

**Braithwaite and Associates**

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*Options for change in health care*

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The ACT Health inter-  
professional learning and  
clinical education project:  
background discussion paper  
#4



Clinical education and  
placements

*A project for ACT Health conducted by Braithwaite and Associates, an Australian consulting practice providing Options for Change in Health Care.*

## **Inter-professional learning and clinical education: A background discussion paper**

### **Duration of project**

August-December 2005

### **Search period**

1892 to 18th August 2005

### **Key words searched**

Words and phrases related to 'inter-professional learning' and 'clinical placement'

### **Databases searched**

- Medline from 1966 to August Week 2 2005
- Embase: Excerpta Medica from 1988 Week 33 2005
- CINAHL from 1982 to August Week 2 2005
- Emerald Fulltext from commencement of the database
- Science Direct from 1967
- PsycINFO from 1892

### **Criteria applied**

We searched for the key terms as listed. Documents were largely limited to English.

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## 1. Executive summary

In this discussion paper we present the findings of a literature review on clinical education and placements. The information is drawn from an extended review of the literature contained in the companion document *Inter-professional learning and clinical education: an overview of the literature*, and is the last of four discussion documents. A composite picture of the whole topic of inter-professional learning and clinical placement can be obtained by reading all four documents.

In the literature reviewed, it was found that clinical education and placements:

- Have long been at the core of health professionals' development;
- Remains uncoordinated in Australia;
- Are underutilised in Australian health workplaces;
- Have been most effectively evaluated in terms of participants' responses to undergraduate and postgraduate courses;
- Medium and long term evaluations, and evaluations of organisational and patient impact remain sporadic;
- Warrants further research, in particular in regard to the roles of preceptors, dedicated student units, service learning and community placements;
- Are often grounded in adult learning principles and practice, including problem based, experiential and action learning, as well as reflective practice;
- Can occur formally and informally in a variety of settings.

## 2. Introduction

This paper is one of a series of four background discussion documents examining inter-professional learning and clinical education on behalf of ACT Health. It is drawn from an extended review of the literature contained in the companion document *Inter-professional learning and clinical education: an overview of the literature*. The four discussion documents are:

1. Background discussion paper #1: the governance and value of inter-professional learning and practice
2. Background discussion paper #2: inter-professional practice
3. Background discussion paper #3: inter-professional relations
4. Background discussion paper #4: clinical education and placements.

Each paper is designed to be read separately, and is written for those with a specific interest in that particular theme. A composite picture of the whole topic of inter-professional learning and clinical placement can be obtained by reading all four documents. Those seeking more information on the project background and methods should contact the consultants.

### 3. Research methods

The researchers conducted four search strategies to uncover available literature on the topic: an electronic search of six academic databases, hand searching of key journals, an examination of grey literature and websites, and snowballing, i.e., securing important references cited frequently in materials already gathered through the first three search strategies. Once assembled, we categorised the materials thematically and also subjected them to a content analysis technique via Leximancer, a software tool which facilitates the conceptualisation and analysis of large text files. We then subjected our thematic categorisation of the literature to a secondary analysis by the Inter-professional Learning Project Reference Group, a body sponsored by ACT Health with responsibilities for guiding the project, consisting of a wide range of stakeholders from the health and education sectors of the ACT, and across the disciplines of nursing, midwifery, medicine and allied health.

Through this method we found and downloaded 62,436 references and, after subjecting them to several refinement processes, reduced these to 37,812 useful references. These are provided in an additional document: *Inter-professional learning and clinical education 1990-2005: an annotated list of the literature*. Further refinement processes led us to reduce the number of references to the 3,765 key documents used in the project.

## 4. Discussion: Clinical education and placements

### 4.1 Development of inter-professional learning and clinical education

We turn to a consideration of clinical education and clinical placements. There are various concerns such as: when in the educational timetable is inter-professional learning to occur? How it is to be assessed?<sup>1</sup> What are the expected outcomes, compared to the actual intended, and unintended, outcomes? What are the implications are both for the practitioners involved, their teams and the organisations for whom they work? Are the training or placements to be voluntary or obligatory?<sup>2</sup> Are the training or placements trying to shape behaviour or values and attitudes? If so, do educators have the capacity to affect deeply held beliefs? In short, what are the rights and responsibilities of both educators and learners undertaking inter-professional learning and placing students in clinical settings?

