

AFMC Entrustable Professional Activities
for the Transition from Medical School to Residency

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The AFMC EPA working group

FMEC PG Transition Group
Association of Faculties of Medicine of Canada

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Preamble

Over the past several years, undergraduate medical education programs have increasingly adopted curricular structures based on competencies, as defined by specialty societies. Although intuitively attractive and effective as a means to determine objectives and teaching programs, the various competencies do not speak directly to physician activities, and have proven difficult to assess objectively.

At the same time, the workplace must ensure patient safety and accrediting agencies require that residency programs provide suitable levels of supervision. If supervisors are unwilling to entrust learners with appropriate levels of responsibility for designated activities, then learning is negatively impacted and learners' development is slowed. Conversely, if supervisors place too much trust in learners who are as yet unable to fulfill their expectations, both educational efforts and patient safety can be compromised (Cantillon and Macdermott, 2008; Kennedy et al., 2005). Thus, exactly which activities are expected to be performed with indirect supervision by residents within a particular context must be understood between the learners and the supervisors in order to ensure that appropriate opportunities for learning take place.

To better explain when an activity can be entrusted, ten Cate (2005) developed the notion of "entrustable professional activities" (EPAs), that is, "tasks or responsibilities to be entrusted to the unsupervised execution by a learner once he or she has attained sufficient specific competence" (ten Cate, 2013). New first year residents (PGY-1) are expected to perform a number of activities without direct supervision. The Association of American Medical Colleges (AAMC) has recently published 13 core EPAs for entry into residency and have clearly defined expectations for each of the activities at that level of training (AAMC, 2014). However, in Canada, the contexts of both medical education and clinical practice differ from those in the United States, such that which activities are currently expected of learners entering residency has not been clearly identified and defined. Furthermore, learners may not have been entrusted, through direct observation, to perform activities expected of residency programs prior to completing their MD degree. In fact, a recent study suggests that there is a discrepancy between supervisor expectations and what PGY-1s are actually being supervised to do in early residency (Touchie et al, 2014). Defining activities that all learners entering a residency program in Canada are expected to perform under indirect supervision will help in alleviating such discrepancy and define a set of common expectations prior to the end of medical school.

The Future of Medical Education in Canada – Postgraduate (FMEC PG) Implementation Project Recommendation #5 included calls to action to develop smoother and more effective transitions from medical school to residency. The document suggests the creation of links between the individual learner competencies developed in MD training with the educational objectives and competencies set for the resident (FMEC PG, 2012). The FMEC PG Transition Implementation Committee and the AFMC Undergraduate Medical Education (UME) Deans supported the development of pan-Canadian EPAs at this transition period. The EPAs found in this document were created to help define expectations for new graduates entering residency programs regardless of (1) the school of MD training, (2) residency training program site and (3) chosen specialty.

The AFMC EPA working group developed the EPAs as a group of core activities required prior to starting residency. These are considered necessary and need to be integrated within the body of required knowledge, skills and behaviours expected at the end of medical school. Each EPA maps to multiple CanMEDS roles (page 7) expecting the learner to demonstrate not only the required medical expertise in the context of clinical care but also the ability to master other intrinsic roles appropriate to the situation. The EPAs in this document are thought to be activities allowing entrustment at an indirect level of supervision (supervisor is not in the room but is available to provide assistance) on day one of residency. The ability to perform these core activities is essential in order to be entrusted with more advanced EPAs and to move along the continuum of transition to discipline and transition to practice of the Royal College of Physicians and Surgeons of Canada (CanMEDS 2015) and to accomplish the sentinel habits of the College of Family Physicians of Canada's Triple C Curriculum (CFPC, 2013).

This report provides a list of 12 suggested EPAs for UME to facilitate the transition between medical school and residency. These EPAs have been approved in principle by the UME deans and endorsed by the Postgraduate Medical Education (PME) deans, student associations (CFMS and FMEQ) and resident associations (RDoC and FMRQ).

