

# Breaking down the silos: interprofessional education and interprofessionalism for an effective rural health care workforce

**Ruth McNair**, Senior Lecturer, The Department of General Practice, University of Melbourne

Why are we attending a rural health conference? For the location – yes; for a chance to meet colleagues and share ideas – yes; in the hope that we can build a better rural health environment – emphatically yes. Today, I will address one of the ways that health care provider education can support and strengthen rural health care. My starting point is that an effective rural health workforce involves a range of health care providers with a range of skills who work effectively together in a collaborative team. This not only provides appropriate health care, but also provides a sustainable workforce by improving the vitality of the health care providers. I believe that being an effective team worker can and should be leaned as part of a vertically integrated education process from the beginning of training.

In this paper, I will critically review the largely uni-professional educational preparation that our students have received to date. One of my major criticisms is that medicine-centred policy has fostered a uni-professional rural health environment. I will then discuss opportunities for interprofessional education that counteract this tradition. Finally, I will present interprofessionalism as a suggested core component for undergraduate IPE curriculum. Explicitly learning the shared values of professionalism in a multi-disciplinary environment will strengthen the team-working attitudes and behaviours of our future rural health care providers.

## PRIORITIES FOR THE CURRENT RURAL HEALTH CARE WORKFORCE

We have a good understanding of the strengths and weaknesses of our rural health care workforce, thanks to research conducted by the Australian Health Workforce Advisory Committee (AHWAC) and the Australian Medical Workforce Advisory Committee (AMWAC). Strengths include improved technologies such as video-conferencing and web-based information; the development of expanded roles for old disciplines, and new emerging health care provider disciplines.<sup>1</sup> In particular, the advancement of the clinical nurse specialist and nurse practitioner are welcome additions to the rural workforce. Health care consumers and communities have become increasingly engaged with their health care, through better availability of health information and increased participation in decision making. As a result, they have higher expectations of accessible, high quality and collaborative health care. Weaknesses, or challenges for rural health care include workforce shortages, an ageing health care workforce and a parallel ageing of the population. Shifts in styles of working amongst health care providers, with a desire to work shorter hours, and a need to respond to calls for changing models of care are particular challenges.

## National Health Workforce Strategic Framework

In response to these challenges, the first National Health Workforce Strategic Framework was developed at the Australian Health Ministers Conference in 2004. This framework moves beyond the adage that workforce planning is all about having the right number of people in the right place at the right time. Rural health workforce is no longer just about numbers, if it ever truly was. The framework “recognises that a collaborative, multi-disciplinary approach is needed to effectively tackle health workforce issues” (page 5). The Australian Health Ministers Conference report states that “ensuring the right practitioner mix will be crucially important and this is likely to involve new disciplines and new roles for old disciplines” (page 11).<sup>1</sup> In particular, the report discusses the need for established professional roles to evolve; for existing professional boundaries to be relaxed; and for new knowledge and skills to be acquired.

The framework is recommending effective teamwork as one solution. Is there evidence that teamwork can improve health care delivery and health outcomes? The Australian National Institute of Clinical Studies has conducted a literature review of factors that support high performance in health care.<sup>2</sup> Team performance was one of five areas explored, and the review showed that the development of trust, safety, and a culture of participation were all important for high performance within a health care team. The reviewers concluded that “the potential of health care teams was not being realized because of lack of effective communication and team working practices” (page 15). There is evidence that interprofessional teamwork is an important contributor to positive health outcomes through the improved communication, efficiency, cost-effectiveness, and the patient-centredness of the health care team.<sup>3,4</sup> Effective teamwork also improves the working environment for the health provider, by creating higher levels of respect between team members, better understanding of roles, collaborative skills and improved job satisfaction.<sup>5,6</sup>

The National Strategic Framework contains seven guiding principles (page 14)<sup>1</sup>:

- ensuring and sustaining supply
- workforce distribution that optimises access to health care and meets the health care needs of all Australians
- the health environment being places that people want to work
- ensuring the health care workforce is always skilled and competent
- optimal use of skills and workforce adaptability
- recognising that health workforce policy and planning must be informed by the best available evidence and linked to the broader health care system
- recognising that health workforce policy involves all stakeholders working collaboratively with a shared vision.

