Australia's Competencies and Other Competency Models

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This paper addresses competency-standards as a basis for:

1. Expressing international chiropractic standards.
2. Practitioner registration and international mobility; and
3. The accreditation of competency-based educational programs.

A common problem!

Equivalent standards for entry into the profession world-wide and of practitioner mobility across international borders is a problem that is not unique to chiropractic.

The Institute for International Medical Education (IIME)

- Considers global essential competences required by ‘global physicians’ an urgent matter.
- Developed the concept of ‘global minimum essential requirements’ (‘GMER’).
- Defined a set of global minimum learning outcomes that medical school students must demonstrate at graduation.

The solution?

Competency-based Chiropractic Education (CBCE) provides probably the most scientific approach to gathering evidence on the competency and capability of registrants as entrants to a profession internationally.

Brief History

The development and assessment of competency-based professional standards in Australia was stimulated by government decisions implemented by the National Office of Overseas Skills Recognition (NOOSR) in the Department of Employment, Education and Training

NOOSR is the body responsible for reviewing credentials of overseas graduates who seek to practice in Australia. It works in close collaboration with the Council on Chiropractic Education Australia (CCEA) and bases its decisions on competency-based professional standards for chiropractors.

It also does the same task for numerous other professions.

Competency

Describes the ability to perform a task in a given context and comprehend the principles and concepts which underlie its application in order to transfer that knowledge and skills to new tasks and situations in both vocational and social settings.

Chiropractic Competency-based Assessment

Describes a method of assessing candidates for registration that is designed and developed to meet the competency standards of the profession.