The EPAs were designed around what physicians do as part of the gradual development of competence that continues during residency and practice. This document is based on the following principles:

- Graduates from medical schools will be “entrustable”, i.e.: ready for indirect supervision of these EPAs on day one of residency.
- In order to be entrusted with these EPAs, medical students will be directly observed/supervised prior to graduation to ensure their readiness for indirect supervision on day one of residency.
- Each school will have the ability to integrate EPAs into their respective curriculum and map each EPA to their objectives of learning.
- Each school will develop an assessment plan in keeping with their curriculum and available resources.
- Each EPA can be assessed comprehensively or separately to fit the curriculum (e.g., history taking and physical examination skills); however the graduating medical student should be able to integrate these skills.
- The focus of these EPAs is meant for usual common presentations expected in the course of medical school, including new and continuing patient interactions across patient age groups and gender in the following settings: emergency departments, office/ambulatory clinics, and medical/surgical in-patient wards.

Methods

The working group used the definition of EPAs as tasks or responsibilities to be entrusted to the unsupervised execution by a learner once he or she has attained sufficient specific competence (ten Cate, 2013). According to ten Cate and Scheele (2007), an EPA: *(1) is part of essential professional work in a given context; (2) must require adequate knowledge, skill, and attitude; (3) must lead to recognized output of professional labor; (4) should be confined to qualified personnel; (5) should be independently executable; (6) should be executable within a time frame; (7) should be observable and measurable in its process and outcome; (8) should reflect one or more competencies.*

The 13 core EPAs outlined by the AAMC served as a starting point for developing Canadian EPAs for entry into residency. Other pertinent documents were used as references. Eight of these 13 were initially identified as highly relevant to the Canadian context by the AFMC EPA working group members through a survey. An additional two AAMC core EPAs (Identify system failures and contribute to a culture of safety and improvement & Performs general procedures of a physician) and one EPA from Utrecht University (Communicates bad news) were identified as potentially relevant through discussion and reaching consensus. In an April 2015 face-to-face meeting, the working group reviewed this subset of EPAs in small subgroups and began the process of adapting them to fit the Canadian context as necessary. Each subgroup was assigned to work on two of the eight initially identified EPAs. A predefined template (ten Cate & Hauer, used with permission) was used to structure this work, including EPA title, short description of the activity and context, links to CanMEDs roles, examples of pre-entrustable and entrustable behaviours, and the required knowledge, skills, and behaviours. Over the next few months, the subgroups continued to define their assigned EPAs through electronic collaboration. Regular teleconferences were held by the larger working group to ensure progress across subgroups. A second face-to-face meeting was held to review the set of EPAs by the larger working group where 11 draft EPAs were described.

A draft document was circulated to the UME deans and the PGME deans followed by face-to-face consultation in the fall of 2015. UME deans were solicited for formal feedback on the document. This second version of the document is based on this feedback with input from the working group. As a result of these consultations, the final document contains 12 EPAs.

AFMC EPAs

EPA 1-Obtain a history and perform a physical examination adapted to the patient's clinical situation

EPA 2-Formulate and justify a prioritized differential diagnosis

EPA 3-Formulate an initial plan of investigation based on the diagnostic hypotheses

EPA 4-Interpret and communicate results of common diagnostic and screening tests

EPA 5-Formulate, communicate and implement management plans

EPA 6-Present oral and written reports that document a clinical encounter

EPA 7-Provide and receive the handover in transitions of care

EPA 8-Recognize a patient requiring urgent or emergent care, provide initial management and seek help

EPA 9-Communicate in difficult situations

EPA 10-Contribute to a culture of safety and improvement

EPA 11-Perform general procedures of a physician

EPA 12-Educate patients on disease management, health promotion and preventive medicine

Mapping of EPAs to the CanMEDS Roles

In order to perform an EPA, a learner needs to have contextual medical expert related knowledge, skills and attitudes, thus it is assumed that all the EPAs will assess for this CanMEDS role. Although each CanMEDS role can probably be mapped to each EPA, some roles are highlighted within an EPA and thus should be assessed predominantly. The working group limited the mapping to the intrinsic roles considered most important for each EPA in addition to the Medical Expert role.