One of the key priority areas for the delivery of the framework was identified as the need to improve links between the health and education sectors. Education can assist in the achievement of all 7 guiding principles, however is particularly important for ensuring competence and adaptability.

# EDUCATION FOR THE RURAL HEALTH WORKFORCE

## Uni-professional education as inadequate preparation

Assuming that the ideal rural health workforce contains a multi-disciplinary team of competent, adaptable and satisfied practitioners, the challenge for educators is to ensure that we prepare students for this environment. Are our current undergraduate and postgraduate courses relevant to this form of practice? I argue that we are not adequately preparing students, and further, that our current education environment creates significant barriers to the development of respectful and effective relationships between different health care disciplines.<sup>7</sup> A silo approach to education; distinct professional codes of ethics; and the drawing of boundaries around uni-professional knowledge, all undermine respectful awareness of the knowledge and skills of other disciplines and fuel inter-disciplinary rivalry.

Students spend the majority, if not all, of their educational experience with students of their own discipline. Vertical uni-disciplinary streams, the silo approach, continue from the delivery of undergraduate coursework, through clinical placements and postgraduate training, to accreditation and maintenance of professional standards.<sup>8</sup> The power invested in having control over a distinct body of knowledge and the development of “cognitive exclusivity”<sup>9</sup> creates a significant barrier to effective relationships with other professionals and with patients.<sup>10</sup> Students are found to enter their specific health professional course with pre-formed stereotypes about their own and other disciplines.<sup>11,12</sup> Negative stereotypes regarding other disciplines can lead to professional arrogance and hamper effective collaborative relationships.<sup>13</sup> Social identity theory suggests that identifying with a particular group actively determines interpersonal attitudes and behaviour towards other groups.<sup>14</sup> Uni-professional course work perpetuates such stereotypes and resulting behaviours.

Professional stereotypes are reinforced for students through a powerful hidden curriculum, delivered by senior colleagues who can role model negative attitudes and behaviours towards other disciplines.<sup>15</sup> Recently qualified health care professionals in one study, who acquired negative attitudes towards other health care professionals during their courses, attributed this partly to the influence of attitudes expressed by their tutors and clinicians.<sup>16</sup>

## Not only uni-professional but doctor-centred

Unfortunately, the primary care system in Australia has developed within a medical model of care, privileging doctors over other providers. This is seen in the doctor-centred Medicare funding model and incentives to specifically relocate doctors to areas of need. The persistent opposition by the Australian Medical Association to nurse practitioners exemplifies that this powerful group is dedicated to retaining the status quo. Fortunately, the Australian Divisions of General Practice peak body has recently reversed this trend by releasing a position statement on nursing in general practice, which states that practice nurses should be employed in all general practices and acknowledges their role in encouraging a team approach to care.<sup>17</sup> Rural health workforce policy in Australia has promoted education programs to increase the number of doctors working in rural areas, while largely ignoring the needs of other providers. At the undergraduate level, scholarships are offered for medical students, including the John Flynn scheme, the Rural Australian Medical Undergraduate Scholarship (RAMUS) Scheme and rural bonded scholarships. Rural-origin students are encouraged to enter medical school through targeted access programs, and rural clinical schools have been funded. Only recently have rural nursing and allied health scholarships been offered. At a postgraduate level, the needs of the medical workforce have also been dominant. The Australian Rural and Remote Workforce Agencies Group is the peak body for each of the state and territory based Rural Workforce

Agencies, formed in 2000. This group and its member groups are specifically funded to support the rural and remote general practice workforce.<sup>18</sup> For example, key projects have been to recruit, train and retain overseas trained doctors; and to provide rural locum relief programs around Australia. There is no equivalently resourced peak body for rural nursing and allied health providers.

