1.2: CanMEDS Roles

CanMEDS Roles Pertinent to Undergraduate Medical Education

In the 1990s the Royal College of Physicians and Surgeons of Canada began to develop the “Canadian Medical Education Directives for Specialists” (CanMEDS) to identify the roles and competencies of physicians in order to improve patient care. The latest iteration of CanMEDS was released in 2015. This framework identifies the following seven central roles, which can be applied to undergraduate radiology education:

1. Medical Expert

The Practitioner will:

• After patient assessment, formulate a care plan that may include requesting imaging examinations
• Know the imaging resources available in their community and how to access them
• Have general knowledge of the indications for imaging examinations based upon guidelines, and other sources of evidence
• Be familiar with guidelines for imaging created and distributed by organizations such as, the Canadian Association of Radiologist (CAR) and the American College of Radiology (ACR)
• Have a general understanding of the strengths and weaknesses of different imaging modalities
• Have knowledge of the relative radiation exposure of different imaging modalities
• Consult with a radiologist if they are uncertain about the best examination to request after clinical assessment
• Apply knowledge of anatomy to the review of imaging examination
2. Communicator

The Practitioner will:

- Explain to the patient the rationale behind ordering imaging examinations
- Explain to the patient, in general terms, what to expect when the imaging examination is performed
- Ensure that a completed request for a medical imaging examination will be sent to the most appropriate imaging centre
- Ensure that the request includes relevant clinical information, and specifies the most likely diagnosis, to facilitate optimal image acquisition and interpretation
- Convey the degree of urgency for the imaging examination when submitting the imaging request
- Provide information about imaging examinations already completed when referring a patient for care elsewhere
- Communicate with an imaging specialist, who can assist in determining the best examination, or arranging alternative examinations, if necessary
- Communicate with an imaging specialist if the interpretation of an imaging examination is urgent or if the interpretation provided is not concordant with the clinical assessment
- Communicate the results of the imaging examinations to patients and their families (if consent for this has been obtained)

3. Collaborator

The Practitioner will:

- Establish, and maintain, positive, collaborative working relationships with members of the imaging team to facilitate patient examinations and results
- Utilize the human resources and infrastructure in their work environment to facilitate and expedite imaging investigations and the conveyance of results to the patient

4. Leader

The Practitioner will:

- Adopt the strategies of quality assurance and patient safety to enhance patient care
- Ensure that optimal management strategies are in place to receive the results of imaging examinations personally, or via an office setting, particularly when the practitioner works from multiple clinical settings
- Adopt information technologies that enhance access to images and reports that can be shared with patient, and their families

5. Health Advocate

The Practitioner will:
• Advocate on behalf of their patient with honesty and integrity
• Determine if a patient’s clinical situation deteriorates, warranting more urgent imaging, and notify the appropriate imaging facility
• Promote access to the most appropriate imaging technology available within their scope of practice
• Take into consideration the radiation dose of imaging technologies available with a general understanding of radiation protection/radiobiology

6. Scholar
The Practitioner will:

• Undertake to have knowledge of epidemiology, biostatistics, and decision analysis, that are integral in applying evidence based decisions in healthcare
• Be aware of current guidelines for imaging examinations and appropriateness criteria will be applied when available
• Engage in maintenance of competence activities that enhance knowledge about utilization of imaging
• Critically evaluate current literature to shape decision making
• Facilitate the learning of patients, families, students, residents, other health professionals, and staff about pertinent imaging related topics that may effect health, safety and clinical care

7. Professional
The Practitioner will:

• Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
• Manage conflicts of interest
• Appreciate the professional, legal and ethical codes of practice pertinent to imaging