	Medical Expert	Collaborator	Communicator	Health Advocate	Leader	Professional	Scholar
EPA 1 History and PE	X		X			X	X
EPA 2 Diff diagnosis	X		X			X	X
EPA 3 Investigation plan	X			X	X	X	
EPA 4 Dx & Screening Tests	X	X	X		X		
EPA 5 Management plans	X	X	X				X
EPA 6 Report Clin encounter	X	X	X			X	
EPA 7 Provide/Receive Handover	X	X		X	X		
EPA 8 Urgent/emergent care	X	X	X		X		
EPA 9 Difficult situations	X		X	X		X	
EPA 10 Culture of safety and improvement	X	X		X		X	
EPA 11 Procedures	X	X	X				X
EPA1 2 Educate patients	X	X	X	X			

EPA 1 - Obtain a history and perform a physical examination adapted to the patient's clinical situation

<p>1. Short description</p>	<p>The graduate performs a complete and focused history and physical examination in a prioritized, organized manner. The history and physical examination is tailored to the clinical situation and specific patient encounter. The encounter is conducted with respect, in a manner sensitive to the patient's particular circumstances including sexual/gender orientation and cultural/religious beliefs.</p> <p><i>This data gathering and patient interaction activity serves as the foundation for clinical work and as the building block for patient assessment and management. The learner needs to integrate the scientific foundations of medicine with clinical reasoning skills to guide their information gathering.</i></p>	
<p>2. Most relevant CanMEDS roles</p>	<p>Medical Expert Communicator Scholar Professional</p>	
<p>3. Entrustable Behaviours</p>	<p style="text-align: center;">Pre-entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Misses pertinent positive or negative details that would assist with problem solving and determining the differential diagnosis when obtaining data • Is disorganized in his/her history taking skills which is not appropriately detailed • Performs a physical examination which is disorganized or missing components relevant to the clinical case • Fails to establish rapport with the patient/family/caregiver/advocate, leading to missed data within the history or physical examination 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Obtains the appropriate data from the patient (family/caregiver/advocate) for the specific patient encounter • Establishes a rapport with the patient (family/caregiver/advocate) • Performs a physical exam appropriately tailored to the clinical case • Demonstrates specific physical exam skills appropriate to the patient case. • Integrates all these elements along with other sources of information
<p>4. Assessment Suggestions</p>	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations.</p>	

EPA 2 - Formulate and justify a prioritized differential diagnosis

1. Short description	<p>The graduate formulates a prioritized list of possible diagnoses across clinical settings and patient demographics in common clinical presentations using a systematic approach. Through the integration of gathered information and the use of clinical reasoning skills, the graduate formulates a working diagnosis.</p> <p><i>The learner develops and prioritizes a differential diagnosis list by both likelihood and severity using history, physical examination and available studies including past records. The learner identifies patient factors (e.g.: culture and socioeconomic status) that may influence the diagnoses considered and the prioritization.</i></p>	
2. Most relevant CanMEDS roles	<p>Medical Expert Communicator Scholar Professional</p>	
3. Entrustable Behaviours	<p style="text-align: center;">Pre-Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Relies on limited aspects of his/her assessment to generate the differential diagnosis, failing to integrate elements across the history, physical examination, and investigative studies • Identifies one or two sensible diagnostic possibilities for clinical presentations, but misses important, common diagnoses • Has trouble identifying the most likely etiology when a differential diagnosis is generated • Selects differential diagnoses which typically lack adequate justification and prioritization • Does not routinely consider determinants of health in generating or prioritizing the differential diagnosis 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Lists diagnostic possibilities by integrating elements from the history, physical examination, and investigative studies • Identifies the major diagnostic possibilities for common clinical presentations • Justifies and prioritizes a most likely diagnosis based on information from his/her clinical assessment • Incorporates major determinants of health for the patient when generating and prioritizing the differential • Balances the tendency to be too all encompassing yet avoids errors of premature closure
4. Assessment Suggestions	<p>This EPA should be assessed by direct observation of the learner at rounds, during review of a patient encounter, with case reviews or chart simulated recall.</p>	

EPA 3 - Formulate an initial plan of investigation based on the diagnostic hypotheses

