SMIFK : CIMS

# PROFILES

## Principal Relevant Objectives and Framework for Integrated Learning and Education in Switzerland

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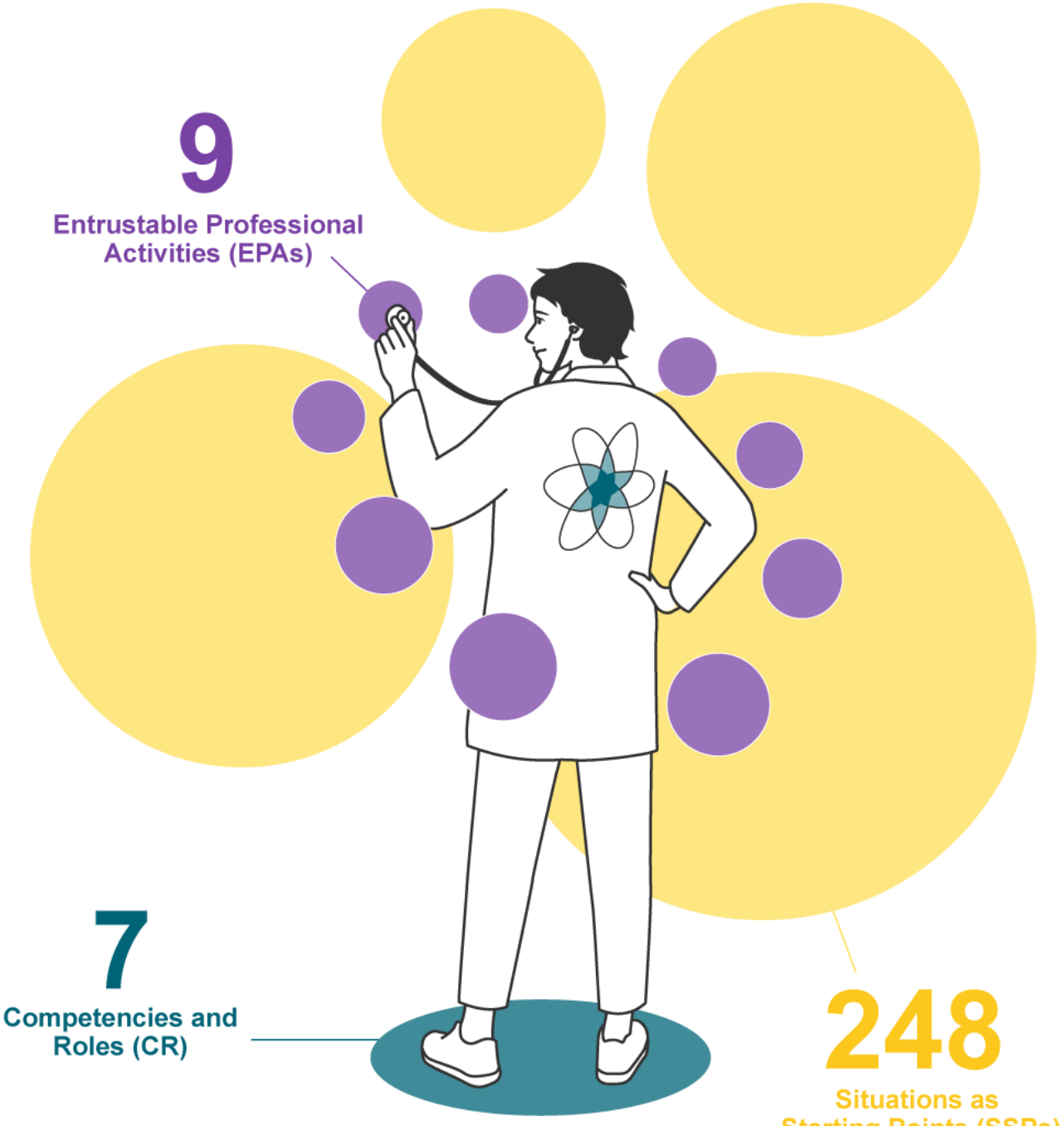
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# Introduction

With this new version, the Joint Commission of the Swiss Medical Schools (SMIFK/CIMS) presents the second edition of PROFILES, the Principal Relevant Objectives For Integrative Learning and Education in Switzerland.

PROFILES describes the medical competencies that graduates in Switzerland must demonstrate at the start of their residency. In this sense, it is rooted in the competency-based approach to medical education that focuses on the outcome of a profession-oriented curriculum aiming at the use of the developed competencies "in daily practice for the benefit of the individual and the community being served".[1] For this, competencies must integrate and combine basic and clinical knowledge and their scientific foundation, skills, values and attitudes essential for medical practice for each age group, each set of circumstances (prevention, acute, rehabilitation, chronic and palliative care) and each setting (ambulatory, hospital, long-term and community care).

The three main chapters of PROFILES cover three inseparable dimensions of medical actions: CanMEDS roles (CRs), Entrustable Professional Activities (EPAs) and Situations as Starting Points for Learning (SSPs). These three dimensions interact in such a way that CanMEDS roles represent the personal attributes and competencies of the graduate, Entrustable Professional Activities represent what the graduate is expected to perform (by using the competencies), and Situations as Starting Points for Learning list the situations in which these professional activities are expected to be performed. Ultimately, competencies are only observable through EPAs performed for a given SSP.

PROFILES operationalizes the objectives set by the University Medical Profession Act.[2] The document is intended for medical students, medical teachers, and curriculum developers. It offers a comprehensive orientation on the expected competencies graduates should demonstrate at the start of their postgraduate training. Moreover, the Ordinance on the Federal Examinations for the University Medical Professions declares that PROFILES determines the content of the Federal Licensing Examination (FLE). PROFILES also offers an orientation for the accreditation of the curricula of the Swiss faculties of medicine.

[1] Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA. 2002 Jan 9;287(2):226-35. DOI: 10.1001/jama.287.2.226. PMID: 11779266.
[2] https://www.fedlex.admin.ch/eli/cc/2007/537/fr
https://www.fedlex.admin.ch/eli/cc/2007/537/de
https://www.fedlex.admin.ch/eli/cc/2007/537/it

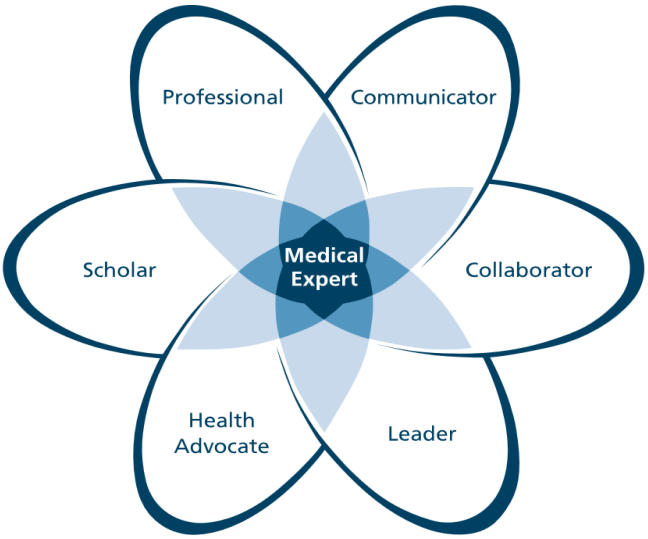
It must be emphasized that although PROFILES does not provide an explicit and comprehensive list of discipline-related knowledge, the acquisition of this knowledge (both fundamental and clinical) constitutes still an essential prerequisite for any medical competency and activity, especially in the area of clinical reasoning.

The main updates of this new version of PROFILES account for the evolution of medicine and society as well as three relevant, recent, global developments. They integrate aspects of diversity, identity, and gender medicine, distributed across all three chapters. The updates also address digitalization in medicine, and new technological advances like clinical decision support systems and artificial intelligence. In addition, “sustainable health care" has been integrated into various positions with the understanding that it provides high-quality care while preserving the environment, is affordable now and in the future, and has a positive social impact. This refers to a vision of a sustainable health system based on the recognition that human health depends on the integrity of ecosystems, with a broader focus on creating health at the population level. It also reflects an adequate interprofessional activity and task-sharing to optimally use available resources. Finally, EPA 9 has been rewritten with the aim to present relevant instruments and measures for patient safety and to create observable situations for feedback and assessment.