Unlike inter-professional learning and education, which is a product of the 20<sup>th</sup> century, clinical education has a history dating back over three hundred years.<sup>3</sup> Throughout this period, clinical placements have formed the core of health professionals' training.<sup>4</sup> The purpose of clinical education is generally held to be the development of the students' (or learners') clinical competence.<sup>5 6</sup> As with inter-professional learning however, while few people question the rationale or aim of clinical education, questions arise as to its actual outcomes.<sup>7</sup>

Despite the World Health Organisation proclaiming interprofessional education a key area of health professional development,<sup>8</sup> inter-professional education, though gaining strength, continues to struggle. Inter-professional education goes against a long tradition of what training health professionals in isolation, a method which they claim reinforces autonomous and separate roles and decision making.<sup>9</sup> At the same time, the Institute of Medicine argues that all "... *health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team ....*"<sup>10:3</sup> Hilton and Morris support this proposition and assert, on the basis of a small evaluative study, that the clinical setting is the ideal learning environment of collaborative practice skills.<sup>11</sup>

Inter-professional education is taking place both in educational institutions and in health services. A key issue is for learning to be genuinely inter-professional, and not simply 'parallel'. An example of the difference can be seen in many postgraduate health programs, where individuals from diverse disciplines may work side by side, or together on projects, but the focus is the project or issue itself (for example the epidemiology of tuberculosis), rather than on

both the issue at hand (rates and patterns of tuberculosis in developing countries) and how an inter-disciplinary process might be undertaken in the study of these patterns (for example combining perspectives and skills from public health nursing, nutritionists, pathologists and human geographers). Genuine inter-professional education only occurs where two or more professional groups learn with *and about each other* for a common purpose and with the explicit intent of synthesising their professional skills and perspectives.<sup>12</sup> This can occur at the levels of undergraduate, postgraduate and continuing education.\*

While Australian health and education systems have instigated inter-professional learning intermittently, they have not adopted a co-ordinated approach either within or across states and territories. A companion document to this, *Inter-professional learning and clinical education: a review of initiatives in Australian jurisdictions* provides a review of the information available on key inter-professional initiatives in Australian health services. Most states and territories are undertaking some inter-professional initiatives; however there is little co-ordination between states, and no clear shared vision. In Australia, the University of Adelaide is acknowledged internationally as leading the way in relation to inter-professional teaching and research.<sup>9</sup>

#### **4.2 Undergraduate and postgraduate education and curricula**

Barriers to conducting inter-disciplinary courses both within and across educational institutions are considerable. A recent report indicates that clinical education in Australia is marked by lack of innovation and alternatives, under-usage of workplace settings as learning environments, and a lack of research into clinical education.<sup>3</sup> Additional problems include: the compartmentalisation of professional schools, reflected in clinical placements and timetables which all assist in keeping the professions apart at undergraduate level;<sup>13</sup> the need to operate as partners with the community; the reconceptualising of professional expertise to include collaborative scholarship and practice,<sup>14</sup> the need for a common language,<sup>15</sup> core inter-professional competencies,<sup>16 17</sup> and in the view of the Pew Commission, core inter-professional curricula.<sup>18</sup>

While numerous examples of programs have been published,<sup>19</sup> few provide concrete evidence as to the effectiveness of inter-professional education. These papers are, however, useful in helping to tease out the methods and approaches, tensions and successes of inter-professional education. In one UK study, for

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\* For the purposes of this review, continuing education incorporates all non-University, post graduate studies. This includes workshops, courses or training sessions run by health services or professional colleges or associations.

example, medical students were taught in the last years of their courses either with nursing students or with social work students. The programs involved groups in joint analysis of cases and assessment of patients. At the end of the study, the medical students ratings of social workers had improved, but their rating of nurses remained the same.<sup>20</sup> A required interdisciplinary course on health care ethics also had similarly mixed results. A group of first year child health associates (physicians' assistants), doctoral nursing students, medical students and physiotherapists undertook the course which was explicitly intended to facilitate inter-professional learning. Child health assistants rated the course most highly (94% agreed it was important, and 85% felt it helped them better understand their ethical responsibilities), while 38% of medical students felt it was important, and only 49% felt it had helped them understand ethics. Nurses and physical therapists rated the course in the middle of the range.<sup>21</sup> Another study of an inter-professional postgraduate course for health professionals in the UK found that participants' attitudes changed little throughout the course.<sup>22</sup>

Other studies have reported more positive results. In one case, nursing, occupational therapy, and physiotherapy students worked as a team to develop and implement activities centred on patient mobility, and were able significantly to decrease the incidence of complications in patients from immobility.<sup>23</sup> A course which trained pharmacists and medical students on medication adherence found that not only did most of the participants feel that the course had better prepared them to work in health care teams, but that they wanted to participate in more interdisciplinary projects.<sup>24</sup> In another example, physio, occupational, speech and language therapy students worked together to provide services to homeless and chronically ill elderly people.<sup>25</sup> It is important to note, however, that one of the earliest pieces of research into multidisciplinary teamwork<sup>26</sup> found that inter-professional education without the opportunity for collaboration resulted in stereotyping of 'other' professional groups.

