

Competencies in Complementary and Alternative Medicine for Undergraduate Medical Education

Competencies in undergraduate medical education (UME) are the observable or measurable knowledge, skills, and attitudes that a medical student should successfully demonstrate by the time he/she graduates. What do physicians need to be able to do for effective practice? Competencies are wedded to the curriculum and are a priority in this era of accountability. As CAM curricula becomes increasingly integrated into UME programs, it is expected to show that it contributes to the competencies that students must meet at various stages of their education. It has become insufficient to say that knowledge of CAM will benefit the quality of patient care, or that it fosters thinking "outside the box."¹

At various workshops and meetings over the past four years, we have asked many educators to identify the areas and abilities that graduating medical students need to be competent in with regard to the field of CAM. We have put forward a comprehensive list that could ideally be met in Canadian UME programs; in reality, schools (or instructors) will choose the competencies that best accommodate their school's curriculum and pedagogy at the current time.

The following list of competencies has undergone many revisions, but has remained relatively true to the original list of CAM educational objectives drafted by 14 of 16 Associate Deans UME in Canada in 2002.² We have maintained the headings "knowledge", "skills, and "attitudes" to organize the competencies.³ At the same time, we wish to stress that although we have assigned each competency to one of these three key areas, several could be classified into more than one.

There are many different formats to express competencies. Though not noted in this document, we also recognize the CanMEDS Physician Competency Framework developed by the College of Physicians and Surgeons of Canada in our development of CAM topic summaries. In each summary, called [CAMpods](#), that we have created to support curriculum development, we have identified the physician roles that the CAM topic will help enhance.⁴

Finally, we must stress that we recognize that several of the competencies listed below are **NOT** unique to education about complementary and alternative medicine (e.g., critical appraisal of evidence). They are relevant to all of medicine. However, in reiterating the competency in the context of CAM, we wish to suggest that CAM is an important topic that can enhance and reinforce existing medical school curricula.

1 A "thinking outside the box" role for CAM is noted by D. Owen and G. T. Lewith, "Teaching Integrated Care: CAM Familiarization Courses," *Medical Journal Australia*, 2004; 181, 276-278.

2 To access the list of educational objectives identified by the Association Deans, please go to: <http://www.caminume.ca/documents/associatedeansenglish.pdf>.

3 The knowledge, skills, and attitudes framework for CAM is also used by the Consortium of Academic Health Centers for Integrative Medicine (CACHIM) in their published competencies for integrative medicine, with the expansion of the framework to include "values". See Kligler B, Maizes V, Schacter S et al. Core competencies in integrative medicine for medical school curricula: a proposal. *Academic Medicine* 2004 ;79 :521-29.

4 The several physician roles (or meta-competencies) identified in the CanMEDS Framework include: medical expert, communicator, manager, health advocate, scholar, and professional. More information about the CanMEDS Framework can be found at <http://rcpsc.medical.org/index.php?pass=1>.

Core CAM in UME Competencies

Knowledge-based Competencies

- K1** Describe CAM and how CAM can be classified. List and describe commonly used CAM therapies in Canada.
- K2** Describe and discuss the potential challenges and benefits of Integrative Medicine (IM).
- K3** List CAM therapies that are commonly used by patients for specific diseases or health concerns (list to be determined locally by the instructor). Identify how CAM use is related to socio-demographic characteristics, values and beliefs.
- K4** Describe the potential impact of selected CAM therapies (list to be determined locally by the instructor) on stress reduction, illness prevention, health promotion.
- K5** Identify potential safety issues associated with selected CAM therapies (list to be determined locally by the instructor). This may include: interactions with other CAM therapies, interactions with conventional medicine, side effects, and/or contra-indications.
- K6** Identify reliable sources to establish the current state of evidence for the following CAM therapies (list to be determined locally by the instructor).
- K7** Know where to find information on:
- Natural Health Product Regulations (federally regulated),
 - Regulation and credentialing of common CAM practices in the student's province, medical licensing,
 - Medical licensing and regulation of physicians practicing CAM in the student's province,
 - Medical licensing and regulation of physicians referring patients to CAM practitioners in the student's province.
- K8** Compare the conventional/biomedical paradigm with various complementary paradigms with respect to concepts such as reductionism, holism, experimental efficacy, clinical effectiveness, standards of evidence, clinical trials, wellness, healing, and placebo response.
- K9** Identify barriers to professional and ethical issues that arise in the establishment of collaborative relationships between physicians and CAM practitioners and discuss potential strategies for addressing these issues.

Skills-based Competencies

- S1** Critically appraise the evidence pertaining to selected CAM therapies for the prevention and treatment of specific conditions (list to be determined locally by the instructor)
- S2** Discuss the subject of CAM with patients in a respectful, non-judgmental, and professional manner, including:
- Taking a patient history of CAM use;
 - Responding to patients in a manner which reflects some minimal knowledge of CAM, as well as cultural sensitivity, and appreciation for the values and beliefs of the patient;

- Informing and advising patients regarding CAM; and
- Acknowledging the limitations of one's own knowledge regarding CAM

S3 Communicate respectfully and effectively, with permission of the patient, with CAM practitioners about assessment, treatment, decision-making, referrals, and patient safety.

Attitude-based Competencies

A1 Reflect on your own culturally based values and belief systems, attitudes, and CAM-related knowledge, and describe how these may affect your approach to self-care, health, wellness, healing, and the practice of conventional medicine and CAM.

A2 Demonstrate respect for the beliefs and choices of patients who use CAM.