Those of us who have worked in rural and remote Australia know that the medical model does not necessarily result in an effective workplace. To work as one doctor in professional isolation, without support from a range of disciplines bringing varied skills and knowledge, is to commit all but the most robust provider to a short and exhausting “tour of duty”. Alternatively, working in a town with a group of general practitioners who are stretched to their limits, constrained to treating illness rather than providing preventative and public health, and who are forced into closing their clinic to new patients at regular intervals is equally soul-destroying. If doctors are fortunate enough to find themselves in a location with health care providers of other disciplines, we know that their education did not prepare them for understanding how to work effectively together.

Alternative models of, and priorities for, health care provider education are desperately needed. University Departments of Rural Health have been established, which “aim to establish a rural-focused national network of medical and health professional training”.<sup>19</sup> The National Rural Health Alliance, as a peak body of health consumers and service providers, has been a strong advocate for multi-disciplinary primary health care policy. In 2005, it has prioritised support for allied health and nursing rural workforce, arguing for increased undergraduate placements for nursing and allied health students and scholarships for allied health students.<sup>20</sup> The Australian Divisions of General Practice (ADGP) has made a submission to the May federal budget proposing the funding of nurses and allied health professionals in primary care teams.<sup>21</sup> However, are these initiatives delivering skills for team-working?

## Opportunities for interprofessional education in Australia

It is not enough to continue to train providers separately. We need more innovative approaches to challenge existing attitudes and improve interprofessional relationships. Interprofessional education (IPE) is one such approach and can achieve some of the national strategic framework objectives. I am not arguing to remove uni-professional education, as clearly students of each discipline must acquire discipline-specific skills and knowledge. Further, IPE should be seen as one of many educational initiatives. For example, a model has emerged in the UK, which provides an undergraduate course for generic health care providers, who can then adapt their skills according to the workplace they enter. Another model is post-registration training as generic rural health practitioners, an example of which was offered by the University of Queensland as a distance education course in 2003. This trained allied health, nursing and emergency practitioners in areas such as advanced life support, counselling, emergency dental care and limited prescribing.

For the remainder of this paper, I will focus on undergraduate IPE. IPE brings students together from different disciplines to learn with, from and about each other. Interprofessional learning can positively influence attitudes towards other professionals<sup>13,22,23</sup>, and improve group team-work skills<sup>24</sup>, particularly when introduced early in the course.<sup>25</sup> Demonstrating changes in IP collaboration in practice as a result of an IPE intervention has proved challenging, no studies have yet achieved Cochrane criteria for systematic reviews.<sup>26</sup> However, despite limited evidence, IPE has recently gained political and academic support in the UK and the USA.<sup>27,28</sup>

Many of the challenges to developing IPE programs are structural. The ideal program would commence early in the undergraduate program, encourage students of different disciplines to learn together in the classroom, and then be periodically placed together in the clinical and community environment through to the end of the course. Logistically, it is easiest if different disciplines based at the same University are combined. The Southampton program involved two different Universities and several years of planning to achieve a common learning program for all students in eleven health care disciplines at each University.<sup>29</sup> By comparison, each University in Australia tends to have fewer health care disciplines, yet has been slow to develop IPE initiatives. Two examples of volunteer projects are the Tasmanian Interprofessional Rural Placement (IRPP) program, which developed as a pilot for student volunteers from the University of Tasmania<sup>30</sup>; and the Rural Interprofessional Education (RIPE) program in Victoria, which I developed, which placed students from eight Victorian Universities.<sup>31</sup> Both programs are now run by University Departments of Rural Health, however currently continue to be restricted to small groups of volunteer students. This is the case around Australia, with no compulsory, vertically integrated IPE program yet developed. A snapshot of some of the current IPE projects is provided in Table 1, all but one of which are rural.

