Chiropractic Education: Towards Best Practice in Four Areas of the Curriculum

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ABSTRACT: Objective: To report outcomes of the discussion-based components of the inaugural Summit on Chiropractic Education held in Melbourne Australia in July 2009. Design: A narrative reporting statements of relative consensus that form the basis for the future development of statements of best practice. Setting: A two day meeting on the RMIT University campus held under the auspices of the Australasian College of Chiropractors of the Chiropractors Association of Australia (National). Participants: The academic leadership of the eight Asian Pacific chiropractic institutions, leading educators other than chiropractors, industry leaders and practicing members of the discipline of chiropractic. Results: The nature of the methodology allowed the development of themes that will facilitate future discussion in four areas of the chiropractic curriculum: assessing students in the clinical setting; engaging students in learning research and scholarship; the teaching of clinical skills and chiropractic technique; and aligning taught content with industry (professional) practice. Conclusion: While it is not appropriate to take any of the reported statements as being representative of agreed best practice there are valuable comments that not only show commonality amongst all institutions but also represent a solid foundation of educational concepts.

INDEX TERMS: EDUCATIONAL TECHNOLOGY; EDUCATION, CHIROPRACTIC; EDUCATION, CHIROPRACTIC/AUSTRALIA; CLINICAL COMPETENCE; ASSESSMENT, EVIDENCE-BASED CHIROPRACTIC; EDUCATIONAL MEASUREMENT.

INTRODUCTION

In early July 2009 the academic leadership of the eight Asian Pacific educational institutions that deliver chiropractic education (Table 1) met in Melbourne as the inaugural Summit on Chiropractic Education. Delegates of note included representatives of the regulatory bodies in New Zealand and Victoria and of the Council on Chiropractic Education Australasia. Also present were representatives of the private practice of chiropractic and of the associated discipline of Applied Kinesiology.

The two day meeting was held under the auspices of the Australasian College of Chiropractors of the Chiropractors Association of Australia (National) and featured 34 presentations grouped as four themes within a context of the rapidly changing educational environment. The four themes were:

• Assessing students in the clinical setting
• Engaging students in learning research and scholarship
• The teaching of clinical skills and chiropractic technique
• Aligning taught content with industry (professional) practice.

A context was provided in the opening session through various presentations by educators other than chiropractors who were able to bring to the meeting their individual perspective on what constituted good teaching. Each of the four themes of the summit was explored by facilitated group discussion with a view to identifying an informal consensus summary statement for each.

The purpose of this paper is to report outcomes of the discussion-based components of the summit as opposed to reproducing specific papers or abstracts. The latter are contained on the summit website along with recordings of all presentations.

METHODOLOGY

The objective of the summit was to provide an opportunity for academic chiropractors to meet and share their individual...
approaches to contemporary aspects of the chiropractic curriculum with a view to identifying directions that could eventually lead to statements of best practice.

The structure was a thematic blend of free and invited papers. Invited presenters were purposively identified by the Conference Committee as being leaders in their educational field. The summit was promoted through the Chiropractors Association of Australia and persons accepted by the Conference Committee on the basis of their submission of an abstract of a free paper were assigned to the theme most relevant to their work.

Each of the four themed sessions was facilitated by a notable academic who, at the end of the session, led a discussion to identify statements that all attendees at that session felt could form the basis of concepts of best educational practice in chiropractic programs. The purpose of requiring the facilitator to chair their respective session was to ensure their engagement with the content which allowed the identification of informed seed questions and prompts for the ensuing discussion.

The convenor (PE) of the summit acted as recorder at each of the four sessions and constructed a summary of each session that more or less represented an agreement by consensus.

The intent in selecting the facilitators of the discussions was to achieve a balanced distribution among the regions that were represented at the summit. The program was prepared with representation from North America (Dr Glori Hinck, Northwestern Health Sciences University, Asia (Prof Michael Haneline, International Medical University, New Zealand (Dr Valerie Pennacchio, New Zealand College of Chiropractic) and Australia (Dr Sharyn Eaton, Macquarie University).

Regrettably and at short notice Prof Haneline advised he was restricted in international movement by quarantine arrangements implemented in response to the pandemic of H1N1 influenza and the decision was taken to request Dr Brian Kelly (New Zealand College of Chiropractic) to replace him as a session chair.

TOWARDS STATEMENTS OF BEST PRACTICE

Time constraints limited the exploration of each theme. However the nature of the methodology allowed the development of themes that will facilitate future discussion. While it is not appropriate to take any of the following as being representative of agreed best practice there are valuable comments that not only show commonality amongst institutions but also represent a solid foundation of educational concepts.

