

2013
VERSION 1.0

This document applies to those who begin training on or after July 1, 2013.

DEFINITION

Occupational Medicine is that branch of medicine that emphasizes prevention, and deals clinically and administratively with the health needs of both individuals and groups with respect to their working environments and includes the recognition, evaluation, control, management and rehabilitation of occupationally related diseases and injuries, and other conditions affecting ability to work.

GOALS

Occupational Medicine aims to:

- Promote and maintain the highest degree of physical, mental and social well being of workers in all occupations;
- Prevent health problems caused by working conditions;
- Place and maintain workers in occupational environments compatible with their physical and psychological capabilities.

Upon completion of training, a resident is expected to be a competent subspecialist in Occupational Medicine capable of assuming a consultant's role in the subspecialty. The resident must acquire a working knowledge of the theoretical basis of the subspecialty, including its foundations in the basic medical sciences and research.

Only candidates certified by the Royal College of Physicians and Surgeons of Canada in Internal Medicine or Public Health & Preventive Medicine may be eligible for certification in Occupational Medicine.

Residents must demonstrate the requisite knowledge, skills, and attitudes for effective patient-centred care and service to a diverse population. In all aspects of specialist practice, the graduate must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

OCCUPATIONAL MEDICINE COMPETENCIES

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:

Medical Expert

Definition:

As *Medical Experts*, Occupational Medicine subspecialists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centred care. *Medical Expert* is the central physician Role in the CanMEDS framework.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient/worker-centred medical care

- 1.1. Perform a consultation effectively, including the presentation of well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care professional
- 1.2. Demonstrate use of all CanMEDS competencies relevant to Occupational Medicine practice
- 1.3. Identify and appropriately respond to relevant ethical issues arising in patient/worker care
- 1.4. Demonstrate the ability to prioritize professional duties effectively when faced with multiple patients/workers and problems
- 1.5. Demonstrate compassionate and patient-centred care
- 1.6. Recognize and respond to the ethical dimensions in medical decision-making
- 1.7. Demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony or advising governments, as needed
 - 1.7.1. Provide a competent medicolegal examination and report, and clinical and expert testimony relevant to an Occupational Medicine problem

2. Establish and maintain clinical knowledge, skills and attitudes appropriate to Occupational Medicine practice

- 2.1. Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to Occupational Medicine
 - 2.1.1. Demonstrate skills in occupational hygiene and safety including but not limited to the identification and evaluation of health hazards in the workplace, and the development, delivery and evaluation of relevant programs for workers
 - 2.1.2. Analyze critically a body of literature and form a conclusion regarding its relevance to a specific hypothesis
- 2.2. Describe the CanMEDS framework of competencies relevant to Occupational Medicine

- 2.3. Apply lifelong learning skills of the Scholar Role to implement a personal program to keep up-to-date, and enhance areas of professional competence
- 2.4. Contribute to the enhancement of quality care and patient/worker safety in Occupational Medicine practice, integrating the available best evidence and best practices
 - 2.4.1. Undertake a walk-through of a workplace to identify key health hazards, safety risks, and job demands
 - 2.4.2. Review the chemical inventory of a workplace and characterize the key health effects, protective measures, and susceptible groups
 - 2.4.3. Identify statutes and regulations as they apply to a given industry or occupational hazard, and the actions that may be required in order to protect the health and safety of workers

3. Perform a complete and appropriate assessment of a patient/worker

- 3.1. Identify and explore issues to be addressed in a patient/worker encounter effectively, including the patient's context and preferences
 - 3.1.1. Describe the consequences of a worker's illness or injury in terms of impairment and disability, and recommend an appropriate plan for return to employment
- 3.2. Elicit a history that is relevant, concise and accurate to context and preferences for the purposes of prevention and health promotion, diagnosis and/or management
 - 3.2.1. Effectively assess individual and group perception of health outcomes and exposures to health hazards
- 3.3. Perform a focused physical examination that is relevant and accurate for the purposes of prevention and health promotion, diagnosis and/or management
 - 3.3.1. Perform a clinical assessment of a patient/worker with an illness or injury to determine his or her work limitations or restrictions
 - 3.3.2. Perform a preplacement or periodic clinical assessment to determine an individual's fitness to work
- 3.4. Select medically appropriate investigative methods in a resource-effective and ethical manner
 - 3.4.1. Undertake a clinical assessment following a patient's exposure to a health hazard to determine the extent of exposure, individual susceptibility, effect, and future health risk
 - 3.4.2. Identify other medical, psychological, and social factors influencing a worker's recovery from an illness or injury, and safe return to work