1. Short description	<p>The graduate selects a series of tests to help refine the differential diagnosis for a clinical presentation and enable him/her to make appropriate management decisions.</p> <p><i>The plan of investigation should be limited to common clinical situations expected for this level of training.</i></p>	
Most relevant CanMEDS roles	<p>Medical Expert Leader Professional Health Advocate</p>	
3. Entrustable Behaviours	<p style="text-align: center;">Pre-Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Orders tests that are not relevant or helpful in the clinical situation. • Does not discuss with patients the possible consequences of ordering certain tests • Does not take into account the potential adverse effects of the ordered tests. • Does not justify the selection of the tests according to best practices • Does not ensure a follow up of the tests 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Orders (or decides not to order) tests considering their features and limitations (e.g., reliability, sensitivity, specificity), availability, acceptability for the patient, inherent risks and contribution to a management decision • In case of social implications of positive results, discusses the selection of the tests with patients/family/caregiver/advocate when ordering them (e.g. HIV, pregnancy in an adolescent) • Identifies levels of uncertainty at each step of the diagnostic process and do not over-investigate or under-investigate • Chooses diagnostic interventions using evidence or best practice/guidelines according to costs and availability of resources taking into consideration the way in which care is organized • Identifies who will be responsible for the follow-up of the test results.
4. Assessment suggestions	<p>This EPA should be assessed by direct observation of the learner at rounds, during review of a patient encounter, with case reviews or chart simulated recall.</p>	

EPA 4 - Interpret and communicate results of common diagnostic and screening tests

1. Short description	The graduate recognizes normal and abnormal diagnostic and screening test results, explains the significance of test results, responds appropriately to these test results and communicates them to patients (family/caregiver/advocate), team members and/or colleagues	
2. Most relevant CanMEDS roles	Medical Expert Collaborator Communicator Leader	
3. Entrustable Behaviours	<p style="text-align: center;">Pre-entrustable</p> <p>The learner:</p> <ul style="list-style-type: none"> • Is unable to recognize significant urgent or abnormal results or common normal variations in results • Is unable to form a preliminary opinion about the significance of results • Does not communicate significant normal or abnormal results in a timely manner to other team members • Is unable to summarize and/or interpret the meaning of results to other team members • Does not communicate results in a clear manner to patients (family/caregiver/advocate) • Does not seek help to interpret results when necessary 	<p style="text-align: center;">Entrustable</p> <p>The learner:</p> <ul style="list-style-type: none"> • Recognizes significant urgent or abnormal results • Distinguishes between common normal variations in results and abnormal results • Formulates an appropriate preliminary opinion about the potential clinical impact of results • Communicates significant results in a timely and appropriate manner to other team members • Summarizes and interprets the meaning of the results to other team members • Communicates results in a clear manner to patients (family/caregiver/advocate) • Seeks help to interpret results when necessary
4. Assessment suggestions	This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations.	

EPA 5 - Formulate, communicate and implement management plans

1. Short description	The graduate proposes an <i>initial</i> management plan for <i>commonly</i> encountered presentations and diagnoses, including consultations/referrals, written/electronic orders and prescriptions. He/she discusses these recommendations with other members of the healthcare team and patients (family/caregiver/advocate), to reach a shared management plan. He/she makes sure to include patient safety/quality of care principles in his/her management plans	
2. Most relevant CanMEDS roles	Medical Expert Communicator Collaborator Scholar	
3. Examples of expected behaviours	<p style="text-align: center;">Pre-Entrustable</p> The learner: <ul style="list-style-type: none"> • Proposes initial management plans that are inappropriately expansive or significantly incomplete in scope • Proposes management plans that do not reflect an adequate understanding of patient’s context, values and illness experiences • Proposes management plans that lack approach, prioritization or organization • Proposes management plans that do not take into account opinions of other healthcare professionals • Omits pertinent information of the initial proposed plan when discussing with the more senior members of the medical team • Incompletely or inaccurately documents approved management plans in the form written/electronic orders and prescriptions • Incompletely or inaccurately communicates approved management plans to patients and other healthcare team members • Does not implement management plans in the form of verbal and written/electronic orders and prescriptions in an accurate and timely manner • Writes incomplete consults/referrals, orders or prescriptions, or that could impact patient safety 	<p style="text-align: center;">Entrustable (Indirect supervision)</p> The learner: <ul style="list-style-type: none"> • Proposes evidence informed, holistic initial management plans that include pharmacologic and non-pharmacologic components developed with an understanding of the patient’s context, values and illness experience • Prioritizes the various components of the management plans. • Considers other health care professionals advice in proposing a management plan • Reviews the initial plan with more senior team members to formulate an approved management plan • Documents approved management plans in the form written/electronic orders, prescriptions and consultations/referrals • Communicates approved management plans with patients and other healthcare team members that results in mutual agreement and understanding • Uses the electronic medical record when available to keep the team informed of the up-to-date plans • Follows principles of error reduction including discussions of indications/contraindications of treatment plans, possible adverse effects, proper dosage and drug interactions • Writes consults/referrals, orders or prescriptions which are complete, incorporate patient safety principles and that can be understood by all the members of the team, including the patient