Australian Competency-Based System - Hierarchical Arrangement

DOMAINS - DIFFERENT *PARTS* OF PRACTICE

UNIT OF COMPETENCY - *BROAD AREA* OF PROFESSIONAL PERFORMANCE

ELEMENTS OF COMPETENCY - WHAT IS *DONE* IN PRACTICE

PERFORMANCE CRITERIA - *ACHIEVEMENT* OF ELEMENT

RANGE STATEMENT - WORK *ENVIRONMENTS*

THE EVIDENCE GUIDE - LINKED TO ALL OF THE ABOVE + *ASSESSMENT GUIDELINES.*

METHODS OF ASSESSMENT

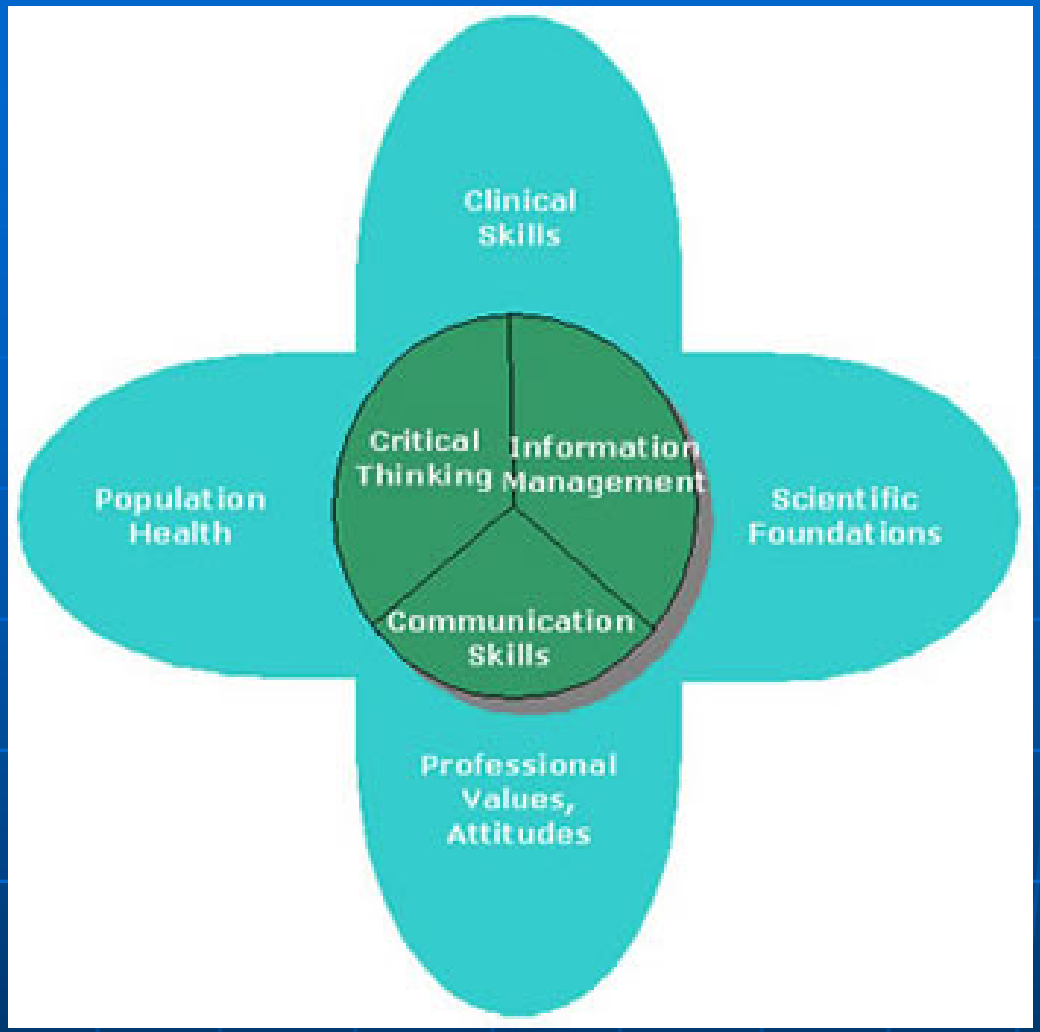
THE AUSTRALIAN DOMAINS OF CHIROPRACTIC PRACTICE

DOMAINS OF PRACTICE	UNITS AND ELEMENTS OF PRACTICE
1.Competence to interact with society	interact with the community interact with the health care system
2.Competence to interact with the profession	interact with the profession
3.Competence to manage a practice situation	interact with staff manage practice finances manage the practice environment
4.Competence to manage patients	assess patients reach diagnostic decisions plan patient care implement patient care

The IIME Core Committee's **seven** broad educational domains

1	Professional Values, Attitudes, Behaviour and Ethics
2	Scientific Foundation of Medicine
3	Clinical Skills
4	Communication Skills
5	Population Health and Health Systems
6	Management of Information
7	Critical Thinking and Research

From: Core Committee, Institute for International Medical Education. Global minimum essential requirements in medical education. *Medical Teacher.* 2002:24(2):130-135



Relationship of the seven broad educational domains of the IIME Core Committee

From: Core Committee, Institute for International Medical Education. Global minimum essential requirements in medical education. *Medical Teacher.* 2002:24(2):130-135

THE TWELVE LEARNING OUTCOMES

ADAPTED TO CHIROPRACTIC from THE DUNDEE UNIVERSITY - CENTRE FOR MEDICAL EDUCATION
MODEL FOR OUTCOME-BASED EDUCATION

GROUP 1 - SEVEN LEARNING OUTCOMES THAT DESCRIBE *WHAT* THE DOCTOR OF CHIROPRACTIC SHOULD BE ABLE TO DO

(1) **Competence in clinical skills:**
(2) **Competence to perform practical procedures:**
(3) **Competence to investigate a patient:**
(4) **Competence to manage a patient:**
(5) **Competence in health promotion and disease prevention:**
(6) **Competence in skills of communication:**
(7) **Competence to retrieve and handle information:**

GROUP 2 – THREE LEARNING OUTCOMES ABOUT *HOW* THE DOCTOR OF CHIROPRACTIC APPROACHES THE SEVEN COMPETENCES
(1) **With an understanding of basic, clinical and social sciences:**
(2) **With appropriate attitudes, ethical understanding and understanding of legal responsibilities:**
(3) **With appropriate decision-making skills and clinical reasoning and judgement:**

GROUP 3 – TWO LEARNING OUTCOMES ABOUT THE *PERSONAL DEVELOPMENT* OF THE DOCTOR OF CHIROPRACTIC AS A PROFESSIONAL
(1) **Appreciation of the role of the doctor within the health-care system**
(2) **Aptitude for personal development**

Recommended assessment methods for the 12 learning outcomes of a competent and reflective physician. SAMPLE OF 4 of 12

Learning outcome		**Assessment methods**
What the doctor is able to do		
1	Clinical Skills	OSCE Observation Logbooks Written examination
2	Practical Procedures	OSCE Portfolios and logbooks Observation Written examination
3	Patient Investigation	Written examination OSCE Observation Portfolio
4	Patient Management	Written examination OSCE Observation Portfolios

Competency-based Assessment – Australian Approach

- Observation in the workplace – i.e. the clinic or hospital
- Written assignments/projects or questioning used to assess knowledge
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice.
- Clinical skills involving direct patient care are to be assessed initially in a simulated clinical setting (laboratory). If successful, a second assessment is to be conducted during clinical application under supervision
- Examples of assessment notes
- Oral questioning and demonstration on technique or assessment strategy
- Assignments and projects
- Other

Advantages of basing objectives on competencies

1. Students will know what they will be expected to be able to do at the end of the course.
2. Lecturers will be working towards the course goals.
3. It is a superior (more reliable) method of ensuring that graduates would possess the necessary attributes to meet societal needs.
4. Establishment of competencies assists curriculum planners in determining content, methods, and assessment.
5. It assists with decisions on deletion of content and lessens the burden of assimilating a great deal of factual content, i.e. it prevents overcrowding of the curriculum (Blunt, 1976).
6. Student and staff knowledge of the objectives allow more valid and reliable evaluation techniques to be developed to assess whether students have acquired the essential competencies.