**Table 1 Current undergraduate IPE initiatives in Australia**

University	Project	Disciplines	Learning methods	Content
Monash, Centre for Rural Health, Vic	Multi-disciplinary Unit	Medicine Nursing	Classroom	Ethics and law
Northern NSW UDRH		Medicine Nursing Nutrition/Dietetics Medical imaging	Short learning units	
Tasmania, UDRH*	Interprofessional Rural Placement Program(IRPP)	Medicine Nursing Pharmacy	Rural community placement	Teamwork, rural health care
University of Melbourne, UDRH	Rural interprofessional education (RIPE) project	Medicine Nursing Pharmacy Physiotherapy	Rural community placement, inter-disciplinary pairs	Teamwork, rural health care, community-based project
University of Melbourne, UDRH	Rural Health Module	Medicine Physiotherapy Dentistry	Rural community placement and classroom, inter-disciplinary pairs	Team practice, aboriginal health, health issues analysis presentation
University of Newcastle	CORE Initiative	Medicine Nutrition/Dietetics Physiotherapy Occupat. therapy Radiology	4 modules in first year, class room based	Health law and ethics Communication skills Evidence based practice Aboriginal health
University of Newcastle Geriatric Unit,	Multi-disciplinary learning unit	Medicine Nursing Nutrition/Dietetics Social work	Hospital based (John Hunter Hospital)	Geriatric patient care
University of Sydney and U. Technology Sydney		Medicine Nursing Allied health	Hospital based (Royal North Shore Hospital)	Observe and participate in hospital care together

\*UDRH = University Department of Rural Health

A further logistical barrier is where to fit IPE content into existing crammed curricula. The Southampton experience has demonstrated that several years of planning and co-operation are required to create space in existing curricula. It would seem that the development of new courses would be the logical time to make room for IPE content from the beginning, yet even this is not happening here. Eight new Australian medical schools have been funded since 2000, the first for thirty years. Their development has been driven by local workforce needs,

particularly rural and remote. These schools have been praised for fostering diversity and “daring to be different” with an emphasis on collaboration. However, they only appear to be collaborating in terms of “harnessing teaching and learning resources in innovative ways from within (and outside) their Universities” (page 662).<sup>32</sup> Many of the Universities have other health care provider courses; however the closest they have come to IPE is cross-disciplinary teaching, which does not constitute students learning with or from each other. I see this as a lost opportunity, with new medical curricula designed to train rural doctors devoid of interprofessional content. By contrast, all four new medical schools developed since 1998 in the UK have included interdisciplinary learning.<sup>33</sup>

## PROFESSIONALISM AS CORE IPE CONTENT

Core elements of IPE content according to the World Health Organisation are competencies for effective teamwork such as collaborative sharing of knowledge and skills, understanding of role definitions and boundaries, and development of respect between professionals.<sup>34</sup> One of the barriers to introducing IPE modules is persuading course designers that the material is unique, important and best delivered using IPE. IPE advocates must offer something essential. Hammick argues that IPE not only creates an opportunity to integrate knowledge from various disciplines but also to create a “new terrain of knowledge” (page 326).<sup>10</sup> I argue that learning the values of professionalism that are shared across all health care disciplines is such a new terrain, a subject I have termed interprofessionalism.<sup>35</sup> Health care provider educators are increasingly introducing explicit learning about professionalism as essential for effective practice.<sup>36</sup> Yet again however, this is largely uni-professional and has the potential to set the values of one profession against those of another. I suggest instead that the values of interprofessionalism should be learned using interprofessional education and emphasising a patient-centred rather than profession-centred approach.<sup>37,38</sup>

The American Board of Internal Medicine definition of professionalism<sup>39</sup> includes six values:

- altruism
- accountability
- excellence
- duty and service
- honour and integrity
- respect for others.