4. Assessment suggestions	This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations.
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EPA 6 - Present oral and written reports that document a clinical encounter

1. Short description	<p>The graduate presents a concise and relevant summary, including pertinent positives and negatives of a clinical encounter to members of the team (including patients, and when legally relevant, family members) facilitating ongoing care. He/she follows legislation (e.g.: privacy legislation) and confidentiality considerations.</p> <p><i>This EPA includes various types of documentations of clinical encounters (e.g.: admission notes, consultation notes, discharge summaries, etc.)</i></p>	
2. Most relevant CanMEDS roles	<p>Medical Expert Communicator Collaborator Professional</p>	
3. Entrustable behaviours	<p style="text-align: center;">Pre-Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Presents a summary which is unfocused, inaccurate, disorganized and lacking important information • Does not demonstrate shared understanding among patient, the health care team members and consultants • Documents findings in an unclear, unfocused or inaccurate manner 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Presents a concise and relevant summary of a patient encounter to members of the healthcare team • Presents a concise and relevant summary to the patient, and where appropriate, the patient's family (caregiver/advocate) • Specifies the patient context in the report • Demonstrates a shared understanding among the patient, the health care team members and consultants through oral and written reports • Documents findings in a clear, focused and accurate manner
4. Assessment suggestions	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals.</p> <p>It can also be assessed using simulated patients and/or objective structured clinical examinations.</p> <p>In can also be assessed by reviewing charts.</p>	

EPA 7 - Provide and receive the handover in transitions of care

1. Short description	<p>The graduate participates in safe transitions of care, both as a provider and receiver, with members of the health care team to ensure that pertinent information related to a specific patient is clearly conveyed and understood.</p> <p><i>This should include either verbal and/or written transfer of information. Evidenced-based tools can be used to direct the transfer of information.</i></p>	
2. Most relevant CanMEDSroles	<p>Medical Expert Collaborator Health Advocate Leader</p>	
3. Entrustable behaviours	<p style="text-align: center;">Pre-entrustable</p> <p>When providing handover, the learner:</p> <ul style="list-style-type: none"> • Delivers variable information from patient to patient, not following a consistent structured handover template for verbal communication • Omits key components, such as severity of illness in the handover information • Does not completely update electronic handover tools • Transmits erroneous information about patients • Does not appropriately emphasize key points • Does not use closed-loop communication to verify that the receiver of information has understood • Does not question the timing of an handover in conditions where it would not be appropriate <p>When receiving handover, the learner:</p> <ul style="list-style-type: none"> • Receives information passively without asking clarifying questions • Does not use closed-loop communication to verify important information • Does not accept responsibility for the transfer of care 	<p style="text-align: center;">Entrustable</p> <p>When providing handover, the learner:</p> <ul style="list-style-type: none"> • Conducts handover communication that minimizes known threats to transitions of care (e.g., by ensuring to engage the listener, avoiding distractions) • Documents and updates an electronic handover tool • Follows a structured handover template for verbal communication • Provides succinct verbal communication that conveys, at a minimum, illness severity, patient demographics and wishes regarding care, a concise medical history, current problems and issues, pertinent and/or pending laboratory, radiological and other diagnostic information, situation awareness, action planning, anticipatory guidance and upcoming possibilities and contingency planning • Demonstrates respect for the patient’s privacy and confidentiality • Questions the timing of handover and discusses appropriate actions with team <p>When receiving handover, the learner:</p> <ul style="list-style-type: none"> • Provides feedback to transmitter to ensure informational needs are met • Asks clarifying questions • Repeats the information just communicated to ensure closed-loop communication • Communicates with the health care team and patient (family/caregiver/advocate) that the transition of responsibility has occurred • Elicits feedback about the most recent handover communication when assuming primary responsibility for the patient

		<ul style="list-style-type: none"> • Accepts responsibility for required care until responsibility is transferred to another team member • Demonstrates respect for the patient’s wishes regarding their care, privacy and confidentiality
<p>4. Assessment suggestions</p>	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations.</p>	

EPA 8 - Recognize a patient requiring urgent or emergent care, provide initial management and seek help