# 1. Competencies and Roles (CR)

*(Adapted from the CanMEDS 2015 model and the second Swiss version of the SCLO)*

The original *CanMEDS Physician Competency Framework*, developed by the Royal College of Physicians and Surgeons of Canada, already inspired the description of the roles of physicians in the second version of the SCLO. PROFILES defines the following set of training objectives, building on the review of the CanMEDS model as presented in the latest available version (2015)[3]. The competencies are organized on the basis of a short description of seven generic roles of physicians, as illustrated in the figure below. While two chapters cover specific aspects of the practice of clinical care, the competencies listed below represent the core of the undergraduate curriculum for all Swiss medical faculties. This chapter promotes an integrative, interdisciplinary vision of the practice of medicine and public health, contributing to the adaptability of future doctors.




The seven CanMEDS *roles* (see figure above) define the framework of daily practice for both training *and* trained physicians, whatever their discipline and setting. In the *PROFILES* document, *these roles are expressed as specific competencies* that the students must attain by the end of their undergraduate training. As illustrated by the CanMEDS 'flower' above, any physician integrates all of the other six roles as an expert.

While this section and the next two sections do not provide an explicit and comprehensive list of discipline-related knowledge, the acquisition of this knowledge (both fundamental and clinical) constitutes an essential prerequisite for any medical activity, especially in the area of clinical reasoning.

[3] Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.
http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e

The CanMEDS roles and the list of Entrustable Professional Activities (EPAs) listed in Chapter 2 are all highly interconnected, although some connections are stronger than others. For example, to take the history of a patient, the physician must be a good communicator and exhibit professionalism. Confronted with the need to select relevant hypotheses for a differential diagnosis, or the requirement to elaborate a complex management plan, the physician must base these processes on the available literature and evidence (scholar role). When performing emergency procedures on a patient with severe wounds and blood loss, the physician must be particularly aware of the importance of an interprofessional and coordinated team approach.

Thus, in the first chapter on Competencies and Roles, all seven roles described refer to a varying extent to some of the EPAs of Chapter 2. *These links are provided in the titles.*

### 1.1 Medical Expert (EXP)

As Medical Experts, physicians possess a comprehensive body of knowledge and skills which they apply in medical practice. They collect and interpret information, perform problem analyses, and make appropriate clinical decisions within their area of expertise and competence. They check whether their decisions and associated actions are up to the appropriate quality standard and have the desired effects. They assess the extent to which they need supervision in their professional activities. They deliver curative and preventive care using evidence-based, ethically sound, and economically viable standards. Medical care includes both somatic and psychosocial aspects and tackles acute and chronic disorders and situations. Medical experts engage in effective oral, written, and electronic communication with patients, relatives, and other professionals in social services or healthcare. They keep themselves updated on developments in the field of medicine and acquire a critical awareness of the social and ethical issues associated with the progress of science.

The following “expert” section synthesizes the key objectives of undergraduate training, and as such overlaps with the objectives provided in the six other roles (as shown in the CanMEDS “flower”).

**As Experts, physicians are able to:**

| | | |
|---|---|---|
| CR | 1.1 | describe and integrate the structures and underlying mechanisms governing the function of the human body, from molecular to organ level, including pathophysiological processes and principles |
| CR | 1.2 | demonstrate a good basic and clinical knowledge of all common situations in each discipline |
| CR | 1.3 | perform a patient-focused consultation in the time allowed |
| CR | 1.4 | identify and prioritize issues to be addressed in a patient encounter, and elicit a relevant, concise and accurate personal, professional, social, and family history from the patient and other sources |
| CR | 1.5 | perform triage assessment and interventions, taking into account clinical urgency, the potential of deterioration, and available resources |

| | | |
|---|---|---|
| CR | 1.6 | conduct an effective general or specific physical examination, also in difficult situations |
| CR | 1.7 | analyse and interpret data to establish a differential and a working diagnosis (clinical reasoning) |
| CR | 1.8 | integrate the foundations of basic medical sciences into their clinical reasoning and the selection of relevant procedures and investigations, respecting the principles of sustainable healthcare and environment |
| CR | 1.9 | establish a patient-centred, shared management plan and deliver high-quality, cost-effective, and sustainable preventive and curative care, including when dealing with a patient who is vulnerable and/or polymorbid (elderly) or who suffers from a terminal illness |
| CR | 1.10 | demonstrate safe and environmentally responsible prescribing |
| CR | 1.11 | prioritize and perform procedures in a skilful and safe manner |
| CR | 1.12 | obtain and document informed consent, explaining the risks, benefits and rationale for the proposed options |
| CR | 1.13 | advise and counsel patients on their health and lifestyle in an empathetic non-judgmental manner. Perform a motivational interview |
| CR | 1.14 | set up and conduct a discussion with the family/caregivers and manage options/decisions regarding the patient's health, condition and outcomes |
| CR | 1.15 | demonstrate appropriate medical data and information management |
| CR | 1.16 | integrate the advancements produced by evidence-based scientific research into clinical practice |
| CR | 1.17 | develop a critical awareness of common stereotypes in all areas of diversity that might bias clinical activities, related to factors such as age, gender, ethnicity, culture, level of education, political orientation, handicaps, and representations. |
| CR | 1.18 | identify the impact on health of sex (i.e. biological difference related to sexual determination), and gender (cultural and social differences across the spectrum of gender in terms of roles and expectations). Address these issues in medical activities |
| CR | 1.19 | incorporate and apply the foundations of biomedical and clinical ethics in patient care; respect values such as autonomy and dignity; identify and weigh up, in situations posing ethical dilemma, the various options available and how principles and values may affect them |
| CR | 1.20 | recognize and disclose conflicts of interest that might compromise equitable, high quality care at individual and collective levels |
| CR | 1.21 | comply with the code of ethics and consider the recommendations of national professional associations |
| CR | 1.22 | take Swiss legislation into account in the care of the patients, in particular coverage for disease, accidents, occupational disease and disability; display awareness and respect for the rights of the patient |
| CR | 1.23 | understand the population perspective as a core aspect of public health, and the application of basic principles of social medicine; advocate for the health and healthy environment of the local community and society as a whole |
| CR | 1.24 | take into account the economic, social, cultural, and ecological aspects of health maintenance prevention and care at individual and community levels |
| CR | 1.25 | practise self-reflection and critical thinking related to evolution of the health system; recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice |
| CR | 1.26 | demonstrate appropriate use of modern technology and artificial intelligence for diagnosis, decision making, management, communication, and patient guidance |
| CR | 1.27 | Integrate sustainable health care into practice (management, procedures and investigations) and recognize the relationship between environment and individual or population health |

### 1.2 Communicator (CO)

*(linked EPAs: 1, 2, 4-9)*

As *communicators*, physicians establish and maintain *effective relationships with patients and relatives*. They use communication skills to provide high-quality care and prevention / health promotion.

**As Communicators, physicians are able to:**

| | | |
|---|---|---|
| CR | 2.1 | engage in and maintain therapeutic relationships with patients based on mutual understanding, empathy, and trust |
| CR | 2.2 | accurately and adequately convey relevant information and explanations to patients, families, colleagues and other professionals, foster a common understanding of issues and problems, and jointly develop a healthcare plan |
| CR | 2.3 | manage disagreements and emotionally charged conversations, for example with patients, families and within teams |
| CR | 2.4 | deal effectively with diverse groups of patients such as children, adolescents, and adults of all ages; men, women and people with other gender identities (e.g. non binary); and patients with different languages and different cultural and religious backgrounds |
| CR | 2.5 | disclose adverse events (diagnostic and treatment failures, errors) accurately to patients and their families, to the team and to supervisors |
| CR | 2.6 | share bad news with patients and their families appropriately (“breaking bad news”) |
| CR | 2.7 | develop effective, shared strategies with patients to increase their adherence to therapeutic options and improve their adoption of healthy habits and lifestyles, and to integrate the patients’ relatives to support these strategies |
| CR | 2.8 | assist patients in the adoption of health promoting habits and provide effective counselling in the use of personal data obtained through screening procedures, imaging, serologic or genetic findings (precision / prediction medicine) |
| CR | 2.9 | improve patient’s and family’s health literacy by using and assisting them to identify, access, and make use of information and communication technologies to support their health care and the adoption of healthy lifestyles |

### 1.3 Collaborator (COL)

*(linked EPAs: 4-9)*

As collaborators, physicians are team players who effectively work together in interdisciplinary and interprofessional partnerships in order to provide optimum patient care, education, and/or research.

