence. They are best used for guiding assessment efforts (e.g., sampling, observation, reflection) over time to build a case for overall competence or the lack thereof. They may also be useful in the following situations:

For trainees:

- Use as a guide for self-reflection on competence and the development of a learning plan, particularly prior to and during clinical experiences
- Use as a guide for soliciting feedback from preceptors/assessors

For preceptors/assessors:

- Compare and contrast materials in this document with your assessment strategies and adjust as necessary
- Use as a guide to help develop learning plans for your trainees
- Use as a guided assessment of your trainees, including soliciting feedback, developing questions to ask trainees, and completing field notes
- Use as a self-reflection guide to assess your teaching

For programs:

- Use as a guide to plan a curriculum that can adequately expose trainees to the priority topics and procedures
- Use as a guide to develop assessment strategies
- Use as assessment standards when making decisions about residents' successful completion of training

Priority Topics

1. [Patient selection/Preoperative assessment](#)
2. [Consulting as a physician with enhanced surgical skills](#)
3. [Labour and delivery management](#)
4. [Cesarean section](#)
5. [Surgical management of postpartum hemorrhage](#)
6. [Complex obstetrical lacerations](#)
7. [First trimester bleeding](#)
8. [Acute abdomen](#)
9. [Gastrointestinal endoscopy](#)
10. [Primary uncomplicated inguinal and umbilical hernias](#)
11. [Female surgical sterilization](#)
12. [Acute perianal and perineal presentations \(excluding obstetrical\)](#)
13. [Trauma management](#)
14. [Abdominal access/Laparoscopic access](#)
15. [Intraoperative complications](#)
16. [Post-operative management](#)
17. [Continuous quality improvement](#)

Priority Topic 1: Patient selection/Preoperative assessment

1. When working as a physician with enhanced surgical skills, participate in the development of institutional and regional policies about patient selection.
2. When considering a surgery or procedure for a patient:
 - a) Independently confirm the diagnosis
 - b) Consult appropriately with anesthetists and other members of the team to determine the suitability of the patient for the procedure
 - c) Respond appropriately to the urgency of the situation
 - d) Decide where care should be provided based on personal and team skill sets, as well as the available local resources
3. In collaboration with the patient assess the options and risks and benefits of performing the surgery/procedure locally or transferring, taking into consideration factors that include:
 - Patient stability
 - Potential complications
 - Weather conditions and geographic factors
 - Prolonged transfer delays
 - Socio-cultural factors, and the patient's and family's wishes and financial resources
 - Patient autonomy
4. When creating a management plan for a patient who will undergo a surgery or procedure locally:
 - a) Identify individual medical risks and optimize the preoperative medical status
 - b) Anticipate complications and develop a contingency plan
 - c) Develop, implement, and communicate a comprehensive plan for post-operative care

Note: For detailed key features on the priority topic: **Patient Transfer**, please see the document [*Priority Topics for the Assessment of Competence in Rural and Remote Family Medicine. Pg.8*](#)

Priority Topic 2: Consulting as a physician with enhanced surgical skills

1. When consulted about a patient:
 - a) Address the concerns of the referring practitioner and the patient
 - b) Confirm the diagnosis independently using an appropriate history, examination, and investigations
 - c) Decide and clearly communicate who has ongoing responsibility for care (i.e., most responsible practitioner) to the referring physician and the patient
 - d) Communicate the treatment plan to the patient and the referring practitioner

2. When your clinical opinion does not align with the opinion of the referring practitioner and/or the patient:
 - a) Define, communicate, and document your diagnosis clearly in the proposed management plan and provide alternative options
 - b) Take appropriate steps to resolve the difference of opinion respectfully and in a timely manner
 - c) Ensure ongoing follow-up as required and determine ongoing responsibility for care