Central to the success of inter-professional learning seems to be the issue of timing, or more precisely, how early in the professional education process inter-professional learning can occur. For medical practitioners in particular, the earlier the intervention in their professional formation, the more effective the inter-professional learning program appears to be.<sup>27 28</sup> Some authors specified that it should take place within the first two years of professional training.<sup>29</sup> The most compelling rationale for early introduction of inter-professional learning is that it may prevent or ameliorate the development of stereotypes about other professional groups, stereotypes which hinder collaborative practice.<sup>30</sup> The countervailing argument is based on theories of professional identity development, and claims that later introduction

of inter-professional learning lowers the possibility of perceived threats to personal identity.<sup>31</sup>

### **4.3 Clinical placements**

Clinical placements have long been considered a prime site for inter-professional learning and the development of collaborative approaches.<sup>32</sup> Yet as with inter-professional learning in general, there is a lack of direct evidence about the effectiveness of such placements.<sup>3 7</sup> Clinical placements have formed the core of health professionals' undergraduate (or apprenticeship) training.<sup>4</sup> While the purpose of clinical education is generally held to be the development of the students' (or learners') clinical competence, clinical placements have been used extensively as an important site for inter-professional learning.<sup>33</sup>

Several key elements affecting the effectiveness of clinical placements have been identified. The role and quality of clinical supervisors, for example, have been identified as important factors in the success of placement.<sup>34</sup> The use of preceptors, and education units both for undergraduate students on placement, and as a centralised location of the development of staff,<sup>35</sup> are also considered to provide valuable support to both groups. Here too, however, research falls short. As Oandasan and Reeves (2004) state *"Although a number of authors stress the need for good interprofessional facilitation, little is offered in terms of suggestions which could actually inform potential facilitators."*<sup>36:115</sup>

A particular type of placement, known in the United States as 'service learning' or community placements, is also a potentially valuable source of inter-professional learning. These placements, though supervised, may be voluntarily undertaken over and above the placement requirements for a professional degree. In locating learners within working community centres and organisations, the placements offer participants the opportunity to learn collaboratively both with professionals from other disciplines and with clients, within a structured, supervised learning environment.<sup>37</sup>

### **4.4 Educational approaches to inter-professional learning**

As the Institute of Medicine's report on health professional educations notes, the academic environments of health professions are generally not interdisciplinary, while work environments are increasingly so.<sup>10: ix</sup> This situation has made the provision of opportunities for effective inter-professional learning in the workplace even more important. One way to improve the effectiveness of clinical education and inter-professional learning is through the utilisation of adult education principles and methods, including the creation of a supportive learning environment.<sup>38</sup>

The use of techniques such as problem-based learning,<sup>39</sup> experiential learning,<sup>40</sup> action learning,<sup>41</sup> and reflective practice<sup>42</sup> all appear to support both adult learning in general, and inter-professional learning in particular. Informal learning and the opportunity to debrief with peers are useful adjuncts to more formal reflective processes.<sup>43</sup> Changes in technology and educational methods have also affected learning and teaching approaches, and have led for example, to more learner-driven approaches. Examples of these are evident in the increased use of computer based learning<sup>44</sup> and simulations<sup>45</sup> in clinical settings, the first of which (problem based learning) is used extensively in inter-professional learning and teamwork development.

The process of inter-professional learning can and does involve a variety of educational approaches, techniques and strategies over and beyond the issue of whether it occurs at undergraduate, postgraduate or workplace context. Barr<sup>46</sup> identified what he determines to be the key dimensions in inter-professional learning in a clinical environment: implicit or explicit, discrete or integrated, all or part, general or particular, positive or negative, individual or collective, work-based or college-based, shorter or longer, sooner or later, common or comparative, or interactive or didactic. One additional dimension – safe or unsafe – could also be added. In the light of what is known about the potential effects of perceived threats to professional identity from inter-professional learning processes (and in particular, processes which are not soundly based or skilfully handled by faculty), the importance of a safe learning environment, that is one where learners feel free to express their opinions and have time to process their learning, is paramount. This is particularly true if the learning occurs in the workplace and therefore later in the professional development of the practitioner.<sup>47</sup>

## **5. Conclusion**

We have discussed issues drawn from the literature about clinical education and placements. If you have any comments on the issues canvassed in this discussion paper, please do not hesitate to contact us. Alternatively, you may wish to access the other discussion papers or companion documents, available from us or the ACT Health website [<http://www.health.act.gov.au/c/health>].

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