**As Collaborators, physicians are able to:**

| | | |
|---|---|---|
| CR | 3.1 | optimize health care delivery in identifying and understanding the roles and responsibilities of individuals such as physicians from other disciplines, nurses, pharmacists, physiotherapists, psychologists, dieticians, social workers, religious ministers, technology experts, medical engineers, data managers and, when appropriate, the patient him/herself |
| CR | 3.2 | communicate with respect for and appreciation of team members, and include them in all relevant interactions; establish and maintain a climate of mutual respect, dignity, integrity and trust |

| | | |
|---|---|---|
| CR | 3.3 | participate in team building strategies and conflict resolution approaches based on the model of interprofessional education and practice; define overlapping and shared responsibilities between colleagues from all healthcare professions as required |
| CR | 3.4 | balance team needs and personal needs in order to optimize delivery of care |

### 1.4 Leader / Manager (LEA)

*(linked EPAs: 5-7)*

As managers and individuals demonstrating leadership, physicians are engaged individuals who take the initiative to contribute in a collaborative way towards positive and sustainable change in health care, from the level of an individual patient to that of the healthcare system (leaders do not need a formal title to lead). Managers take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

**As Leaders/Managers, physicians are able to:**

| | | |
|---|---|---|
| CR | 4.1 | understand the principles of population medicine and its strategies, and use the main tools which are used in epidemiology and public health. These include the gathering and use of health determinants and indicators, descriptive and explanatory statistics, risk and protective factors and the concepts of prevention and health promotion at individual, community and environmental levels |
| CR | 4.2 | define and illustrate health promotion and health-enhancing strategies at various levels, such as the monitoring and promotion of a safe environment and the promotion of effective public health policies and interventions. In doing so, they take into account financial, material and staffing resources, at both community and public health levels. |
| CR | 4.3 | recognize and be aware of the complexity of disease outbreaks, epidemics, pandemics, and mass casualties; recognize and respond to climate-induced events. |
| CR | 4.4 | identify and address the special needs of vulnerable populations, showing awareness of the importance of equity in the delivery of care. They seek collaboration with social services if appropriate |
| CR | 4.5 | address the psychosocial, insurance, financial and environmental aspects of persons with disabilities and chronic diseases |
| CR | 4.6 | identify the roles and describe the functions of the health and invalidity insurance system and its impact on health and health care at both individual and collective levels |
| CR | 4.7 | integrate the principles of economic effectiveness and efficiency in daily work and the planning of healthcare provision |
| CR | 4.8 | identify and engage in opportunities for continuous improvement of the healthcare system, based on a critical understanding of the continuous transformation of medicine, society, and environment |

### 1.5 Health Advocate (ADV)

*(linked EPAs: 8-9)*

As health advocates, physicians recognize and actively promote the importance of public health and preventive healthcare for the individual patient, for patient groups, and for society. They advocate high quality healthcare to policymakers and, wherever possible, put preventive

healthcare into practice. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change. They take into account the historical and social aspects of the progress of science, medicine and public health. They promote sustainable healthcare and a healthy environment within the planetary boundaries.

**As Health Advocates, physicians are able to:**

| | | |
|---|---|---|
| CR | 5.1 | recognize issues, settings, circumstances, or situations that require advocacy on behalf of patients, professions, or the general population, keeping in mind the structure and function of the healthcare system and insurance coverage of disease, accidents and disability in Switzerland |
| CR | 5.2 | incorporate health surveillance activities into interactions with individual patients (discussing lifestyles, counselling). Such activities include, but are not limited to screening, immunization and disease prevention, risk and harm reduction measures, including from environmental hazards, and health promotion. |
| CR | 5.3 | work with a community or population to identify the determinants of health that affect them, how to address them and promote system-level change in a socially and environmentally accountable manner |
| CR | 5.4 | recognize the central role and functions played by primary care in the population |
| CR | 5.5 | inform the population on the risks of climate change and biodiversity loss on health. Advocate for systemic actions to mitigate these impacts on health and adapt to global changes |

### 1.6 Scholar (SCH)

*(linked EPAs: 3-4, 7,9)*

As scholars, physicians recognize the need for lifelong learning and continual updating of their professional expertise. They strive to make scholarly contributions to the assessment, establishment, and understanding of knowledge and skills in healthcare. They actively participate in teaching, and facilitate the education of medical students, other health professionals, patients and members of the community. They develop and maintain critical thinking about the scientific progress of medicine and health.

**As Scholars, physicians are able to:**

| | | |
|---|---|---|
| CR | 6.1 | develop and document a reflective attitude towards learning and education, for example in their learning portfolio |
| CR | 6.2 | apply basic principles of critical appraisal to best available sources of evidence-based medical information. Identify ethical principles that apply to basic and clinical research |
| CR | 6.3 | demonstrate the critical use of information technology to access accurate and reliable (online) medical information, taking into account the levels of evidence provided by the medical literature, and integrating it into patient care |
| CR | 6.4 | understand the general theoretical principles of medical and scientific knowledge and show an awareness of its development, its problems and limits |
| CR | 6.5 | identify and develop a research question or hypothesis, work out a procedure to address the issue, analyse and synthesize the results, and publish these as a scientific report or article. Effectively present medical information based on scientific evidence |

| | | |
|---|---|---|
| CR | 6.6 | adapt to new technological advances, e.g. clinical decision support systems, artificial intelligence, and options for remote patient monitoring |
| CR | 6.7 | facilitate the learning of patients, students and health professionals, provide effective feedback to enhance learning and performance, use assessment and evaluation tools |

### 1.7 Professional (PRO)

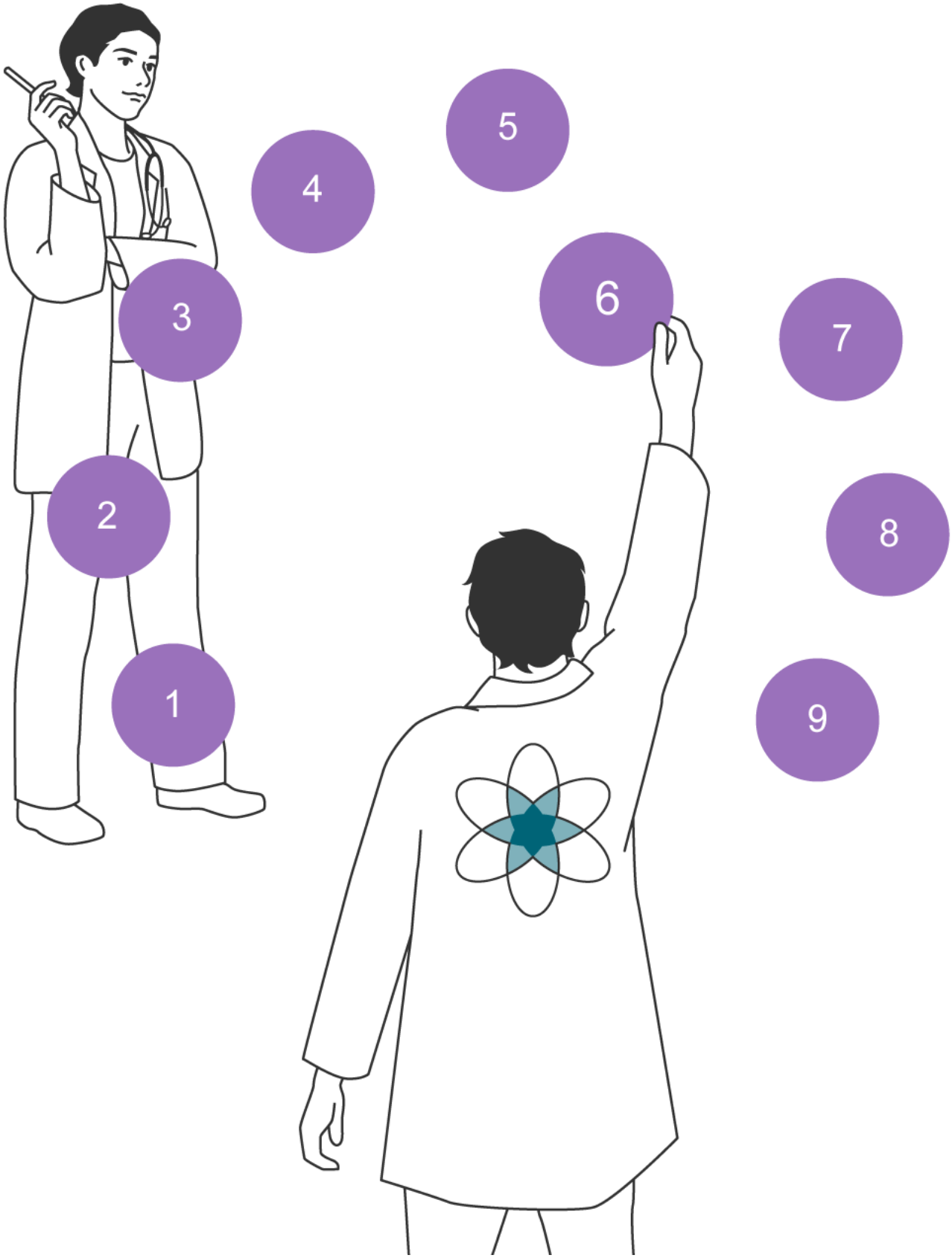
*(linked EPAs: 1, 2, 5-9)*

As professionals, physicians are committed to the health and well-being of individual patients and society. This is expressed by their ethical practice, high personal standards of behaviour, accountability to the profession and society, as well as physician-led regulation and maintenance of the physician's own health.