Priority Topic 3: Labour and delivery management

1. When consulted regarding an antepartum or intrapartum patient for possible operative vaginal delivery or Cesarean section:
 - a) Perform a full, independent assessment of both the mother and fetus
 - b) Address the concerns of the referring practitioner and patient
 - c) Develop a time-sensitive management plan based on:
 - The acuity of the situation
 - Consideration of both maternal and fetal well-being
 - Your own skills
 - The available resources (e.g., team, equipment, transfer time)
 - d) Decide and clearly communicate who has ongoing responsibility for care (i.e., most responsible practitioner)
2. When consulted about a patient who presents with an obstetrical emergency (e.g., antepartum hemorrhage, suspected uterine rupture, abnormal fetal heart rate):
 - a) Remain calm, assume control of the situation, and communicate your plan of action assertively with the patient, referring practitioner, and health care team
 - b) Implement a management plan that considers and optimizes maternal and fetal well-being using all available resources
 - c) Initiate timely transfer when necessary
3. When consulted about a patient with possible abnormal progress in labour:
 - a) Re-evaluate to establish the diagnosis of labour and confirm or rule out dystocia (i.e., recognize variations of “normal”)
 - b) Ensure optimal management of labour
 - c) Initiate delivery when appropriate
4. When consulted about a patient with possible atypical or abnormal fetal heart monitoring:
 - a) Obtain and interpret the fetal heart tracing while considering the clinical situation
 - b) Ensure adequate intra-uterine resuscitation
 - c) Promptly initiate delivery when appropriate
5. When consulted about a patient with a complex obstetrical laceration:
 - a) Complete an appropriate examination including adequate light, analgesia, and exposure
 - b) Thoroughly assess and determine the extent of the injury to the anal sphincter
 - c) Optimize care and recognize the need for transfer
6. When initiating transfer for a patient with an acute perianal or perineal presentation:
 - a) Ensure hemostasis
 - b) Start antibiotics prior to transfer

Note: See also [Priority Topics and Key Features for the Assessment of Competence in Intrapartum and Perinatal Care.](#)

Priority Topic 4: Cesarean section

1. When consulted to assess a patient who may need a Cesarean section:
 - a) Complete an independent reassessment of the patient and determine whether a Cesarean section is an appropriate decision
 - b) Discuss with the patient the option of possibly avoiding a Cesarean section by a trial of labour
2. After a decision to perform a Cesarean section is made:
 - a) Decide whether to perform the Cesarean section locally based on the urgency, the maternal and fetal conditions, gestational age, the available surgical and neonatal resources, the availability of transportation to another site, and the importance of birth close to home
 - b) Choose the appropriate abdominal and uterine incisions based on the clinical scenario
 - c) Ensure ongoing monitoring of the mother and the fetus
 - d) Anticipate and plan for a possible difficult Cesarean section delivery (e.g., impacted head after long labour, anterior placenta, high BMI, prior abdominal surgery) to develop a team-based management plan
 - e) Ensure a team is prepared for the newborn
3. When performing a Cesarean section:
 - a) Change the surgical plan when necessary (e.g., unsuccessful anesthesia, substantial blood loss, malpresentation) in collaboration with the team
 - b) Adjust the speed/urgency of the procedure according to the circumstances (e.g., uterine rupture, abnormal fetal heart rate)
 - c) Communicate in a sensitive manner, recognizing the unique nature of the situation (e.g., awake patient, partner present)
4. When difficulty with extraction of the fetus occurs:
 - a) Recognize the need for and perform an extension of the incision (i.e., uterus, muscle, fascia, skin)
 - b) Employ alternative delivery techniques when necessary (e.g., elevate the head, breech extraction)
 - c) Direct the team for necessary assistance
5. After an unexpected or negative outcome:
 - a) Recognize the emotional impact on the mother, partner, and family and provide appropriate support (e.g. maintain communication with the team caring for the newborn, arrange appropriate follow-up)

- b) Debrief and reflect on the emotional impact on you, the team, and the community and seek appropriate support

Priority Topic 5: Surgical management of postpartum hemorrhage

1. When consulted to manage a patient with a postpartum hemorrhage:
 - a) Remain calm and assume control of the situation
 - b) Resuscitate the patient and optimize medical management
 - c) Consider all causes of bleeding and treat correctable etiologies
 - d) Do not underestimate blood loss
 - e) Anticipate, prevent, and manage shock

2. In a hemorrhaging postpartum patient who is not responding to management:
 - a) Ensure ongoing resuscitation while preparing for surgery
 - b) Decide on the surgical intervention based on etiology, urgency, available resources, and skill level
 - c) Communicate clearly the urgency of the intervention to the team and the patient
 - d) Initiate transfer when necessary
 - e) Use an appropriate range of surgical techniques

Note: See also [*Priority Topics and Key Features for the Assessment of Competence in Intrapartum and Perinatal Care.*](#)

Priority Topic 6: Complex obstetrical lacerations

1. When consulted to assess a patient with a possible obstetrical laceration:
 - a) Ensure appropriate analgesia, positioning, exposure, and lighting in the operating room, if necessary
 - b) Examine the birth canal in a systematic fashion, including a digital rectal exam and walking the cervix, to ensure all injuries are identified with specific attention to fourth-degree tears
 - c) Monitor ongoing blood loss and recognize postpartum hemorrhage