Based on data from: Beenhakker JC. 1987.

Views on “Competencies”

- Competency Based Medical Education (CBME) has entered the lexicon of the profession and is now debated in the top general medical journals [18; 19]
- ‘‘Competencies’’ have become the unit of medical educational planning in many jurisdictions [18; 20]
- Competency frameworks such as CanMEDS [21; 22] the Outcome Project of the (US) Accreditation Council for Graduate Medical Education [23] and the Scottish Doctor now arguably form the basis of training for the majority of medical learners in the Western world[17]

The International CBME (Competency-based medical education) Collaborators Group (Formed in 2009) concluded that:

- CBME is a resurgent paradigm in professional education.
- CBME is organized around competencies, or predefined abilities, as outcomes of the curriculum. .
- The CBME paradigm employs redefined concepts of competence and its development.
- CBME holds great promise along with many challenges for physician training worldwide.
- CBME has the potential to transform contemporary medical education.

Frank Jason R. *et al* Competency-based medical education: theory to practice *Medical Teacher*. 2010; 32: 638–645

Global competencies

The Institute for International Medical Education (IIME) developed the concept of ‘global minimum essential requirements’ (‘GMER’) and defined a set of global minimum learning outcomes that medical school students must demonstrate at graduation

The Australian Chiropractic Competency Project 1989 - 2010

A significant group of people have been involved in various steps leading to:

- the establishment of competency-based chiropractic standards
- the development of competency-based assessment strategies for chiropractors
- development of detailed methodologies
- accumulation of background information
- implementation of competency-based standards

The resources associated with this long process can be made available to serve an international project.

Competencies and the Australian Education System

More than two decades of research has been done by several governmental agencies who have produced excellent processes and methodologies to convert training, education and assessment in many professional and occupational fields from “traditional approaches” to a competency-based process.

Extensive work has been done on comparison of competency and capability (beyond the scope of this paper).

A project to establish Competency Based Chiropractic Education can draw on extensive documentation covering all aspects including principles, implementation startegies, candidate assessment and institutional accreditation processes.

Strategies to Establish International Standards and CBCE (Competency Based Chiropractic Education)

Recommendations

1. Review the several models available for undertaking the important task of establishing international standards for chiropractic regulation, education and accreditation.
2. Review outlines of domains and lists of competencies used by medical universities will be of great benefit – particularly the work done by Professor R Harden and associates at the University of Dundee – probably the greatest centre for medical education research in the world.

3. Conduct literature searches.
4. Obtain input from unpublished sources and from educational experts.
5. Pool the experience and expertise of personnel related to chiropractic organisations and organise key persons into a “steering group” or “core committee”.
6. Review listings of standards, outcomes and processes of chiropractic and medical education.
7. Establish a data base and reference library incorporated into reference materials for the committee.

[3-7 -Adapted in part from Schwarz & Wojtczak 2002:127].

8. Ensure that this project project is supported by all stakeholders:

- The Federation of Chiropractic Licensing Boards
- National Registration/licensing Boards
- Councils on Chiropractic Education
- Associations of Chiropractic Colleges and individual institutions where indicated
- The US National Board of Chiropractic Examiners
- The International Board of Chiropractic Examiners
- Chiropractic Education Experts

9. Draw on existing expertise and groups and individuals who are motivated to get the task done expeditiously and efficiently.

Benefits of CBCE to International Mobility

The registration or licensing of chiropractors educated in one country, who move to another, will be greatly facilitated if competency is used as a model for the specification of learning outcomes and if the processes used to determine competency are globally acceptable.

CBCE and Institutional Re-accreditation

In the absence of external examinations prior to registration in countries where the Institutional award/qualification is accepted as the sole *competency* criterion for registration, it is critically important that Institutions should provide evidence for re-accreditation that they have in place validated processes and procedures to ensure competency of all graduates.

It is imperative that any proposed project should be supported by all bodies and stakeholders in the interest of patients and future patients of future students and registrants that the Boards have the statutory duty to regulate.

Thank you very much

for your

participation and interest!