**As Professionals, physicians are able to:**

| | | |
|---|---|---|
| CR | 7.1 | display integrity, honesty, commitment, empathy and accountability in taking care of patients and communicating with families and colleagues |
| CR | 7.2 | be aware of their own limits, seek supervision when appropriate, and timely refer patients to experts when needed |
| CR | 7.3 | respect patients' privacy and confidentiality |
| CR | 7.4 | show awareness of individual factors (e.g. cultural, societal, and spiritual/religious issues) that impact on the health and delivery of care of individuals and of the community |
| CR | 7.5 | recognize that the patient's wishes and preferences are central for medical decision-making ("shared decision-making") |
| CR | 7.6 | incorporate and apply the principles of biomedical and clinical ethics in the care of patients; identify the principles and values that affect the available options in situations that pose an ethical dilemma; act according to the highest available ethical recommendations (e.g. national professional associations); recognize and manage conflicts of interest |
| CR | 7.7 | demonstrate accountability to their profession and society, respect their legal and professional obligations and the codes of regulatory bodies |
| CR | 7.8 | act with respect towards colleagues and other healthcare professionals; recognize and respond appropriately to unprofessional and unethical behavior by physicians and other health care professionals, such as sexism, sexual harassment, racism, or any other forms of discrimination |
| CR | 7.9 | allocate personal time and resources effectively in order to balance patient care, learning needs, and private activities outside the workplace, and to sustain their own health; recognize excessive stress; recognize their own substance misuse or personal illness in order to protect patients |
| CR | 7.10 | anticipate career choices and plan their own future training and activity |

## 2. Entrustable Professional Activities (EPAs)



An Entrustable Professional Activity (EPA) is a unit of medical activities that a trainee is entrusted to perform once the trainee has demonstrated sufficient competence in the activities. Entrustability is closely related to the trainee's level of autonomy in the given task and the need for supervision. Although new graduates still require direct supervision in several situations, they have to deal with tasks that they must perform under distant supervision.

The medical activities that graduates are expected to perform at the level of distant supervision on the first day of their residency are outlined below in nine broad EPAs.

| | | |
|---|---|---|
| EPA | 1 | Take a medical history |
| EPA | 2 | Assess the physical and mental status of the patient |
| EPA | 3 | Prioritize a differential diagnosis following a clinical encounter |
| EPA | 4 | Recommend and interpret diagnostic and screening tests in common situations |
| EPA | 5 | Perform general procedures |
| EPA | 6 | Recognize a patient requiring urgent / emergency care, initiate evaluation and management |
| EPA | 7 | Develop a management plan, discuss orders and prescriptions in common situations |
| EPA | 8 | Document and present patient's clinical encounter; perform handover |
| EPA | 9 | Apply instruments and measures for patient safety in clinical context |

As mentioned in the introduction chapter, these nine EPAs cannot be considered in isolation. Rather, EPAs are context-dependent, which means that EPAs should be trained, applied and assessed in as many different medical situations as possible, as listed in the chapter on SSPs. Not only are the SSPs and the EPAs inextricably linked, but the CanMEDS roles (chapter 1) and the EPAs are also mutually dependent. There are always several roles and competencies required to perform an EPA. In this way, an EPA can be used as an integrative indicator of the different competences a trainee has attained. To highlight this interdependency, each EPA cross-references the main associated CanMEDS roles in its title.

The following selection of items has been adapted from the guide developed by the Drafting Panel of the American Association of Medical Colleges (AAMC) . We are grateful to the AAMC for allowing us to use their document.

## 2.1 Take a medical history

*(linked roles: EXP / COM / PRO)*

| | | |
|---|---|---|
| EPA | 1.1 | Obtain a complete and accurate history in an organized fashion, taking into account the patient's expectations, priorities, values, representations and spiritual needs; explore complaints and situations in persons of all ages; adapt to linguistic skills and health literacy; respect confidentiality |
| EPA | 1.2 | Explore patient expectations, values and priorities |
| EPA | 1.3 | Use patient-centered, hypothesis-driven interview skills; be attentive to patient's verbal and nonverbal cues, patient/family culture, concepts of illness; check need for interpreting services; approach patients holistically in an empathetic and non-judgmental manner |
| EPA | 1.4 | Evaluate understanding and decision-making capacity of all patients, especially those of psychiatric patients, cognitively impaired persons or minors |
| EPA | 1.5 | Identify and use alternate sources of information to obtain history when needed, including but not limited to family members, primary care physicians, staff of living facility, pharmacy or social/health alliance |
| EPA | 1.6 | Assess gender, social, cultural and other factors that may influence the patient's perception and description of symptoms; demonstrate cultural awareness and humility, and be conscious of the potential for bias in interactions with the patient |
| EPA | 1.7 | In cases of long-term follow-up care, select the most salient issues that must be addressed in terms of treatment, side-effects, compliance, daily impact of the disease and patient's environment |
| EPA | 1.8 | Review the patient's health behavior, lifestyle, and environmental risk exposure as part of a routine check-up, or as far as possible, and assess the patient's opinions, representations and expectations |
| EPA | 1.9 | Explore the patient's use of medicine and treatment, including complementary and integrative medicine |
| EPA | 1.10 | Explore the patient's use or misuse of psychoactive substances |
| EPA | 1.11 | Use clinical reasoning in gathering focused information relevant to a patient's care |
| EPA | 1.12 | Identify issues not mentioned spontaneously by the patient (hidden agenda) |
| EPA | 1.13 | Recognize situations involving potential self-harm or victimization, such as interpersonal violence, assault |
| ***Specific competencies / skills related to history taking*** | | |
| EPA | 1a | Take an age-specific pediatric history (involving mother/father and child or adolescent) |
| EPA | 1b | Perform an age-specific assessment of a child's / adolescent's development and lifestyle |
| EPA | 1c | Take a psychiatric history |
| EPA | 1d | Take an occupational and workplace history, consider ergonomic and hygienic situation |
| EPA | 1e | Take a sleep history |
| EPA | 1f | Take a history of sexual and reproductive health |
| EPA | 1g | Take a history from severely ill or dying patients |

## 2.2 Assess the physical and mental status of the patient

*(linked roles: EXP / COM / PRO)*

| | | |
|---|---|---|
| EPA | 2.1 | Perform an accurate and clinically relevant physical examination in a logical and fluid sequence, with a focus on the purpose and the patient's expectations, complaints and symptoms, in persons of all ages; respect patient privacy, comfort, and safety |
| EPA | 2.2 | Assess the cognitive and mental state of the patient including attention, memory, perception, understanding, language, expression, affect, and behavior |
| EPA | 2.3 | Perform a physical examination in difficult situations such as obesity, intrusive procedure, non-cooperative patients, reduced consciousness, cognitive impairment, disabled patients, and persons who do not speak the local language or are of different ethnicity |
| EPA | 2.4 | Identify, describe, document and interpret abnormal findings of a physical examination. Assess vital signs (temperature, heart and respiratory rate, blood pressure) |
| EPA | 2.5 | Demonstrate patient-centered examination techniques; demonstrate effective use of devices, as recommended by medical societies (such as a stethoscope, otoscope, ophthalmoscope) |
| EPA | 2.6 | Explain physical examination maneuvers, obtain consent as appropriate, and communicate findings |
| EPA | 2.7 | Recognize the signs of imminent death |
| **Specific competencies / skills related to history taking.**<br><br>Students are expected to perform the tasks below on simulated or real patients. However in some situations, *in italics*, only a demonstration of the technique should be expected | | |
| EPA | 2a | Assessment of patient's general condition and vital signs |
| EPA | 2b | Assessment of nutritional status |
| EPA | 2c | Assessment of state of consciousness, attention, orientation, language/speech, affect, mood |
| EPA | 2d | Evaluation of patient's decision-making capacity |
| EPA | 2e | Assessment of the skin, hair and nails, description of lesions |
| EPA | 2f | Palpation of lymph nodes |
| EPA | 2g | Inspection and palpation of the orbit, eyelids and eye (all structures) |
| EPA | 2h | Assessment of visual acuity and visual field, *as well as optic disc and retinal vessels with ophthalmoscope* |
| EPA | 2i | Assessment of color vision |
| EPA | 2j | Assessment of eye movements, recognition and description of nystagmus |
| EPA | 2k | Inspection and palpation of auricle and adjacent region as well as external auditory canal and tympanic membrane (*using otoscope*) - hearing tests with whispering, conversational voice and tuning fork |
| EPA | 2l | Examination of nose, face, mouth, salivary glands, pharynx, larynx, and neck visually, manually, and by using basic, non-endoscopic instruments |
| EPA | 2m | Inspection, palpation and auscultation of cervical structures |
| EPA | 2n | Inspection and palpation of thyroid, carotid arteries |
| EPA | 2o | Inspection and palpation of skeleton and joints |
| EPA | 2p | Functional testing of joint mobility: shoulders, elbows, wrists, hands, fingers, hips, knees, ankles, feet, and toes |
| EPA | 2q | Inspection, palpation, percussion and mobility of the spine |
| EPA | 2r | Inspection and palpation of chest, percussion and auscultation of lungs |