2. When an obstetrical laceration requires surgical intervention:
 - a) Assess accurately whether you have the skills necessary for the repair of complex injuries (e.g., fourth-degree tear) and consider early consultation with possible transfer
 - b) Repair the tear(s) and involved anatomic structures using appropriate surgical techniques and instruments
 - c) If transfer is planned, ensure adequate analgesia, hemostasis, and resuscitation

3. When creating the post-operative plan:
 - a) Prevent constipation to avoid the breakdown of the repair (e.g., prescribe laxatives)
 - b) Prescribe adequate multi-modal analgesia
 - c) Educate the patient regarding the potential long-term consequences

Priority Topic 7: First trimester bleeding

1. When consulted regarding a patient with presumed first trimester bleeding:
 - a) Perform a full reassessment (e.g., hCG, gestational age, Rh) of the patient, including a speculum exam (i.e., do not rely solely on technology and lab results), to include or exclude pregnancy
 - b) Confirm the gestational age and location of the pregnancy while considering the possibility of a heterotopic pregnancy
 - c) Confirm and respect the patient's expectations for this pregnancy
2. In a patient with a pregnancy of unknown location or uncertain viability consider delaying intervention if the patient is stable and arrange close follow-up.
3. In a patient diagnosed with a non-viable intrauterine pregnancy consider medical versus surgical management (i.e., do not rush to the operating room).
4. In a patient with a diagnosed ectopic pregnancy:
 - a) Anticipate and monitor for blood loss and possible concealed hemorrhage
 - b) Act promptly on diagnosis and initiate medical or surgical management
 - c) Discuss with the patient the impact of management options on future fertility and increased risk of recurrence
5. When performing a dilation and curettage, ensure a timely and appropriate response to suspected or actual uterine perforation.
6. In a patient who has had treatment for first trimester bleeding:
 - a) Educate the patient to recognize immediate post-op and long-term complications and the need for follow-up
 - b) Recognize and address the emotional impact of pregnancy loss

Priority Topic 8: Acute abdomen

1. When consulted about a patient with a suspected acute abdomen who may require surgical intervention:
 - a) Complete an independent multi-system reassessment using appropriate investigations
 - b) Reassess and recognize the changes, which may be subtle, that influence the decision to perform surgery
 - c) Provide appropriate analgesia
 - d) Recognize potentially life-threatening situations (e.g., ruptured abdominal aneurysm) and manage promptly
 - e) Recognize atypical presentations in special populations (e.g., appendicitis in young children and pregnant women) and manage accordingly
 - f) Decide between operative and non-operative management and initiate timely treatment, including the decision to perform surgery locally or urgent transfer

Note: See also [*Priority Topics and Key Features for Evaluation Objectives in Family Medicine \(Abdominal Pain\)*](#).

Priority Topic 9: **Gastrointestinal endoscopy**

1. While conducting an upper gastrointestinal (GI) endoscopy, recognize clinical scenarios or specific lesions where management exceeds your skill set and available resources and refer for further care.

2. For a patient undergoing a colonoscopy:
 - a) Communicate the importance of bowel preparation for the procedure
 - b) Adequately document the quality of the exam (e.g., cecal intubation, polyp detection)
 - c) Recognize lesions and situations when management exceeds your skill set and available resources and refer for further care
 - d) Take appropriate action when the bowel preparation is inadequate
 - e) Recognize and manage difficulties in completing the procedure (e.g., insufficient or inappropriate insufflation, inadequate sedation, patient positioning)
 - f) Recognize complications (e.g., perforation, major bleed) and manage promptly

Priority Topic 10: Primary uncomplicated inguinal and umbilical hernias

1. When consulted about a patient with a suspected inguinal or umbilical hernia:
 - a) Use specific examination techniques to confirm the presence of a hernia (e.g., standing position, Valsalva)
 - b) Correlate physical findings with symptoms (e.g., hernias often do not cause abdominal pain)
 - c) Use imaging only when indicated
 - d) Distinguish primary, uncomplicated hernia from complicated hernia (e.g., bowel incarceration or strangulation) and arrange for urgent care when appropriate

2. For any patient who is being considered for hernia repair:
 - a) Select the appropriate technique based on patient factors (e.g., obesity) and your own skill set
 - b) Develop a management plan for unexpected intra-operative findings

3. While performing an inguinal hernia repair:
 - a) Identify structures accurately because of the complexity of the regional anatomy
 - b) Recognize a sliding hernia and alter the surgical approach

