

ENTRUSTABLE PROFESSIONAL ACTIVITIES

for the Transition from Medical School to Residency



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

AFMC EPA working group

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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 <u>"entrustable"</u>, i.e.: <u>ready for indirect supervision</u> of these EPAs <u>on day one of residency</u>.
- In order to be entrusted with these EPAs, medical students will be <u>directly observed/supervised</u> 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-Participate in health quality improvement initiatives

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

EPA 11-Perform general procedures of a physician

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	•		V	Advocate			
History and PE	X		X			Х	X
EPA 2	v		V			V	
Diff diagnosis	X		х			X	X
EPA 3	х			Х	Х	х	
Investigation plan	^			^	^	^	
EPA 4	х	х	Х		Х		
Dx & Screening	Α	Α	A		Α		
Tests							
EPA 5	Х	х	Х				Х
Management	2.						
plans							
EPA 6	Х	х	х			Х	
Report Clin							
encounter							
EPA 7	Х	х		х	Х		
Provide/Receive							
Handover							
EPA 8	Х	х	X		Х		
Urgent/emergent							
care							
EPA 9	X		X	x		x	
Difficult							
situations							
EPA 10	Х	x			X	X	
Quality							
improvement							
EPA 11	X	x	X				X
Procedures							
EPA1 2	X	X	X	x			
Educate patients							

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

		patient's clinical situat		
1.	Short description	The graduate performs a complete and focu	ised 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 include	ding sexual/gender orientation and	
		cultural/religious beliefs.		
		This data gathering and patient interaction		
		work and as the building block for patient as	_	
		needs to integrate the scientific foundations	s of medicine with clinical reasoning skills to	
		guide their information gathering.		
2.	Most relevant	Medical Expert		
	CanMEDS roles	Communicator		
		Scholar		
		Professional		
3.	Entrustable	Pre-entrustable	Entrustable	
	Behaviours	The learner	The learner	
		Misses pertinent positive or negative	Obtains the appropriate data from the	
		details that would assist with problem	patient (family/caregiver/advocate)	
		solving and determining the	for the specific patient encounter	
		differential diagnosis when obtaining	• Establishes a rapport with the patient	
		data	(family/caregiver/advocate)	
		Is disorganized in his/her history	Performs a physical exam	
		taking skills which is not appropriately	appropriately tailored to the clinical	
		detailed	case	
		Performs a physical examination	Demonstrates specific physical exam	
		which is disorganized or missing	skills appropriate to the patient case.	
		components relevant to the clinical	Integrates all these elements along	
		case	with other sources of information	
		Fails to establish rapport with the		
		patient/family/caregiver/advocate,		
		leading to missed data within the		
		history or physical examination		
4.	Assessment	This EPA should be assessed by direct observation in various clinical contexts (including		
	Suggestions	common acute and chronic medical condition		
		including children and their parents, adults	· · · · · · · · · · · · · · · · · · ·	
		It can also be assessed using simulated patients and/or objective structured clinical		
		examinations.		

EPA 2 - Formulate and justify a prioritized differential diagnosis

1. Short description	The graduate formulates a prioritized list of and patient demographics in common clinic approach. Through the integration of gather reasoning skills, the graduate formulates a way. The learner develops and prioritizes a difference severity using history, physical examination. The learner identifies patient factors (e.g.: confidence the diagnoses considered and the patient factors and the patient factors.)	possible diagnoses across clinical settings al presentations using a systematic red information and the use of clinical working diagnosis. Ential diagnosis list by both likelihood and and available studies including past records. ulture and socioeconomic status) that may
2. Most relevant CanMEDS roles	Medical Expert Communicator Scholar Professional	
3. Entrustable Behaviours	Pre-Entrustable The learner 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	 Entrustable The learner 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	-	bservation of the learner at rounds, during e reviews or chart simulated recall.