Students should start to learn these values early in their courses, and be encouraged to apply them, not just to patients, but also to relationships with students within their own discipline, and in other disciplines. They should then learn a shared ethical framework for health care provision, such as one developed by the Tavistock group. This is a multi-disciplinary group of health care and ethics leaders, which has developed a set of ethical principles that apply to all members of the health care team, in “recognition that much of health care is multi-disciplinary, yet ethical codes usually cover only one discipline” (page 616).<sup>40</sup> Following extensive consultation in the USA and UK, they now include seven principles:

- rights (to health care)
- balance (between individual and population health)
- comprehensiveness
- improvement

- safety
- openness (honesty, trustworthiness) and
- co-operation (with patients, each other and other sectors).

These principles enact the elements of interprofessionalism and provide students with tools for engagement with health care consumers and health care colleagues. Co-operation is seen to be the central principle in recognition that all of those working in health care depend on each other. The ultimate aim of an interprofessionalism curriculum is for students to adopt a value-based perspective, which will then have a powerful influence on professional behaviour. This is the central tenet of “virtue ethics” which states that behaviour is determined by internally adopted qualities or values (in this context, the shared elements of professionalism) rather than by concepts or external rules.<sup>41</sup>

In developing such a curriculum for the explicit learning of values that will apply to interactions with inter-disciplinary colleagues, we must address methods for assessing and rewarding interprofessionalism. Many Australian medical schools have now included a professional development component of undergraduate curriculum, and for some such as Flinders University, students are required to demonstrate suitably “professional behaviours” as a hurdle requirement to passing the course. Shrank and colleagues have suggested that requiring a minimum standard is not enough, and describe the need to reward professional behaviour, not just within the student body, but also within faculty, to ensure appropriate role modeling.<sup>42</sup> They suggest visible rewards for excellence in professionalism. Assessment of values has been notoriously difficult to implement, however using multiple methods over time is appropriate. Assessment could include observation of student behaviour with student colleagues, accompanied by feedback from trained observers. The so-called “360 degree evaluation” encourages feedback to students from multiple sources in the clinical setting including peers, patients and health providers from a variety of disciplines. More structured assessment can also be used through Objective Structured Clinical Examination (OSCE), in which interprofessional scenarios are presented and students are assessed against a checklist of team working skills, knowledge and values. This has been successfully implemented as part of an IPE program in Auckland. Finally, encouraging self-reflection is an important tool for life-long learning and improvement of interprofessionalism.

## FUTURE DIRECTIONS

IPE and interprofessionalism should be included as core curriculum to better prepare health care students for rural work. There needs to be a greater commitment to IPE in Australia, from government and educators. We are clearly lagging behind the more progressive policy and educational focus in the UK, which has developed through repeated calls from senior faculty to change the educational mindset.<sup>43</sup> Educational assumptions and norms that prevent collaboration must be challenged. The Association for Medical Education Europe annual conference had a strong IPE program in 2004, resulting in a post conference statement that “we should be aiming for interprofessionalism as an emergent property of today’s and tomorrow’s practitioners”.<sup>44</sup>

Despite the potential for University Departments of Rural Health to introduce IPE, they are slow to take up the challenge. I consider this relates to a continued dominance of medicine in the rural health care policy arena and an inherent conservatism within medical education. Internationally, medical education is undergoing a campaign for revitalisation with suggestions that “academic medicine is in crisis”.<sup>45</sup> This crisis includes difficulty finding committed teachers, related to having “forgotten the essential values of altruism and social responsibility” (Page 658). I suggest that these values are needed not just to secure appropriate

teachers and mentors, but also to provide curriculum that truly serves the needs of the population. Nursing and allied health educators are increasingly introducing curriculum based on team work, however these health care providers cannot hold up the health care team alone. The doctor is an integral part of the rural health team. It is not enough for co-workers to have developed collaborative skills and values, while doctors grimly hang on to hierarchical privilege. Doctors must take their place in the multi-disciplinary team if the community is to be served well. It remains for those of us committed to serving our communities and contributing to a healthy rural workforce to call for more appropriate preparation for our students. We need to unite to argue for policy commitment to interprofessional teams. Let's break down the uni-disciplinary silos and help to create a more effective workforce.

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