Priority Topic 11: Female surgical sterilization

1. When consulted about a patient requesting surgical sterilization as an interval procedure, at Cesarean section or postpartum:
 - a) Provide adequate counselling, taking into consideration various patient factors (e.g., current relationship and relationship stability, cultural aspects, age, parity), risks and benefits of the procedure (e.g., permanency, risk of ectopic pregnancy, failure rates), and expected outcomes
 - b) Discuss all non-surgical options and surgical techniques (tubal occlusion versus salpingectomy)
2. When planning interval surgical sterilization, counsel the patient to continue with appropriate contraception until the surgery is completed.
3. When consulted about a patient requesting surgical sterilization at an emergency Cesarean section without previous counselling about sterilization, consider deferring sterilization until the patient has had adequate counselling and time for consideration.
4. When performing surgical sterilization:
 - a) Confirm that the patient is not pregnant prior to proceeding
 - b) Identify the appropriate anatomy (e.g., round ligament versus fallopian tube)
5. After performing surgical sterilization, verify that the pathology report matches the expected surgical specimen.

Priority Topic 12: Acute perianal and perineal presentations (excluding obstetrical)

1. When consulted about a patient with an acute perianal or perineal presentation:
 - a) Complete a comprehensive independent reassessment
 - b) Fully assess the extent of the lesion, the associated abscess if any, and the necessity and urgency for surgical intervention
 - c) Develop a broad differential diagnosis (e.g., possibility of abuse, STI) and manage appropriately
 - d) Optimize the management of comorbidities (e.g., inflammatory bowel disease, diabetes, cancer)

2. When managing an acute perianal or perineal presentation:
 - a) Recognize that these presentations may be more complex, extensive and/or urgent than initially apparent (e.g., young healthy patients can compensate; early sepsis) and promptly start appropriate management
 - b) Recognize and do not underestimate the severity of the pain and provide adequate analgesia, which will often require a general or spinal anesthetic in the operating room
 - c) Ensure optimal conditions for surgical management (e.g., lighting, retraction, resources), including transfer to the operating room
 - d) Continually re-evaluate anatomy (e.g., extension to contiguous spaces, distortion of the tissue due to infection) to ensure optimal surgical management (e.g., avoid injury to the anal sphincter)

3. In a patient who had a perianal or perineal intervention, recognize the sensitive nature of this injury and educate the patient on post-operative expectations, care, and recovery (e.g., acknowledge social discomfort, prescribe laxatives, advise when to resume sexual activity).

Priority Topic 13: Trauma management

Trauma in rural and remote locations creates unique challenges and requires decisions regarding immediate management locally and transfer to higher levels of care. There is a role for the local surgical team, including anesthesia and nursing, to provide critically urgent care locally while considering transfer. This is best done when supported by regional and provincial trauma teams.

1. Participate and support the team in planning for the provision of trauma care locally in the context of a regional network or program.
2. For any patient presenting with trauma:
 - a) Approach management in a comprehensive and systematic way
 - b) Be prepared to assume the role of the team leader and surgical first responder
 - c) Perform procedures within the expectations of the regional and provincial network and your own skill set

Note: Skill with ATLS is assumed as a basic requirement. See also Multiple Trauma in [Key Features of the Priority Topics for the Assessment of Competence in Emergency Medicine](#) and [Priority Topics for the Assessment of Competence in Rural and Remote Family Medicine](#).

Priority Topic 14: Abdominal access/Laparoscopic access

1. In a patient who is about to have abdominal surgery:
 - a) Choose the most appropriate “access route” (i.e., laparoscopic or open) before deciding on the appropriate incisions based on history and examination (e.g., previous surgeries, obesity, most likely intra-abdominal findings)
 - b) Create optimal conditions for abdominal entry (e.g., deflate the stomach, empty the bladder, optimize patient position) in collaboration with the health care team, especially anesthetists
 - c) Anticipate and recognize the need to change the size and location of the incision

2. When planning to perform a laparoscopic procedure:
 - a) Anticipate the physiologic response to CO₂ pneumoperitoneum and potential complications related to pneumoperitoneum (e.g., acidosis, hypotension, hypoxia)
 - b) Discuss with the patient and the team the potential need to convert to an open procedure

3. When using electrosurgery, choose appropriate applications that will enhance both efficacy and safety.

4. When performing laparoscopic surgery:
 - a) Ensure safe entry into the peritoneal cavity
 - b) Monitor for unexpected findings or events and manage appropriately, using a broad differential diagnosis (e.g., loss of pneumoperitoneum, equipment malfunction, anatomy)
 - c) Stop the procedure or convert to an open procedure when warranted