- 3.5. Demonstrate effective clinical problem solving and judgment in addressing patient/worker problems, including interpreting available data and integrating information to generate differential diagnoses and management plans
 - 3.5.1. Provide an opinion on the work-relatedness of a patient's illness or injury and justification for that opinion
 - 3.5.2. Identify when rehabilitative services (physiotherapy, occupational therapy, clinical psychology, functional capacity assessments, return to work programs) are indicated in the rehabilitation of an ill or injured worker
 - 3.5.3. Apply epidemiological and statistical principles and techniques to analyze illness or injury data in worker and community populations
 - 3.5.4. Identify when further environmental assessment, job demands information, clinical investigations, or clinical consultations are indicated for the rehabilitation or compensation of a worker

4. Use preventive and therapeutic interventions effectively

- 4.1. Implement a management plan in collaboration with a worker
 - 4.1.1. Design, implement and evaluate programs for prevention, surveillance and return to work for groups of workers
- 4.2. Demonstrate appropriate and timely application of preventive and therapeutic interventions relevant to Occupational Medicine practice
 - 4.2.1. Undertake an investigation into common exposure and risk factors for a group of workers presenting with a cluster of injuries or illness
 - 4.2.2. Identify and manage issues specific to subsets of the workforce, including young workers, women, migrant workers, newly immigrated workers, those with disabilities and chronic diseases (e.g. HIV, Hepatitis B)
 - 4.2.3. Recognize and investigate potential sentinel health events of occupation – (SHE(O))
- 4.3. Ensure appropriate informed consent is obtained for therapies
- 4.4. Ensure patients/workers receive appropriate support during the course of a chronic occupational disease

5. Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic

- 5.1. Demonstrate effective, appropriate, and timely performance of diagnostic procedures relevant to Occupational Medicine practice
- 5.2. Demonstrate effective, appropriate, and timely performance of therapeutic procedures relevant to Occupational Medicine practice
- 5.3. Ensure appropriate informed consent is obtained for procedures

- 5.4. Document and disseminate information related to procedures performed and their outcomes
- 5.5. Ensure adequate follow-up is arranged for procedures performed

6. Seek appropriate consultation from other health professionals, recognizing the limits of their own expertise

- 6.1. Demonstrate insight into their own limits of expertise
- 6.2. Demonstrate effective, appropriate, and timely consultation of another health professional as needed for optimal patient care
- 6.3. Arrange appropriate follow-up care services for a patient and their family

Communicator

Definition:

As *Communicators*, Occupational Medicine subspecialists effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Develop rapport, trust, and ethical therapeutic relationships with workers, , families and groups of workers

- 1.1. Recognize that being a good communicator is a core clinical skill for physicians, and that effective physician-patient communication can foster patient satisfaction, physician satisfaction, worker and employee satisfaction, adherence and improved clinical outcomes
- 1.2. Establish positive therapeutic relationships with patients and their families that are characterized by understanding, trust, respect, honesty, empathy and confidentiality
- 1.3. Respect patient confidentiality, privacy and autonomy
- 1.4. Listen effectively
- 1.5. Be aware of and responsive to nonverbal cues
- 1.6. Facilitate a structured clinical encounter effectively

2. Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, communities, workplaces and other professionals

- 2.1. Gather information about a disease and about a patient's/worker's beliefs, concerns, expectations and illness experience, while considering the influence of

factors such as employment, age, gender, ethnic, cultural and socio-economic backgrounds, and spiritual values on that illness

- 2.2. Seek out and synthesize relevant information from other sources, such as a patient's family, caregivers and other professionals

3. Convey relevant information and explanations accurately to patients and families, workers, colleagues and other professionals

- 3.1. Deliver information to a patient/worker and family, colleagues and other professionals in a humane manner and in such a way that it is understandable, encourages discussion and participation in decision-making

4. Develop a common understanding on issues, problems and plans with workers, families, the health care team, workplace parties, government agencies and other professionals to develop a shared plan of care

- 4.1. Identify and explore problems to be addressed from a patient/worker encounter effectively, including the worker's context, responses, concerns, and preferences
- 4.2. Respect diversity and difference, including but not limited to the impact of gender, religion and cultural beliefs on decision-making
- 4.3. Encourage discussion, questions, and interaction in the encounter
- 4.4. Engage patients, families, and relevant health professionals in shared decision-making to develop a plan of care
- 4.5. Demonstrate skills in conflict resolution and address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding

5. Convey effective oral and written information about a medical encounter

- 5.1. Maintain clear, concise, accurate and appropriate records of clinical encounters and plans
 - 5.1.1. Report medical and occupational information required by workers' compensation, insurance carriers, or other third parties, in an accurate, effective, and ethical manner
- 5.2. Present verbal reports of clinical encounters and plans
- 5.3. Present medical information effectively to the public or media about a medical issue and demonstrate effective risk communication to workers, other groups and the general population