| | | |
|---|---|---|
| EPA | 2s | Palpation (apex beat/fremitus) and auscultation of heart; description of normal/abnormal heartbeat and murmurs |
| EPA | 2t | Palpation of pulse, testing for arterial insufficiency or bruits |
| EPA | 2u | Demonstrate ability to perform simple ultrasound investigations (suspected pleural effusion, abdominal mass, ascites) |
| EPA | 2v | Assessment of venous system |
| EPA | 2w | Palpation, percussion and auscultation of abdomen, description of findings |
| EPA | 2x | Inspection and palpation of groin / hernial orifices |
| EPA | 2y | *Examination of external genitals (all sexes)* |
| EPA | 2z | *Rectal examination in male and female (anus, rectum, prostate gland, sacrum, vagina, uterus, parametria)* |
| EPA | 2aa | *Speculum examination: inspection of vagina and cervix* |
| EPA | 2bb | *Bimanual examination: vagina, cervix, uterine corpus, ovaries* |
| EPA | 2cc | Palpation of breast |
| EPA | 2dd | Neurological examination: Assessment of state of consciousness, attention, orientation, language/speech, cranial nerves, motor system (including involuntary movements), sensory system, reflexes, stand and gait |
| EPA | 2ee | Assessment of coma (scale) |
| EPA | 2ff | *Examination of newborns (Apgar score, dysmorphism, malformation)* |
| EPA | 2gg | Assessment of age-specific anthropometric characteristics of infants / children / adolescents |
| EPA | 2hh | *Assessment of pubertal growth (pubertal stages)* |
| EPA | 2ii | Age-specific assessment of the child: neurological and cognitive development |
| EPA | 2jj | Assessment of basic and instrumental activities of daily living |
| EPA | 2kk | *Forensic examination of persons under the influence of alcohol and/or drugs* |
| EPA | 2ll | *Approach to and documentation of physical/sexual violence* |
| EPA | 2mm | *Clinical diagnosis of death, estimation of time of death* |

### 2.3 Prioritize a differential diagnosis following a clinical encounter

*(linked roles: EXP / SCH)*

| | | |
|---|---|---|
| EPA | 3.1 | Synthesize essential data from previous records, integrate the information derived from history, meaningful physical and mental symptoms and physical exam; provide initial diagnostic evaluations; take into account the age, gender and psychosocial context of the patient as well as social determinants of health |
| EPA | 3.2 | Assess the degree of urgency of any complaint, symptom or situation |
| EPA | 3.3 | Demonstrate awareness of polymorbidity and atypical presentation of disease, especially in elderly patients |
| EPA | 3.4 | Integrate the scientific foundations of basic medical sciences as well as epidemiological information (probability of diseases) into clinical reasoning, in order to develop a differential diagnosis and a working diagnosis, organized in a meaningful hierarchical way |
| EPA | 3.5 | Engage with supervisors and team members for endorsement and confirmation of the working diagnosis; explain and document the clinical reasoning that led to the working diagnosis; demonstrate critical thinking with regard to differential diagnosis |
| EPA | 3.6 | Manage ambiguity in a differential diagnosis for oneself and the patient; respond openly to questions from patients and members of the healthcare team; continuously update differential diagnosis |

### 2.4 Recommend and interpret diagnostic and screening tests in common situations

*(linked roles: EXP / COM / COL / SCH)*

| | | |
|---|---|---|
| EPA | 4.1 | Recommend first-line, cost-effective diagnostic evaluation for a patient with an acute or chronic disorder or as part of routine health maintenance |
| EPA | 4.2 | Justify an informed, evidence-based rationale for ordering tests (when appropriate, based on integration of basic medical disciplines as they relate to the clinical condition); take into account cost-effectiveness and environmental impact of ordering |
| EPA | 4.3 | Obtain informed consent: discuss with the patient and the family or proxy, and ensure that they understand the indications, risks, benefits, alternatives, and potential complications; seek an agreement/shared decision and document it in the file |
| EPA | 4.4 | Demonstrate awareness of differences in values and thresholds regarding sex and age in the interpretation of biological test results: use reference values |
| EPA | 4.5 | Interpret results of tests and investigations (including morphological and pathological findings)and integrate them into the differential diagnosis; understand the implications and urgency of an abnormal result and seek assistance with interpretation if needed |
| EPA | 4.6 | As part of a routine check-up, advise patients and order screening tests or procedures to identify asymptomatic diseases or risk factors, weighing up their risks, benefits and predictive value; apply valid epidemiological data in selecting tests and procedures |
| EPA | 4.7 | Provide an informed rationale for ordering imaging examinations; interpret first-line, common X-rays; integrate diagnostic imaging into the clinical workup |
| EPA | 4.8 | Order required tests and investigations in situations with medicolegal implications: substances in the blood, X-rays and genetic tests |

### 2.5 Perform general procedures

*(linked roles: EXP / COM / COL / LEA / PRO)*

| | | |
|---|---|---|
| EPA | 5.1 | Understand and explain the anatomy and physiology, indications and contraindications, risks and benefits, alternatives and potential complications of the procedure |
| EPA | 5.2 | Obtain informed consent: communicate the information to the patient and the family or proxy, seek an agreed/shared decision and document it in the file |
| EPA | 5.3 | Demonstrate the technical (motor) skills required for the procedure |
| EPA | 5.4 | Observe principles of asepsis and maximize patient safety during procedure |
| EPA | 5.5 | Manage common post-procedure complications |
| **Specific procedures that must be mastered by the student by the end of the curriculum**<br><br>Students are expected to perform the procedures below with real patients, except for some specific procedures that should be learnt and performed *as simulations (marked with italics)* | | |
| EPA | 5a | Measuring and interpreting body temperature |
| EPA | 5b | Intravenous injection and cannulation, subcutaneous and intramuscular injection |
| EPA | 5c | Insertion of a peripheral intravenous line, planning and managing parenteral administration of drugs |
| EPA | 5d | Pre-operative preparation of surgical field for minor surgery; asepsis and antisepsis |
| EPA | 5e | Local skin anesthesia |
| EPA | 5f | Wound cleaning, application and removal of sutures |
| EPA | 5g | Application of bandages and dressings |

| | | |
|---|---|---|
| EPA | 5h | Simple spirometry, measurement of peak expiratory flow |
| EPA | 5i | Arterial puncture for blood gas analysis |
| EPA | 5j | Instruction of the patient in the use of metered dose inhalers, spacers and nebulizers |
| EPA | 5k | Taking a throat swab and performing a rapid streptococcal test |
| EPA | 5l | Ear irrigation |
| EPA | 5m | Removal of a superficial foreign body from the cornea |
| EPA | 5n | *Urethral catheterization* |
| EPA | 5o | Performance and interpretation of a urine stick test |
| EPA | 5p | Preparation and examination of urinary sediment |
| EPA | 5q | Performance and interpretation of an ECG |
| EPA | 5r | Performance and interpretation of a pregnancy test |
| EPA | 5s | *Assisting in the delivery of a baby* |
| EPA | 5t | *Clamping of umbilical cord / separating placenta from child* |
| EPA | 5u | *Nasogastric intubation* |
| EPA | 5v | *Lumbar puncture* |
| EPA | 5w | *Cutaneous allergy test (Prick-test)* |