Priority Topic 15: Intraoperative complications

1. When performing any surgery:
 - a) Continuously monitor the progress of the operation to recognize developing complications
 - b) Verify anatomy at every step of the procedure
 - c) Adjust the surgical plan (e.g., stop the surgery, different approach) when the procedure is not progressing as anticipated
 - d) Facilitate open communication with the OR team throughout the procedure

2. When an intraoperative complication occurs:
 - a) Consider potential causes (both procedure related and others) and manage appropriately
 - b) Remain calm and communicate clearly
 - c) Seek input from the team and consultants
 - d) Apply basic surgical principles and skill transference
 - e) Recognize the severity of the situation and manage appropriately (e.g., stopping the procedure and arranging alternative care)

3. After completing a procedure in which an intraoperative complication has occurred:
 - a) Disclose the complication and the potential adverse outcomes to the patient and family
 - b) Recognize and address the impact the complication had on you and the team (especially after a negative outcome)
 - c) Use quality improvement strategies to reduce the likelihood of similar occurrences in the future

Priority Topic 16: Post-operative management

1. For all post-operative patients:
 - a) Make operative notes readily available
 - b) Communicate the process for follow-up and how to recognize complications with the health care team, patient, and family

2. In a patient with an unexpected post-operative course:
 - a) Review the operative notes
 - b) Reassess/re-examine the patient and undertake appropriate investigations to identify specific complications
 - c) Create a broad-based differential diagnosis and management plan considering the common complications, variations of normal recovery, and the context (e.g., demographics, age, comorbid issues)

3. When managing a patient with a post-operative complication:
 - a) Determine the need and urgency to re-operate
 - b) Mobilize resources, both locally and regionally, and consider transfer if appropriate
 - c) Consult a colleague early, when appropriate

4. Following an unexpected outcome of a surgery:
 - a) Disclose the complication and the potential adverse outcomes to the patient and family
 - b) Recognize and address the impact the complication had on you and the team (especially after a negative outcome)
 - c) Use quality improvement strategies to reduce the likelihood of similar occurrences in the future

Priority Topic 17: Continuous quality improvement

The use of enhanced surgical skills should be done in the context of a regional network of care that includes support, education, and quality improvement.

1. When providing surgical care:
 - a) Participate in continuous quality improvement as a patient care improvement tool
 - b) Engage proactively in local and regional processes for quality improvement
 - c) Incorporate the recommendations from systematic reviews of integrated, regional processes into your practice
 - d) Review all cases systematically for predefined standards of care for both adherence to protocol and expected outcomes
 - e) Review critical incidents for opportunities to improve the quality of care

2. Advocate for both physician and team education (including simulation and mock scenarios).

Table 1. List of procedural skills for enhanced and obstetrical surgical skills

Procedures	Enhanced Surgical Skills		Obstetrical Surgical Skills	
	List A	List B	List A	List B
Gastrointestinal:				
Appendectomy	Yes			
Primary uncomplicated inguinal and umbilical hernia repair	Yes			
Colonoscopy including polypectomy	Yes			
Upper GI diagnostic endoscopy	Yes			
Hemorrhoid banding		Yes		
Diagnostic laparoscopy	Yes			
Reproductive:				
Assisted vaginal delivery	Yes (vacuum)	Low and outlet forceps	Yes (vacuum)	Low and outlet forceps
Dilation and curettage (first trimester and postpartum)	Yes		Yes	
Third-degree perineal laceration repair	Yes		Yes	
Fourth-degree perineal laceration repair		Yes		Yes
Obstetrical lacerations (excluding third- and fourth-degree perineal lacerations)	Yes		Yes	
Tubal ligation postpartum		Yes		Yes
Sterilization at Cesarean section	Yes		Yes	
Cesarean section	Yes		Yes	
Manual removal of placenta	Yes		Yes	
Surgical management of ectopic pregnancy	Yes			Yes
Compression sutures for postpartum hemorrhage	Yes		Yes	
Vasectomy		Yes		
Laparoscopic sterilization (occlusion or salpingectomy)	Yes			
Non-neonatal circumcision		Yes		
Uterine balloon tamponade (e.g., Bakri)	Yes		Yes	

Extremity:

Carpal tunnel release		Yes		
Complex abscess drainage	Yes			Yes
Complex wound repair (flaps and grafts)		Yes		
Advanced access (central line)		Yes		
Other:				
Tonsillectomy		Yes		