Educational technology is experiencing exponential growth and is being integrated into chiropractic education. The summit agreed on the value of blended learning with teaching mediated and supported by new technology rather than being dominated by it. Technology should not be used simply for technology’s sake and should only be used if it adds value to the educational experience. It was felt that any statement of best practice would continue to explore this integration of technology to help the chiropractic profession learn from the lessons of other disciplines and to better reflect what is being done in other health care educational settings.

Assessing Students in the Clinical Setting

This theme was perhaps the easiest to address and the summit agreed reflective learning is valuable in the clinical learning environment. It was appreciated that the clinical setting included the class-based environment where skills were initially taught as well as the range of environments that involved patient care.

It was felt that clinical learning benefited from the student understanding why a certain task was undertaken at the time they learned to perform that task. The development of best practice would retain an awareness that clinical skills involve real-world patients. The human interface remains integral which requires the maintenance of real time and place for assessing clinical skills. This suggested the retention of the live interaction between the learner and instructor and could include a move away from strict quantitative standards and more towards qualitative interaction.

Engaging Students in Learning Research and Scholarship

The summit found this theme difficult to explore in the allocated time. It was recognised that institutions have a responsibility to clearly identify and define the product they wished to graduate in terms of the trinity of education, clinical practice and research. It is appreciated that the majority of graduates will be clinical practitioners and an appropriate
institutional objective could be to produce practitioners who were competent consumers and/or supporters of research. In turn this raised the unresolved question of whether institutions should be producing practitioners or researchers.

Best practice with respect to engaging students in learning research and scholarship would seem to include the development of critical thought more broadly throughout the curriculum. The shortfalls now known about self-directed learning include the perception of “lazy lecturing” and students “not getting value for money.” The learning of critical thinking would seem to be the antithesis of this and could be a valuable way of maintaining the academic rigor of a program concurrent with teaching an optimal professional curriculum.

Processes to work towards this include research activities that build capability with literature searching and data bases, and information literacy exercises being built into various courses such as clinical nutrition. Where such exercises are utilised the scholarship can extend into developing skills producing conference posters and subsequently in patient communication. A further example is presenting the philosophy of chiropractic concurrently with neuroscience so that the language becomes shared. Strategies by which research has been developed at one particular institution include the hiring of a Research Director and introducing research literacy skills into the curriculum.

It was thought that greater effort seems needed to cross-engage chiropractic practitioners with academic chiropractors. It is appreciated that disciplines such as psychology require academics to retain current practice. Consideration should be given to a chiropractic best practice of academics being involved in active patient care.

It was stated that an institution’s shift away from the utilisation of subluxation as a diagnostic entity in its clinical learning environments creates a significant disconnect with the practitioner constituency. It was suggested that problem-based learning and courses in critical thinking may be one way to enhance engagement by the student. However it was felt that the evidence-based paradigm could be seen as being reductionistic with shortcomings and open to some criticism. Best practice would thus seem to require an agreed, clearly stated paradigm by which institutions posed a framework for chiropractic research.

Movement towards best practice could include strengthening the relationship between the institutions and the practitioners, perhaps through more Guest Lecturers and Mentors. Institutions appreciate that students admire the mentoring by active practitioners. In turn this may emphasise the relationship between the informed consumption of research and its scholarly application to clinical practice.

The Teaching of Clinical Skills and Chiropractic Technique

The presentations included numerous examples of learning and teaching approaches to clinical skills and technique and again while statements of best practice were not fully developed a number of important elements were identified.

These included the use of blended learning where technology was used to extend the student’s learning engagement beyond traditional class-based activities. Where multiple approaches are utilised scaffolding would help guide the learner. This suggests active modelling of particular approaches to learning to ensure participatory engagement by the learner with the intentions and directions of the instructor. In other words, students need to learn how a skills class is conducted so they understand the expectations of being a learner.

In application this could mean using a protocol that incorporated detailed indications for specific techniques as well as the skills of performing any particular chosen technique. In this sense a process of critical clinical thinking that becomes patient-driven would support the selection of technique.

A challenge was identified with technology development that related to deciding on the most appropriate entry-point given the high initial cost that is known to decrease within short time-frames. The summit agreed there would be benefit for the discipline from institutions sharing developing learning technologies with professional and regulatory bodies to enhance the delivery of and engagement with continuing professional development (CPD). It was felt this approach would connect with the institutions’ intent of graduating a practitioner capable of change and could empower the concept of life-long learning by providing opportunities in a CPD mode familiar to the student.

Aligning Taught Content with Industry (Professional) Practice.

This theme allowed active discussion between leaders of the industry (profession) and academic chiropractors. Best practice would appear to require ongoing dialogue between all stakeholders and whilst it was agreed aligning taught content is a shared responsibility it became evident there were questions as to where the discipline should look for leadership on this question.