<p>1. Short description</p>	<p>The graduate recognizes a patient who requires urgent or emergent care. He/she initiates rapid systems based assessment, evaluates the patient's risk and need, manages for short term stabilization and communicates with team members, other care givers and family members. The graduate identifies his/her limitations and when to seek for help.</p> <p><i>A graduate starting residency training in particular is often among the first responders in an acute care setting, or the first to receive notification of an urgent abnormal laboratory tests or deterioration in a patient's status. Early recognition and intervention (including basic life support*) provides the greatest chance for optimal outcomes in patient care.</i></p>	
<p>2. Most relevant CanMEDS roles</p>	<p>Medical Expert Collaborator Communicator Leader</p>	
<p>• Entrustable behaviours</p>	<p style="text-align: center;">Pre-entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Does not recognize an urgent or emergent case • Does not initiate an assessment and/or management of an urgent or emergent case • Is unable to perform CPR • Does not ask for help when appropriate • Does not appropriately document patient assessments and necessary interventions in the medical record • Does not update patient's status to family members (caregiver/advocate) • Does not clarify goals of care 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Utilizes early warning scores, or rapid response team / medical emergency team criteria to recognize patients at risk of deterioration and mobilizes appropriate resources urgently. • Performs basic life support when required including CPR in cardiac arrest • Asks for help when uncertain or requiring assistance • Involves team members required for immediate response, continued decision making, and necessary follow-up • Initiates and participates in a code response • Rapidly assesses and initiates management to stabilize the patient • Documents patient assessments and necessary interventions in the medical record • Updates family members/caregiver/advocate to explain patient's status and escalation-of-care plans • Clarifies patient's goals of care upon recognition of deterioration
<p>3. Assessment suggestions</p>	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals.</p> <p>It can also be assessed using manikin-based simulation or objective structured clinical examinations.</p>	

EPA 9 – Communicate in difficult situations

1. Short description	<p>The graduate communicates in difficult or challenging situations with patients, families, advocates, colleagues or other health care team members. Such situations could include delivering negative, unfortunate or difficult news, managing a crisis (anxiety, sadness or anger) or care dissatisfaction.</p> <p><i>The graduate is often the first responder to manage these situations and must initiate a conversation with those concerned. He/she demonstrates skills to manage a host of complex communication tasks.</i></p>	
2. Most relevant CanMEDS roles	<p>Medical Expert Communicator Health Advocate Professional</p>	
3. Examples of expected behaviors	<p style="text-align: center;">Pre-entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Provides information without verifying that relevant permissions have been obtained • Communicates in a public or crowded space with others around, which may impact confidentiality • Does not show sensitivity to patient preference (alone, with family, etc.) as applicable. • Does not introduce him/herself and/or does not explain the purpose of the visit • Uses medical jargon when communicating • Does not provide information in an organized, logical manner • Is not attentive to the patient's concerns and/or interrupts patient • Does not verify for understanding or does not address concerns • Does not make any follow up plan • Does not seek help in managing the difficult situation 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Verifies who should be present and is aware of what information can and cannot be shared without permission • Plans the encounter and communicates in a private setting • Introduces him/herself, their role in the patient's care and explains the purpose of the conversation • Positions him/herself to communicate comfortably • Speaks in non-jargon language, through a translator if necessary • Listens actively • Verifies for understanding and addresses concerns • Makes a plan that is understood, with next steps articulated • Works with and includes (where relevant) other health care team members to manage the difficult situation • Assesses safety of the situation and seeks help as needed
4. Assessment suggestions	<p>This EPA can be assessed by direct observation with simulated patients and/or in an objective structured clinical examination setting. This can also be assessed by direct observation in various clinical settings.</p>	