Collaborator

Definition:

As *Collaborators*, Occupational Medicine subspecialists effectively work within a health care team to achieve optimal patient care.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

- 1. Participate effectively and appropriately in an interprofessional health care team, consult effectively with other physicians and health care professionals and work effectively with the workplace parties and government agencies**
 - 1.1. Describe the Occupational Medicine specialist's roles and responsibilities to other professionals
 - 1.2. Describe the roles and responsibilities of other professionals within the Occupational Medicine health care team
 - 1.3. Recognize and respect the diversity of roles, responsibilities and competences of other professionals in relation to their own
 - 1.4. Work with others to assess, plan, provide and integrate care for individual patients (or groups of patients) and to develop a management plan for a worker, including investigation, treatment and rehabilitation
 - 1.5. Work with others to assess, plan, provide and review other tasks, such as achieving a goal related to worker health, research problems, educational work, program review or administrative responsibilities
 - 1.6. Participate in interprofessional team meetings
 - 1.6.1. Work effectively as a team member with management, other health professionals, and labour representatives to maximize workplace health, safety, and productivity.
 - 1.7. Enter into interdependent relationships with other professions for the provision of quality care
 - 1.7.1. Identify when specialized skills or techniques of other professionals including but not limited to occupational hygienists and ergonomists, are required to assess health hazards present in the workplace
 - 1.8. Describe the principles of team dynamics
 - 1.9. Respect team ethics, including confidentiality, resource allocation and professionalism
 - 1.10. Demonstrate leadership in a health care team, as appropriate

2. Work with other health professionals effectively to prevent, negotiate, and resolve interprofessional conflict in an occupational context

- 2.1. Demonstrate a respectful attitude towards other colleagues and members of an interprofessional team
- 2.2. Work with other professionals to prevent conflicts
- 2.3. Employ collaborative negotiation to resolve conflicts
- 2.4. Respect differences and address misunderstandings and limitations in other professionals
- 2.5. Recognize one's own differences, misunderstanding and limitations that may contribute to interprofessional tension
- 2.6. Reflect on interprofessional team function

Manager

Definition:

As *Managers*, Occupational Medicine subspecialists are integral participants in health care organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the health care system.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Participate in activities that contribute to the effectiveness of their health care organizations and systems

- 1.1. Work collaboratively with others in their occupational health care organizations
- 1.2. Participate in systemic quality process evaluation and improvement, such as patient and worker safety initiatives
 - 1.2.1. Develop, implement and evaluate programs to:
 - 1.2.1.1. Prevent and manage impairment and disability
 - 1.2.1.2. Monitor populations for indicators of occupational environmental health effects
 - 1.2.1.3. Promote employee health
 - 1.2.1.4. Deliver health services to employees
 - 1.2.1.5. Assess and manage health risks in a worker, workplace, or community
 - 1.2.2. Develop, implement, and evaluate clinical, program delivery, and case management guidelines in Occupational Medicine
 - 1.2.3. Assess and manage information needs in occupational health programs, including data related to health hazards, individual medical files, rehabilitation, compensation, and program evaluation

- 1.3. Describe the structure and function of the health care system as it relates to Occupational Medicine, including the roles of physicians, how to function effectively within it and be capable of playing an active role in its change
- 1.4. Describe principles of health care financing, including physician remuneration, budgeting and organizational funding
 - 1.4.1. Participate in planning, budgeting, evaluation and outcome assessment of a patient(s)/worker(s) health management program in an occupational context

2. Manage their practice and career effectively

- 2.1. Set priorities and manage time and resources to balance patient care, practice requirements, outside activities and personal life
- 2.2. Manage a practice including finances and human resources
 - 2.2.1. Describe the principles of effective selection, retention, promotion, motivation, appraisal, and performance management of employees
- 2.3. Implement processes to ensure personal practice improvement
- 2.4. Employ information technology appropriately for patient care, life-long learning and other activities

3. Allocate finite health care resources appropriately

- 3.1. Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency and access with optimal patient care
- 3.2. Apply evidence and management processes for cost-appropriate care

4. Serve in administration and leadership roles to provide organizational leadership for occupational health and safety

- 4.1. Chair or participate effectively in committees and meetings
- 4.2. Lead or implement change in health care
- 4.3. Plan relevant elements of health care delivery (e.g., work schedules)

Health Advocate

Definition:

As *Health Advocates*, Occupational Medicine subspecialists responsibly use their expertise and influence to advance the health and well-being of individual workers and patients, workplaces and communities, and other populations.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Respond to individual patient health needs and issues as part of patient care