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

	hypotheses	e de la lace de lace de la lace de lace	
1. Short	The graduate selects a series of tests to help refine the differential diagnosis for a clinical		
description	presentation and enable him/her to make appropriate management decisions.		
Most relevant CanMEDS roles 3. Entrustable	The plan of investigation should be limited to level of training. Medical Expert Leader Professional Health Advocate Pre-Entrustable	to common clinical situations expected for this Entrustable	
Behaviours	The learner	The learner	
	 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 	 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	•	bservation of the learner at rounds, during	
suggestions	review of a patient encounter, with case	e reviews or chart simulated recall.	

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

		Lests	
1. Sł		The graduate recognizes normal and abnorm	
de	escription	explains the significance of test results, response	
		communicates them to patients (family/care	egiver/advocate), team members and/or
		colleagues	
2. Mo	st relevant	Medical Expert	
Can	MEDS roles	Collaborator	
		Communicator	
		Leader	
3. Ent	rustable	Pre-entrustable	Entrustable
Beh	naviours	The learner:	The learner:
		 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 	 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
	essment gestions	age groups including children and their p	edical conditions) with patients of various

EPA 5 - Formulate, communicate and implement management plans

	nulate, communicate and impier	
1. Short	The graduate proposes an <i>initial</i> manageme	•
description	presentations and diagnoses, including cons	ultations/referrals, written/electronic orders
	and prescriptions. He/she discusses these re	commendations with other members of the
	healthcare team and patients (family/caregiveness)	ver/advocate), to reach a shared
	management plan. He/she makes sure to in	clude patient safety/quality of care
	principles in his/her management plans	
2. Most relevant	Medical Expert	
CanMEDS roles	Communicator	
Camvizas roies	Collaborator	
	Scholar	
3. Examples of	Pre-Entrustable	Entrustable (Indirect supervision)
expected	The learner:	The learner:
behaviours	 Proposes initial management plans 	Proposes evidence informed, holistic
benaviours	that are inappropriately expansive or	initial management plans that include
	significantly incomplete in scope	pharmacologic and non-pharmacologic
		components developed with an
	 Proposes management plans that do not reflect an adequate understanding 	understanding of the patient's context,
	,	values and illness experience
	of patient's context, values and illness	Prioritizes the various components of
	experiences	the management plans.
	Proposes management plans that lack	1
	approach, prioritization or organization	
	Proposes management plans that do	professionals advice in proposing a
	not take into account opinions of other	management plan
	healthcare professionals	Reviews the initial plan with more
	Omits pertinent information of the	senior team members to formulate an
	initial proposed plan when discussing	approved management plan
	with the more senior members of the	Documents approved management
	medical team	plans in the form written/electronic
	 Incompletely or inaccurately 	orders, prescriptions and
	documents approved management	consultations/referrals
	plans in the form written/electronic	Communicates approved management
	orders and prescriptions	plans with patients and other
	 Incompletely or inaccurately 	healthcare team members that results
	communicates approved management	in mutual agreement and
	plans to patients and other healthcare	understanding
	team members	Uses the electronic medical record
	Does not implement management	when available to keep the team
	plans in the form of verbal and	informed of the up-to-date plans
	written/electronic orders and	Follows principles of error reduction
	prescriptions in an accurate and timely	including discussions of
	manner	indications/contraindications of
	 Writes incomplete consults/referrals, 	treatment plans, possible adverse
	orders or prescriptions, or that could	effects, proper dosage and drug
	impact patient safety	interactions
	impact patient safety	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
L	1	

		patient
4. Assessment suggestions	This EPA should be assessed by direct observation in various clinical contexts (incl common acute and chronic medical conditions) with patients of various age group including children and their parents, adults and elderly individuals. It can also be assessed using simulated patients and/or objective structured clinical examinations.	

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

2.	I. Short description Most relevant CanMEDS roles	negatives of a clinical encounter to members legally relevant, family members) facilitating (e.g.: privacy legislation) and confidentiality This EPA includes various types of documents notes, consultation notes, discharge summar Medical Expert Communicator Collaborator Professional	nt summary, including pertinent positives and is of the team (including patients, and when is ongoing care. He/she follows legislation considerations. ations of clinical encounters (e.g.: admission ries, etc.)
	Entrustable behaviours	 Pre-Entrustable The learner 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 	 Entrustable The learner 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
	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. In can also be assessed by reviewing charts.	