### 2.6 Recognize a patient requiring urgent / emergency care, initiate evaluation and management

*(linked roles: EXP / COM / COL / LEA / PRO)*

| | | |
|---|---|---|
| EPA | 6.1 | Recognize abnormal vital signs |
| EPA | 6.2 | Interpret the clinical situation using pathophysiological principles |
| EPA | 6.3 | Assess the urgency and the severity of a patient's situation / illness and indications for escalating care |
| EPA | 6.4 | Identify possible underlying etiologies of the patient's deteriorating condition |
| EPA | 6.5 | Initiate a care plan for the decompensating patient; apply basic and advanced life support as needed |
| EPA | 6.6 | Take into account a "do-not-resuscitate" request |
| EPA | 6.7 | As a team member, share vital and relevant information with other members, using structured communication techniques as well as briefings and debriefings for continuing decision-making and follow-up of the patient |
| EPA | 6.8 | Identify the need for rapid transfer of patient to another facility |
| EPA | 6.9 | Update the patient/family and ensure that they understand the indications, risks and benefits, alternatives and potential complications. If possible, ask for the patient's informed consent or advance directives |
| **Emergency situations that any resident can autonomously and trustworthily initially manage, i.e. assess the patient's state, order and interpret tests, initiate first procedures and treatment, included basic, immediate, and advanced life support:** | | |
| EPA | 6a | Transient loss of consciousness, syncope, coma, seizures |
| EPA | 6b | Shock, severe hypotension |
| EPA | 6c | Acute chest pain |
| EPA | 6d | Acute severe headache, meningism |
| EPA | 6e | Acute abdominal pain |

| | | |
|---|---|---|
| EPA | 6f | Sudden deterioration of mental state, e.g. confusion / delusion /(auto-)aggressive behavior |
| EPA | 6g | Shortness of breath |
| EPA | 6h | Severe hypertension |
| EPA | 6i | Uncomplicated trauma such as fall, minor traffic injury |
| EPA | 6j | Acute neurological deficits |
| EPA | 6k | Severe acute blood loss |
| EPA | 6l | Intoxication / poisoning |
| EPA | 6m | Burns |

### 2.7 Develop a management plan, discuss orders and prescriptions in common situations

*(linked roles: EXP / COM / COL / LEA / SCH / PRO)*

| | | |
|---|---|---|
| EPA | 7.1 | Establish a management plan that integrates information gathered from the history, the physical examination, laboratory tests and imaging as well as the patient's preference; incorporate the prescription of medications, physiotherapy and physical rehabilitation, dietetic and lifestyles advice, psychological support, social and environmental measures into the management plan |
| EPA | 7.2 | Use clinical scores and clinical decision rules/protocols to support decision (Bayesian approach) when appropriate. |
| EPA | 7.3 | Adopt a shared-decision making approach in establishing the management plan, take into account patients' preferences in making orders; take into account an indication or request for complementary and integrative medicine; deal with treatment refusal; demonstrate an understanding of the patient's and family's current situation, beliefs and wishes, and consider any physical dependence or cognitive disorders; react appropriately when the patient lacks autonomous decision-making capacity. |
| EPA | 7.4 | Take into account the patient's specific profile and situation, such as gender, age, culture, religion, beliefs and health literacy; take into account the vulnerability of specific groups such as immigrants, patients with low socioeconomic status, adolescents |
| EPA | 7.5 | Ensure patient's and family's understanding of the indications, risks and benefits, alternatives and potential complications of treatment |
| EPA | 7.6 | Understand and apply the concept and basic elements of advance care planning |
| EPA | 7.7 | Demonstrate an insight into emotional factors that can interfere with patient-doctor communication and their management |
| EPA | 7.8 | Provide effective treatment (non-pharmacological, pharmacological, and interventional) of all types of pain |
| EPA | 7.9 | Prescribe antibiotics only with clear indications and awareness of the issue of antibiotic resistance |
| EPA | 7.10 | Avoid unnecessary/futile/low-value diagnostic measures and treatment (smarter medicine) |
| EPA | 7.11 | Determine prescription and treatment according to the patient's condition, and adjust for weight, allergies, pharmacokinetics, pharmacogenetics ("precision medicine"), potential interactions with other medication and substances, pregnancy status or co-morbid conditions, legal/illegal psychoactive substances, potential for self-harm. Use therapeutic drug monitoring appropriately. |
| EPA | 7.12 | In patients with multimorbidity, prioritize measures and medication; compose orders efficiently and effectively, whether in oral, written or electronic format |
| EPA | 7.13 | During follow-up, support self-management by the patient; evaluate and discuss adherence; discuss the potential impact of non-adherence if needed, especially with patients who are cognitively impaired or unable to make decisions; use motivational approaches if appropriate |
| EPA | 7.14 | Ensure continuity and interprofessional collaboration in caring for chronic and polymorbid patients |

| | | |
|---|---|---|
| EPA | 7.15 | Counsel patient and family proactively on decision-making at the end of life, taking into account the patient's preferences and acceptable outcomes; involve chaplain if needed and/or consult with ethicist in difficult situations |
| EPA | 7.16 | Prescribe measures for treatment of pain, palliative and end-of-life care, taking into account any advance directives or a "do not resuscitate" request |

### 2.8 Document and present patient's clinical encounter; perform handover

*(linked roles: EXP / COM / COL / ADV / PRO)*

| | | |
|---|---|---|
| EPA | 8.1 | Document and record the patient's chart; filter, organize, prioritize and synthesize information; comply with requirements and regulations |
| EPA | 8.2 | Document and record the patient's autonomous decision-making capacity |
| EPA | 8.3 | Document the rationale for the clinical decision and for involving the patient in making the decision; provide and incorporate discharge document |
| EPA | 8.4 | Document the discussion and the informed consent appropriately in the health record, taking into account the importance of privacy, confidentiality and data protection, especially in the use of electronic communication and records |
| EPA | 8.5 | Provide an accurate, concise, relevant, and well-organized oral presentation of a patient encounter and situation, adjusting it to the profile and role of the recipient; elicit feedback about the handover, especially when assuming responsibility for the patients; ask for clarification if needed |
| EPA | 8.6 | Organize transfer of a patient from one setting to another, involving the patient and family/caregivers; at discharge from hospital, identify the needs for (sustainable) assistance by psychosocial network |
| EPA | 8.7 | Consider forced hospitalization for acute psychiatric breakdown |

### 2.9 Apply instruments and measures for patient safety in clinical context

*(linked roles: EXP / COM / COL / ADV / SCH / PRO)*

| | | |
|---|---|---|
| EPA | 9.1 | Identify actual and potential ("near miss") errors in a patient encounter and report them using an error reporting systems (CIRS). Show adequate accountability |
| EPA | 9.2 | Address and question critical aspects in patient safety, involving other team members. |
| EPA | 9.3 | Report own errors to a superior and provide a plan for improvement. |
| EPA | 9.4 | Encourage patients as partners and communicate sufficient information to patients and families to enable self-care, shared decision-making, and error detection. |
| EPA | 9.5 | Check drug prescriptions with regards to safety and interactions, considering safety/quality procedures and their vulnerabilities |
| EPA | 9.6 | Apply validated standard operating procedures (SOPs) in risk prone clinical situations (e.g. minimizing nosocomial infections as and hygiene, resistance to antibiotics, unnecessary investigations and treatment, transition of care, i.e. using 'smarter medicine') |
| EPA | 9.7 | Contribute to the literacy of patients regarding environmental and ecological safety |
| EPA | 9.8 | Assess patient-specific environmental risks and propose safety measures (i.e. fall risk in elderly, self-medication) |

## 3. Situations as Starting Points (SSPs)

*This chapter provides a set of generic situations which cover the common circumstances, symptoms, complaints and findings which the physician should be able to manage on day one of his residency.*

In other words, she or he should be able to assess a patient presenting with any of these situations in a well-structured way, establish a differential diagnosis and propose diagnostic, therapeutic, social and preventive/counselling measures. The list encompasses most of the typical situations a young resident may face. The situations are listed under several subtitles to make their use easier, but in some instances the classification is arbitrary. Items listed as “symptoms” may also be defined as “findings”, and vice-versa. A set of pre-defined criteria was used to design the list. The situations were selected:

- if they occur frequently
- if rapid and appropriate intervention may be crucial or even life-saving
- if they are a recognized cause of important emotional distress for the patient

The situations are presented in a very generic way, which means that they can be used and applied to all gender identities and ages (children, adults, and the elderly) unless otherwise specified. They cover acute, subacute and chronic problems (e.g. fever, pain, fatigue), which further increases the range of potential pathologies. For instance, the situation “jaundice” may be a starting point for numerous situations such as neonatal jaundice, hepatitis, pancreatic cancer or cirrhosis.

As entry points, the situations mostly constitute a broad range of diagnostic pathways involving different disciplines. For instance, a situation such as “chest pain” can be a starting point for discussion of several pathologies such as cardiac, pleural and parietal problems, disorders of the spine, stress and anxiety and so on. As mentioned above, the situation will have different implications according to the sex, gender and age of the patient and whether the problem is acute or chronic. The use of these situations should assist students to develop their skills in clinical reasoning, to increase their ability to integrate various options into their differential diagnosis, and to maintain an interdisciplinary perspective.