- 1.1. Identify the health needs of an individual patient or worker
- 1.2. Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care
- 1.3. Appreciate the possibility of competing interests between individual advocacy issues and the community at large

2. Respond to the health needs of the communities that they serve

- 2.1. Describe the practice communities that they serve
- 2.2. Identify opportunities for advocacy, health promotion and disease prevention in the communities that they serve, and respond appropriately
- 2.3. Appreciate the possibility of competing interests between the communities served and other populations

3. Identify the determinants of health for the populations that they serve

- 3.1. Identify the determinants of health of the populations, by identifying workplace hazards as well as the most important social determinants of health including but not limited to poverty, unemployment, and social support systems, including barriers to access to care and resources
- 3.2. Identify vulnerable or marginalized populations within those served and respond appropriately

4. Promote the health of individual patients, communities, and populations

- 4.1. Describe an approach to implementing a change in a determinant of health of the populations they serve
- 4.2. Describe how public policy impacts on the health of the populations served by:
 - 4.2.1. Describing how public policy is developed
 - 4.2.2. Identifying current policies that affect health
 - 4.2.3. Citing examples of how policy was changed to address occupational health needs (including occupational health and safety and workers' compensation policy)
- 4.3. Identify points of influence in the health care system and its structure
 - 4.3.1. Describe how health and safety governance influences worker health, research and educational activities at a local, provincial, regional, and national level

- 4.4. Describe the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism
- 4.5. Appreciate the possibility of conflict inherent in their role as a health advocate for a patient or community with that of manager or gatekeeper
- 4.6. Describe the role of the medical profession in advocating collectively for health and patient safety

Scholar

Definition:

As *Scholars*, Occupational Medicine subspecialists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Maintain and enhance professional activities through ongoing learning

- 1.1. Describe the principles of maintenance of competence
- 1.2. Describe the principles and strategies for implementing a personal knowledge management system
- 1.3. Recognize and reflect on learning issues in practice
- 1.4. Conduct personal practice audits
- 1.5. Pose an appropriate learning question
- 1.6. Access and interpret the relevant evidence
- 1.7. Integrate new learning into practice
- 1.8. Evaluate the impact of any change in practice
- 1.9. Document the learning process

2. Critically evaluate medical information and its sources, and apply this appropriately to practice decisions

- 2.1. Describe the principles of critical appraisal
- 2.2. Critically appraise retrieved evidence in order to address a clinical question
- 2.3. Integrate critical appraisal conclusions into clinical care

3. Facilitate the learning of patients/workers, families, , workplaces, health and safety organizations, students, residents, other health professionals, the public and others

- 3.1. Describe principles of learning relevant to medical education

- 3.2. Identify collaboratively the learning needs and desired learning outcomes of others
- 3.3. Select effective teaching strategies and content to facilitate others' learning
- 3.4. Demonstrate an effective lecture or presentation
- 3.5. Assess and reflect on a teaching encounter
- 3.6. Provide effective feedback
- 3.7. Describe the principles of ethics with respect to teaching

4. Contribute to the development, dissemination, and translation of new knowledge and practices

- 4.1. Describe the principles of research and scholarly inquiry
- 4.2. Describe the principles of research ethics
- 4.3. Pose a scholarly question
- 4.4. Conduct a systematic search for evidence
- 4.5. Select and apply appropriate methods to address the question
- 4.6. Disseminate the findings of a study

Professional

Definition:

As *Professionals*, Occupational Medicine subspecialists are committed to the health and well-being of workers and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

Key and Enabling Competencies: Occupational Medicine Subspecialists are able to...

1. Demonstrate a commitment to their patients, profession, and society through ethical practice

- 1.1. Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
- 1.2. Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 1.3. Recognize and appropriately respond to ethical issues encountered in practice
- 1.4. Manage conflicts of interest

OBJECTIVES OF TRAINING IN OCCUPATIONAL MEDICINE (2013)

- 1.5. Recognize the principles and limits of patient confidentiality as defined by professional practice standards and the law
 - 1.5.1. Describe and protect an employee's legal right to confidentiality of personal medical information

- 1.6. Maintain appropriate boundaries with patients

2. Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation

- 2.1. Demonstrate knowledge and an understanding of the professional, legal and ethical codes of practice
- 2.2. Fulfill the regulatory and legal obligations required of current practice
- 2.3. Demonstrate accountability to professional regulatory bodies
- 2.4. Recognize and respond to others' unprofessional behaviours in practice
- 2.5. Participate in peer review

3. Demonstrate a commitment to physician health and sustainable practice

- 3.1. Balance personal and professional priorities to ensure personal health and a sustainable practice
- 3.2. Strive to heighten personal and professional awareness and insight
- 3.3. Recognize other professionals in need and respond appropriately

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