EPA 10 – Contribute to a Culture of Safety and Improvement

1. Short description	<p>The graduate recognizes safety and quality issues for patients, and more broadly, for systems of care. They collaborate with other members of the health care team to participate in the quality improvement cycle on a day-to-day basis. This includes routine demonstration of patient safety habits as well as possible opportunities for: recognition of near misses, identifying system barriers to optimal patient safety or quality of care, participation in developing quality improvement plans, among others.</p>	
2. Most relevant CanMEDS roles	<p>Health advocate Professional Collaborator Medical Expert</p>	
3. Entrustable behaviors	<p style="text-align: center;">Pre-entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Requires prompting to demonstrate common safety habits • Requires prompting to reflect on and develop plans around patient safety • Attributes a single cause to events caused by a deficient system 	<p>The learner</p> <ul style="list-style-type: none"> • Regularly demonstrates and engages in expected safety habits (e.g., universal precautions, hand washing, team time-outs, medication reconciliation, surgical checklists) • Identifies situations that may jeopardize patient safety • Recognizes how the system contributes threats to patient safety • Seeks help appropriately when a patient is identified as being at risk • Recognizes system barriers/errors, reflects on one's contribution, and develops own learning plan
5. Assessment suggestions (note items in italics are optional)	<ul style="list-style-type: none"> • Demonstration of patient safety habits (i.e., handwashing, speaking up and identifying issues, actively participating in team time-outs or debriefing sessions, medication reconciliation, surgical checklists) in the clinical setting. • Participation in reflection exercise on quality and/or patient safety (i.e., Reflection on systemic threats to patient safety observed in clinical work or talks through possible system solutions to address patient safety concerns.) • Participation in system improvement activities such as: morbidity and mortality rounds, documentation of adverse event/error or near miss situation, or participation in root-cause analysis (including in simulation or OSCE setting). • Direct observation of an adverse event disclosure with standardized patient (simulation or OSCE setting). • Participation in the development of a quality improvement plan. 	

EPA 11 – Perform general procedures of a physician

<p>1. Short description</p>	<p>The graduate applies the principles of safe performance of procedures. These principles include (a) describing indications/contraindications and risks/benefits of a procedure, (b) obtaining informed consent, (c) performing the procedure including post-procedure care, and (d) recognizing complications and seeking help if necessary. The graduate recognizes his/her limitations and knows not to perform a procedure which is above their abilities.</p> <p><i>As a learner is expected to perform basic general procedures in various patient settings on the first day of residency and that procedures will vary from setting to setting, the procedures below are suggestions.</i></p> <p><i>Examples of procedures that fit the above principles include:</i></p> <ul style="list-style-type: none"> • Suturing the skin including injection of local anesthetic agent • Insertion of a nasogastric tube in an awake patient • Vaginal speculum examination with Pap smear 	
<p>2. Most relevant CanMEDS roles</p>	<p>Medical Expert Collaborator Communicator Scholar</p>	
<p>3. Examples of expected behaviors</p>	<p style="text-align: center;">Pre-entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Lacks the skills to perform the procedure • Cannot list the indications and contraindications, the risks or benefits • Does not anticipate or recognize the complications post-procedure and/or does not seek the necessary help • Explains the procedure in a way that the patient/family cannot understand, using jargon and minimizing risks • Does not answer the patient/family’s questions adequately • Documents the procedure in an incomplete manner with missing information in the chart/notes 	<p style="text-align: center;">Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Demonstrates the necessary skills to perform the procedure and has a good understanding of the indications/contraindications, the risks and the benefits of the procedure • Anticipates and recognizes the complications associated with the procedure and seeks help appropriately • Explains the procedure to the patient/family/caregiver/advocate in language that is familiar to them and such that they understand the risks associated with the procedure • Answers all questions of patient/family clearly • Documents the procedure with all the relevant details
<p>4. Assessment suggestions</p>	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals.</p> <p>It can also be assessed using simulated patients and/or objective structured clinical examinations.</p>	

EPA 12 – Educate patients on disease management, health promotion and preventive medicine

<p>1. Short description</p>	<p>The graduate counsels patients on disease management, risk factor modification, and health promotion adapted to meet the clinical context using evidence-based information. He/she does so independently where appropriate, or in collaboration with other members of the health care team.</p> <p><i>Examples of the types of information to be provided by the graduate may include: dietary/lifestyle modifications, general information on patients' condition(s), patient safety, etc.</i></p>	
<p>2. Most relevant CanMEDS roles</p>	<p>Medical Expert Communicator Health advocate Collaborator</p>	
<p>3. Entrustable behaviours</p>	<p>Pre-Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Does not question the patient about lifestyle habits. • Uses a level of language which is not understood by the patient. • Does not provide examples to promote change. • Does not assess the patient's and/or family's readiness to change. • Does not coordinate with other health care team members potentially leading to mixed messages to the patient. • Does not identify potential risky behaviours or living situations that may jeopardize the safety of the patient. • Does not document the discussion properly. 	<p>Entrustable</p> <p>The learner</p> <ul style="list-style-type: none"> • Enquires about the patient's lifestyle habits. • Educates using language that is understood by the patient. • Encourages the patient to ask questions. • Verifies for understanding of the education provided. • Provides examples of concrete changes that could be implemented to improve healthier habits. • Assesses patient's readiness to change. • Coordinates with other health care team members to ensure appropriate and consistent messaging. • Identifies potential risky behaviours or living situations that may jeopardize the safety of the patient. • Documents the discussion and the planning of the next steps
<p>4. Assessment suggestions</p>	<p>This EPA should be assessed by direct observation in various clinical contexts (including common acute and chronic medical conditions) with patients of various age groups including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations (OSCEs). Patient feedback can also be useful.</p>	