The point was again made that the question of knowing the end product was critical to each institution and there was a need to identify input from the profession and the community and then to implement that into the curriculum. This was phrased in terms of questions such as who are we as a profession? and what areas should we be researching? Stakeholders in the process included government, third party payers, practitioners, academics, researchers and students. It is expected that the new Australian Chiropractic Board, in concert with the other discipline-specific national boards, will be looking at the discipline’s accreditation body particularly for directions with CPD.

Entry-level requirements and expectations for chiropractors are for competence as a primary contact provider who encompasses social responsibility. It was argued that the 56 units of competency currently identified by the Council on Chiropractic Education Australasia (CCEA) could be expressed as the roles and task of being a chiropractor. These standards already required each institution to maintain a Program Advisory Committee (PAC) as the means to facilitate feed-back into each program.

Other mechanisms existed for government to utilise accreditation bodies to reshape curricular elements and mental health is one current example. It is expected that
Table 2

THE WFC IDENTITY STATEMENT OF CHIROPRACTIC

<table>
<thead>
<tr>
<th>The Pole (brand platform)</th>
<th>The spinal health care experts in the health care system</th>
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<tbody>
<tr>
<td>The Ground (brand pillars)</td>
<td>Ability to improve function in the neuromusculoskeletal system, and overall health, wellbeing and quality of life</td>
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<td></td>
<td>Specialized approach to examination, diagnosis and treatment, based on best available research and clinical evidence with particular emphasis on the relationship between the spine and the nervous system</td>
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<td>Tradition of effectiveness and patient satisfaction</td>
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<td></td>
<td>Without use of drugs and surgery, enabling patients to avoid these where possible</td>
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<tr>
<td></td>
<td>Expertly qualified providers of spinal adjustment, manipulation and other manual treatments, exercise instruction and patient education</td>
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<td></td>
<td>Collaboration with other health professionals</td>
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<tr>
<td></td>
<td>A patient-centered and biopsychosocial approach, emphasizing the mind/body relationship in health, the self-healing powers of the individual, and individual responsibility for health and encouraging patient independence</td>
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The Personality (tone)

A combination of:

- Expert, professional, ethical, knowledgeable
- Accessible, caring, human, positive

From: http://www.wfc.org

Aboriginal health and aged care will be other areas. It was also thought specialist registration could be a future area for consideration.

DISCUSSION

The inaugural Summit on Chiropractic Education created for the first time a specific intersection between industry (the profession of chiropractic) and education. Whilst it remains true that universities answer to many masters the ongoing development of best practice in chiropractic education demands a close collaboration between the profession and the universities.

One benefit of institutions meeting together is the sharing of different approaches to achieve essentially common outcomes. Examples include the new chiropractic program at the International Medical University in Malaysia where the leadership is exploring a number of different models of clinical practice to maximise student learning in a country where chiropractic is developing. On the other hand Hanseo University in South Korea incorporates a chiropractic clinic within a multi-discipline hospital and this presents a range of learning opportunities to students not yet seen in the Australian health care sector.

The format chosen for the summit allowed for these and other ideas and approaches to be effectively presented. The summit website acts as a proceedings document and incorporates speaker detail, written abstracts and digital recordings. The level of interest and engagement was a positive outcome but in turn it meant there was insufficient time to fully explore the development of comprehensive statements of best practice, however the theme-based comments reported in this paper may be seen as moving towards this outcome.

Inherent in the concept of statements of best practice for chiropractic education in the Asian-Pacific region is the question of which general skill-set should be seen as characterising a chiropractic primary contact health care worker. Therefore the process of aligning taught content with professional practice strikes to the core of what education is about. The next question could be whether this is best done on a country-by-country basis, perhaps leading to a non-homogenous outcome, or whether this should flow from the top down, for example using the identity statement developed by the World Federation of Chiropractic (Table 2) and allowing for country-by-country interpretation and application.
An observation within one presentation during the summit by an industry leader was that institutions are not teaching a large amount of what is actually done within professional practice. Paradoxically, a recent study suggests the typical curriculum contains a lot of what is not done. If nothing else, the summit highlighted the need for the curriculum to be re-thought.

CONCLUSION

A series of presentations at the inaugural Summit on Chiropractic Education, held in Melbourne Australia in July 2009, provided a comprehensive overview of contemporary education practice including the assessment of students in the clinical setting, their engagement in learning research and scholarship and the teaching of clinical skills and chiropractic technique.

A fourth theme, the alignment of taught content with industry as professional practice, was shown in presentations by chiropractic leaders to be less than ideal. It was stated that education should have relevance to what is done in practice and then add value to it. It was agreed there is an imperative for institutions to invest more in getting to better know and understand the contemporary practice of chiropractic.

While not able to generate specific statements of best practice, overall the summit identified directions worthy of further consideration within four areas of the chiropractic curriculum. These comments as described in this paper are appropriate to serve as prompts for a more extensive meeting in the not-to-distant future, with a specific focus on improving the alignment of taught content with professional practice.

REFERENCES

1. URL: www.wfc.org