The situations are intended to be used by faculties and teachers to illustrate lectures, to engage in problem-based learning sessions and to facilitate teaching in a clinical environment. They will also be used as a basis for the development of the Federal Licensing Examination.

SSPs are ordered under four sections with their own numbering: General complaints and symptoms (G), System-related and specific complaints and symptoms (S), Findings (F), and Other situations (O).

**Situations as starting points encompass not only health problems and symptoms but also normal or current health issues, e.g. the birth of a baby or injury prevention among elderly people.**

### 3.1 General complaints and symptoms (G)

| | | |
|---|---|---|
| SSP | G1 | abdominal perspiration |
| SSP | G2 | Swelling, tumor, included enlarged lymph nodes (lymphadenopathy) |
| SSP | G3 | excessive thirst, excessive fluid intake (polydipsia) |
| SSP | G4 | fatigue, tiredness |
| SSP | G5 | feeling of illness |
| SSP | G6 | fever, chills, hyperthermia |
| SSP | G7 | flushing |
| SSP | G8 | hypothermia |
| SSP | G9 | itching |
| SSP | G10 | pain of all types |
| SSP | G11 | sleep problems (insomnias, hyper-somnias/sleepiness, parasomnias) |
| SSP | G12 | oedema (diffuse or local) |
| SSP | G13 | unnatural death |
| SSP | G14 | unexpected or sudden death |
| SSP | G15 | weight gain, obesity |
| SSP | G16 | weight loss, loss of appetite |

### 3.2 System-related or specific complaints and symptoms (S)

| **S1 Head and neck** | | |
|---|---|---|
| SSP | S1.1 | diplopia, ptosis, abnormal eye movements |
| SSP | S1.2 | acute and gradual loss of vision (acute, slow, temporary, partial) |
| SSP | S1.3 | alteration of voice (hoarseness, aphonia, dysphonia) |
| SSP | S1.4 | asymmetric face, deformation |
| SSP | S1.5 | bleeding nose |
| SSP | S1.6 | blepharospasm |
| SSP | S1.7 | difficulty in swallowing, choking |
| SSP | S1.8 | discharge from ear |

| | | |
|---|---|---|
| SSP | S1.9 | dryness, pain, mass in mouth or throat, oral lesions |
| SSP | S1.10 | earache |
| SSP | S1.11 | facial, jaw or tooth pain, trismus |
| SSP | S1.12 | hearing impairment: hyper- and hypoacusis, deafness, whistling, tinnitus |
| SSP | S1.13 | micro- and macrocephaly |
| SSP | S1.14 | nasal discharge |
| SSP | S1.15 | nasal obstruction |
| SSP | S1.16 | neck stiffness and pain |
| SSP | S1.17 | painful, red, itchy eyes; eye discharge |
| SSP | S1.18 | snoring |
| SSP | S1.19 | sore throat |
| SSP | S1.20 | squint (strabismus) |
| SSP | S1.21 | swelling of face, lips, neck |
| SSP | S1.22 | swelling of the eyelid |
| SSP | S1.23 | visual disturbances, photophobia, light flashes, floating objects, diplopia, color blindness, blurred vision |
| **S2 Chest** | | |
| SSP | S2.1 | apnea, apnea with arousal |
| SSP | S2.2 | change of respiratory pattern |
| SSP | S2.3 | changes of breast size, breast lump, breast discharge |
| SSP | S2.4 | chest discomfort |
| SSP | S2.5 | chest pain |
| SSP | S2.6 | cough, expectoration, hemoptysis |
| SSP | S2.7 | dyspnea |
| SSP | S2.8 | heartburn (pyrosis) |
| SSP | S2.9 | impaired or painful passage of food, dysphagia, regurgitation |
| SSP | S2.10 | painful respiration, wheezing, stridor |
| SSP | S2.11 | palpitations |
| SSP | S2.12 | parietal chest pain |
| **S3 Abdomen** | | |
| SSP | S3.1 | abdominal pain |
| SSP | S3.2 | abdominal distension |
| SSP | S3.3 | abdominal mass |
| SSP | S3.4 | altered defecation pattern, incontinence, pain |
| SSP | S3.5 | anal itching, anal pain, anal protrusion |
| SSP | S3.6 | hematemesis |

| | | |
|---|---|---|
| SSP | S3.7 | constipation |
| SSP | S3.8 | diarrhea |
| SSP | S3.9 | anal bleeding, melena, fresh blood, mucus, pus in feces |
| SSP | S3.10 | nausea, vomiting |
| **S4 Pelvis, urogenital system** | | |
| SSP | S4.1 | variations in sexual development |
| SSP | S4.2 | anuria, pollakiuria, oliguria, polyuria |
| SSP | S4.3 | dysuria, pyuria, hematuria |
| SSP | S4.4 | issues related to conception, e.g. infertility and sterilization |
| SSP | S4.5 | menstrual symptoms: disorders of menstruation, painful menstruation, premenstrual symptoms |
| SSP | S4.6 | pelvic mass |
| SSP | S4.7 | pelvic pain |
| SSP | S4.8 | request for contraception, emergency contraception |
| SSP | S4.9 | scrotal pain, swelling, mass |
| SSP | S4.10 | sexual complaints and dysfunction |
| SSP | S4.11 | swelling, pain in groin |
| SSP | S4.12 | symptoms related to menopause |
| SSP | S4.13 | urethral discharge |
| SSP | S4.14 | urinary incontinence and enuresis |
| SSP | S4.15 | urinary retention |
| SSP | S4.16 | uterine prolapse, pelvic relaxation |
| SSP | S4.17 | vaginal bleeding |
| SSP | S4.18 | vaginal discharge |
| **S5 Back and extremities** | | |
| SSP | S5.1 | abnormal posture and back deformities |
| SSP | S5.2 | back pain |
| SSP | S5.3 | deformities of skeleton and joints |
| SSP | S5.4 | myalgia |
| SSP | S5.5 | pain, burning, cramp, numbness in the extremities |
| SSP | S5.6 | swollen or painful joints, morning stiffness, reduction of joint motility |
| **S6 Skin** | | |
| SSP | S6.1 | changes in oral, genital or perianal mucosa |
| SSP | S6.2 | ecchymosis, hematoma, purpura |

| | | |
|---|---|---|
| SSP | S6.3 | hyper- or hypopigmentation |
| SSP | S6.4 | infected wound, delayed wound healing, skin ulcers |
| SSP | S6.5 | jaundice (icterus) |
| SSP | S6.6 | lack or loss of hair, excess hair |
| SSP | S6.7 | macules, papules, pustules, blisters, ulcers and abscess, bullae, thickening, necrosis, tumors |
| SSP | S6.8 | nail complaints |
| SSP | S6.9 | redness of the skin (localized or diffuse) and/or mucosa |
| **S7 Nervous system** | | |
| SSP | S7.1 | abnormal sense of balance, falls |
| SSP | S7.2 | abnormal gait |
| SSP | S7.3 | abnormal involuntary movements, tremor, tic, lack of coordination |
| SSP | S7.4 | disorders of speech or language |
| SSP | S7.5 | dizziness, vertigo |
| SSP | S7.6 | headache |
| SSP | S7.7 | cognitive impairment, including loss of concentration, memory disturbance, and trouble in understanding |
| SSP | S7.8 | paresis, paralysis |
| SSP | S7.9 | disturbances of sensation (hyper- or hypo-esthesias, paresthesias, pain) |
| SSP | S7.10 | twitches, convulsion, fasciculations, seizure and epileptic status |
| **S8 Injuries and trauma** | | |
| SSP | S8.1 | abdominal injuries |
| SSP | S8.2 | burn, cold injury |
| SSP | S8.3 | contusion, soft tissue bruising |
| SSP | S8.4 | dislocation of joint |
| SSP | S8.5 | drowning or near drowning |
| SSP | S8.6 | foreign body |
| SSP | S8.7 | head and brain injuries and trauma |
| SSP | S8.8 | injuries of the extremities |
| SSP | S8.9 | laceration, closed or open wound, blood loss |
| SSP | S8.10 | spine injuries |
| SSP | S8.11 | thoracic injuries |
| SSP | S8.12 | vascular injuries |
| **S9 Emotional and behavioral symptoms** | | |
| SSP | S9.1 | anxiety and panic |

| | | |
|---|---|---|
| SSP | S9.2 | attention deficit |
| SSP | S9.3 | change in behavior |
| SSP | S9.4 | change in eating behavior |
| SSP | S9.5 | change in mood |
| SSP | S9.6 | hyperactivity |
| SSP | S9.7 | irrational fear, fear of illness |
| SSP | S9.8 | irritability, aggressive and violent behavior |
| SSP | S9.9 | changes in mental status such as confusion, delirium, (auto-)aggressive behavior |
| SSP | S9.10 | obsessive and/or compulsive behavior |
| SSP | S9.11 | reactions to major stressful events |
| SSP | S9.12 | self-harm, including suicide |
| SSP | S9.13 | non-medical substance use (“misuse”), addiction e.g. tobacco, alcohol, illegal substances (“controlled medicines”), gambling and gaming |