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

	The graduate postisionate in sefe transiti		
1. Short description	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.		
2. Most relevant CanMEDSroles	This should include either verbal and/or written transfer of information. Evidenced-based tools can be used to direct the transfer of information. Medical Expert Collaborator Health Advocate		
2 Futuratable	Leader	Entrustable	
3. Entrustable behaviours	When providing handover, the learner: 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 When receiving handover, the learner: 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	 Entrustable When providing handover, the learner: 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 When receiving handover, the learner: 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 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
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 8 - Recognize a patient requiring urgent or emergent care, provide initial management and seek help

	management and seek r	•
Short description 2. Most relevant	for short term stabilization and communicat and family members. The graduate identifies help. A graduate starting residency training in par	raluates the patient's risk and need, manages es with team members, other care givers is his/her limitations and when to seek for aticular is often among the first responders in notification of an urgent abnormal laboratory arly recognition and intervention (including
CanMEDS roles	Collaborator Communicator Leader	
Entrustable	Pre-entrustable	Entrustable
behaviours	 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 	 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
3. Assessment suggestions	This EPA should be assessed by direct observed common acute and chronic medical condition including children and their parents, adults a lt can also be assessed using manikin-based examinations.	vation in various clinical contexts (including ns) with patients of various age groups and elderly individuals.

EPA 9 – Communicate in difficult situations

	EPA 9 – Communicate in un	
1. Short description	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. 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.	
2. Most relevant	Medical Expert	555.5.5
CanMEDS role	Communicator Health Advocate Professional	
3. Examples of	Pre-entrustable	Entrustable
expected behaviors	 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 	 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	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.	

EPA 10 - Participate in health quality improvement initiatives

Short description 2. Most relevant CanMEDS roles	The graduate recognizes and seeks timely intervention for safety and quality issues in patient or systems of care. He/she collaborates with other members of the health care team to develop an evaluation and management plan as part of a quality improvement cycle. This could include recognition of medical errors or near misses. The graduate participates in the reflection process to improve efficacy of systems to protect patients, including the continuous quality improvement cycle. Medical Expert Collaborator Health advocate Professional	
3. Entrustable behaviours	 Pre-Entrustable The learner Is passive during morbidity and mortality rounds Is careless in daily safety habits Does not demonstrate alertness for situations threatening patient safety Does not admit errors of commission or omission until the errors are recognized by others 	 Entrustable The learner Participates in morbidity and mortality rounds Enters information in an error-based system Engages in daily safety habits (e.g., universal precautions, hand washing, time-outs) Recognizes one's own errors to the supervisor/team, reflect on one's contribution, and develops his own learning plan and or quality improvement plan Identifies a risky situation for the safety of a patient Participates in a quality improvement exercise/project
4. Assessment suggestions	Quality improvement project or reflection, presentation at morbidity/mortality rounds, documentation of adverse event/error and near misses, direct observation of a simulated disclosure with standardized patient or OSCE	

EPA 11 - Perform general procedures of a physician

	1. Short description	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. 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. Examples of procedures that fit the above principles include: Suturing the skin including injection of local anesthetic agent Insertion of a nasogastric tube in an awake patient Vaginal speculum examination with Pap smear	
2.	Most relevant CanMEDS roles	Medical Expert Collaborator Communicator Scholar	
3.	Examples of expected behaviors	The learner 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	The learner 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
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 12 - Educate patients on disease management, health promotion and preventive medicine

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.	
Examples of the types of information to may include: dietary/lifestyle modification	Entrustable The learner Equires about the patient's lifestyle habits. Educates using language that is understood by 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
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.	
	modification, and health promotion ada evidence-based information. He/she do appropriate, or in collaboration with oth Examples of the types of information to may include: dietary/lifestyle modification patients' condition(s), patient safety, etc. Medical Expert Communicator Health advocate Collaborator Pre-Entrustable The learner 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.

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 <u>direct observation</u> 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.

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