Sources of information to assess and/or determine progress

EPAs are meaningful physician tasks that can be observed in clinical practice. They make explicit what we, as supervisors, do implicitly every day while supervising students and residents. Thus, one very important source of information to determine whether a student is ready for *indirect* supervision is ensuring direct observation in the clinical setting. This should be done in various contexts throughout the students training to confirm that he/she is trustworthy in various settings. Reporting of this direct observation can be done using various tools such as daily encounter cards, field notes, MiniCEX, etc. The direct observation can also be done using simulation (patient and manikin-based) or other assessment tools listed below. These tools are especially useful in situations that are rare or may be high-risk to patient-safety.

Using EPAs in the clinical setting provides a shared model of performance expectations of learners at the transition between medical school and residency. This alignment of expectations will hopefully lead to improved quality of care. It also offers a framework to provide feedback for ongoing learning (Carraccio et al, 2016).

Other than direct observation in the workplace, the following examples of tools can be used to determine a student's readiness for indirect supervision:

- Simulations
- Objective structured clinical examinations (OSCE)
- Case review
- Chart stimulated recall
- Note/chart review
- Etc.

References

- Association of American Medical Colleges, Core Entrustable Professional Activities for Entering Residency, Curriculum Developers' Guide, 2014.
Available from: <http://members.aamc.org/eweb/upload/Core%20EPA%20Curriculum%20Dev%20Guide.pdf> . Accessed September 15, 2015
- Boucher A, Ste-Marie LG, et al. Towards a competency based medical education : A training framework. April 2014. Les Presses du CPASS.
- Cantillon P, Macdermott M. Does responsibility drive learning? Lessons from intern rotations in general practice. *Med Teach* 2008; 30: 254-259
- Carraccio C, Englander R, Holmboe E, Kogan J. Driving Care Quality: Aligning Trainee Assessment and Supervision Through Practical Application of Entrustable Professional Activities, Competencies and Milestones. *Academic Medicine*, 2016; 91:199-203
- Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015. Available from:
http://canmeds.royalcollege.ca/uploads/en/framework/CanMEDS%202015%20Framework_EN_Reduced.pdf. Accessed April 4, 2016
- Kennedy TJ, Regehr G, Baker GR, Lingard LA. Progressive independence in clinical training: a tradition worth defending. *Acad Med* 2005; 80 (Suppl 10): S106-111
- Oandasan I, Saucier D, eds. *Triple C Competency-based Curriculum Report – Part 2: Advancing Implementation*. Mississauga, ON: College of Family Physicians of Canada; 2013.
Available from: www.cfpc.ca/uploadedFiles/Education/PDFs/TripleC_Report_pt2.pdf. Accessed October 13, 2015
- Ten Cate O. Entrustability of professional activities and competency-based training. *Med Educ* 2005; 39: 1176-1177
- Ten Cate O and Scheele F. Competency-Based Postgraduate Training: Can We Bridge the Gap between Theory and Clinical Practice? *Acad Med* 2007; 82:542-547
- Ten Cate O. Nuts and Bolts of Entrustable professional activities. *J Grad Med Educ* 2013;5:157–8.
- The Future of Medical Education in Canada, A Collective Vision for Postgraduate Medical Education in Canada, 2012.
Available from: https://www.afmc.ca/future-of-medical-education-in-canada/postgraduate-project/pdf/FMEC_PG_Final-Report_EN.pdf Accessed September 15,2015.
- Touchie C, De Champlain A, Pugh D, Downing S, Bordage G. Supervising Incoming First-year Residents: Faculty Expectations vs. Residents' Perceptions. *Medical Education* 2014; 48: 921-929

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