### 3.3 Findings (F)

| **F1 Findings upon physical examination** | | |
|---|---|---|
| SSP | F1.1 | abnormal blood pressure |
| SSP | F1.2 | Physiological, post-surgical or after mutilation, hormonal, and pathological variations in external genitalia (female, male, including intersex and transgender individuals) |
| SSP | F1.3 | abnormal findings upon auscultation |
| SSP | F1.4 | abnormal findings upon inspection |
| SSP | F1.5 | abnormal findings upon palpation |
| SSP | F1.6 | abnormal findings upon percussion |
| SSP | F1.7 | bradycardia, tachycardia, irregular pulse |
| SSP | F1.8 | cachexia and malnutrition |
| SSP | F1.9 | cognitive impairment |
| SSP | F1.10 | cyanosis |
| SSP | F1.11 | disorganized speech |
| SSP | F1.12 | exophthalmos (proptosis), myosis or mydriasis |
| SSP | F1.13 | halitosis (fetor oris) |
| SSP | F1.14 | gangrene |
| SSP | F1.15 | impairment or loss of consciousness, coma |
| SSP | F1.16 | oedema |
| SSP | F1.17 | pallor |
| SSP | F1.18 | pulseless patient, cardiorespiratory disturbances and arrest |
| SSP | F1.19 | transient loss of consciousness, syncope |

| F2 Findings upon additional examination | | |
|---|---|---|
| SSP | F2.1 | abnormal blood gas values |
| SSP | F2.2 | abnormal cardiac enzymes |
| SSP | F2.3 | abnormal coagulation profile |
| SSP | F2.4 | abnormal X-rays of abdomen, chest and skeleton |
| SSP | F2.5 | abnormal leukocyte count |
| SSP | F2.6 | abnormal ECG |
| SSP | F2.7 | abnormal electrolytes |
| SSP | F2.8 | abnormal fecal analyses, occult blood, parasites |
| SSP | F2.9 | abnormal glycaemia and markers of glycaemia homeostasis |
| SSP | F2.10 | abnormal histology, cytology and molecular genetic test |
| SSP | F2.11 | abnormal liver enzymes |
| SSP | F2.12 | abnormal markers of kidney function |
| SSP | F2.13 | abnormal serum lipids |
| SSP | F2.14 | abnormal thyroid hormones |
| SSP | F2.15 | abnormal urine sediment |
| SSP | F2.16 | anemia |
| SSP | F2.17 | blood group incompatibility |
| SSP | F2.18 | effusion detected by ultrasound (abdomen, pleura) |
| SSP | F2.19 | elevated biomarkers of inflammation |
| SSP | F2.20 | low bone density |
| SSP | F2.21 | nutritional deficiencies |
| SSP | F2.22 | polycythemia |
| SSP | F2.23 | proteinemia, albuminemia |
| SSP | F2.24 | proteinuria |
| SSP | F2.25 | thrombopenia, thrombocytosis |

### 3.4 Other situations (O)

| O1 Situations related to pregnancy and motherhood | | |
|---|---|---|
| SSP | O1.1 | abnormal birth weight and prematurity |
| SSP | O1.2 | basic care in normal delivery and childbed |
| SSP | O1.3 | basic pre- and post-conception screening for genetic disease and malformation |
| SSP | O1.4 | maternal problems during pregnancy, fever, oedema, hypertension, premature labour |
| SSP | O1.5 | problems related to delivery |

| | | |
|---|---|---|
| SSP | O1.6 | problems related to lactation |
| SSP | O1.7 | process and basic care of pregnancy |
| SSP | O1.8 | request for abortion |
| SSP | O1.9 | suspicion of pregnancy, unplanned pregnancy |
| **O2 Situations related to childhood** | | |
| SSP | O2.1 | abnormal growth and puberty (slowing or acceleration), failure to thrive |
| SSP | O2.2 | behavioral issues in childhood and adolescence |
| SSP | O2.3 | child abuse and neglect |
| SSP | O2.4 | child immunization |
| SSP | O2.5 | developmental delay |
| SSP | O2.6 | feeding and eating issues during infancy, childhood and adolescence |
| SSP | O2.7 | fetal problems during pregnancy |
| SSP | O2.8 | infant death |
| SSP | O2.9 | irritable, crying infant |
| SSP | O2.10 | learning and school problems in childhood and adolescence |
| SSP | O2.11 | low muscle tone and hypotonia |
| SSP | O2.12 | well-baby, well-child visit, and well-adolescent visit |
| **O3 Situations related to old age** | | |
| SSP | O3.1 | elder abuse and neglect |
| SSP | O3.2 | functional impairment (cognition, sensory and motor) |
| SSP | O3.3 | malnutrition and sarcopenia |
| SSP | O3.4 | polymorbid, polymedicated patient |
| SSP | O3.5 | pressure ulcers |
| SSP | O3.6 | progressively dependent patient |
| SSP | O3.7 | urinary and fecal incontinence |
| **O4 Issues linked with prevention and health promotion** | | |
| SSP | O4.1 | consultation before engaging in sports activities or after a sport injury |
| SSP | O4.2 | immunization plan |
| SSP | O4.3 | promotion of healthy life style |
| SSP | O4.4 | request for check-up, health examination, radiologic and laboratory procedures |
| SSP | O4.5 | promotion of sexual health and fertility |
| SSP | O4.6 | shared assessment of risks and benefits of screening and treating asymptomatic conditions |
| SSP | O4.7 | shared assessment of risks and protective factors for frequent life-compromising diseases, such as cardiovascular, metabolic, oncological, and neurological diseases |

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| **O5 Palliative care** | | |
| SSP | O5.1 | caregivers' fatigue, loss of energy |
| SSP | O5.2 | change in treatment goals and end-of-life decisions |
| SSP | O5.3 | holistic care of the dying patient |
| SSP | O5.4 | management of refractory symptoms (pain, nausea) |
| SSP | O5.5 | need for psychosocial or other kind of support (e.g. spiritual) |
| **O6 Psychosocial issues** | | |
| SSP | O6.1 | absenteeism (school, work) |
| SSP | O6.2 | concern about appearance, body image |
| SSP | O6.3 | domestic violence, sexual abuse, rape |
| SSP | O6.4 | harassing, bullying, mobbing |
| SSP | O6.5 | issues regarding diversity of affective and sexual orientation and gender identity |
| SSP | O6.6 | issues related to family life such as divorce, single parent and reconstructed family |
| SSP | O6.7 | loss, death, grieving process, illness of someone close |
| SSP | O6.8 | mental or spiritual suffering |
| SSP | O6.9 | problems related to work conditions, burnout, unemployment, financial problems |
| **O7 Various health care issues** | | |
| SSP | O7.1 | consultation before or after trip to foreign (tropical) country |
| SSP | O7.2 | determination of work or school incapacity |
| SSP | O7.3 | dietary counselling including a healthy and sustainable nutrition |
| SSP | O7.4 | environmental and psychosocial aspects of chronic condition |
| SSP | O7.5 | errors or misconduct of a co-worker or other healthcare professional |
| SSP | O7.6 | immunocompromised patient |
| SSP | O7.7 | issues linked with food tolerance |
| SSP | O7.8 | medically unexplained symptoms |
| SSP | O7.9 | nosocomial infection |
| SSP | O7.10 | request for informed consent for a procedure |
| SSP | O7.11 | patient refusing treatment |
| SSP | O7.12 | patient with sexually transmitted infection |
| SSP | O7.13 | patient with other cultural background, migration |
| SSP | O7.14 | physical and psychosocial inpatient and outpatient rehabilitation |
| SSP | O7.15 | poor adherence to treatment |
| SSP | O7.16 | pre-intervention and pre-operative assessment |
| SSP | O7.17 | request for certificate, attestation or expertise by patients and insurers |

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| SSP | O7.18 | request for unnecessary investigations and treatment |
| SSP | O7.19 | request for information about gene therapy |
| SSP | O7.20 | request for information related to organ donation, transplantation |
| SSP | O7.21 | benefits and risks of complementary and integrative medicine |
| SSP | O7.22 | suspicion of drug intolerance or interaction (including herbal medicine and dietary supplements) |
| SSP | O7.23 | suspicion of rare disease |
| SSP | O7.24 | vulnerable patient |
| SSP | O7.25 | request for genetic counselling |
| SSP | O7.26 | intoxication, poisoning |