

**Educating the future workforce: building the evidence about
interprofessional learning**

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Abstract

This paper addresses the theme of interprofessional education for health and social care professionals as it effects on the development of the work force. The drivers for change in the UK, typified by the Bristol Royal Infirmary and Victoria Climbié inquiries and the response to this in the form of Department of Health policy, are discussed. The need for rapid development of the evidence base around this subject is evident form literature reviews of the impact of interprofessional education. Directions for future research and investment in this area are proposed including the need for a stronger theoretical base and for longitudinal studies over extended periods of time in order to examine short, medium and long term outcomes in relation to health care practice.

INTRODUCTION

Central to the reform and modernisation agenda in health and social care in the UK is a clear commitment by the government to make patients and carers the focus of modern services (1). The achievement of this vision will require a radical reform of services and at the heart of this challenge is reform of the workforce. As part of this the traditional divisions and demarcations between professions will need to be explored in the face of the clear need to work differently and collaboratively in the interests of the patient. The policy

commitment to a vision of multiprofessional team working has translated into a clear emphasis on the principle of learning together in both pre and post qualifying professional education (2). However, whilst individually professions have focused on delivering evidence based care to patients, the increasing emphasis on multiprofessional team working will require that in future the generation of evidence is able to reflect these dynamics from an appropriate theoretical perspective. Although, for a wide range of stakeholders this may be viewed as a threat to the existing biomedical hegemony it should rather be seen as an opportunity to explore how best professions and others can work together for the benefit of the patient.

This paper outlines the policy drivers for interprofessional education and draws upon the major reviews undertaken in the UK over the past four years. It explores the policy drivers and the operational implications involved in establishing learning opportunities in pre qualifying professional programmes in health and social care, which enable students to learn with and about each other. It also identifies the research imperatives inherent in attempting to achieve this vision for a new generation workforce.

DRIVERS FOR CHANGE

Over the coming decades, radical changes in health and social care roles are inevitable, indeed essential, if there is to be any chance of

meeting the increasing demand for health and social care services. This will require that health and social care professionals become more flexible and develop a greater mutual understanding and respect for each other. In order that patient focused services are delivered, no profession can remain isolated or territorial. Increasing changes in role boundaries mean that activities often overlap and interconnect between professions and regulated careers. The flexibilities sought from the workforce raise fundamental questions about how far reformers are willing to go in challenging the existing medical hegemony (3). As such, the division of labour in health and social care can be seen as in a constant state of flux.

The findings of the public inquiry into the deaths of children undergoing cardiac surgery at Bristol Royal Infirmary presented a defining moment and created a focus for radical change in the NHS. The Inquiry has provided a significant impetus for change and modernisation in the NHS (4). It brought into stark relief the consequences of professional groups socialised into behaviour patterns and working relationships that maintained a pervasive order based on a medical hegemony. The process of socialisation had created a social order of professions which itself appeared to have become resistant to questioning and change. Such persistent social norms and values serve to maintain the status quo. This often ignores a diversity of

patient and interprofessional perspectives that can open up new possibilities for change.

In accepting the recommendations of the Bristol Inquiry, the government recognised the need to 'broaden the notion of competence' in the preparation of health care professionals. The Inquiry suggested that

'One of the most effective ways to foster an understanding about and respect for various professional roles and the value of multi-professional teams is to expose medical and nursing students, other healthcare professionals and managers to shared education and training' Para 18 (4)

The Inquiry recommended that a number of pilot projects should be developed in universities to take forward the radical reform of pre registration education by bringing students from differing professions together to learn. While the evidence base about interprofessional learning is growing, this recommendation and subsequent policy direction must be supported by significant research investment to further build the evidence base. Whilst the Bristol Inquiry did not make explicit the expected outcomes of learning together, or their conception of 'shared learning', they did identify a range of areas that were viewed as crucially important to the care of patients. These six

key areas included: *"skills in communicating with patients and with colleagues; education about the principles and organisation of the NHS, how care is managed, and the skills required for management; the development of teamwork; shared learning across professional boundaries; clinical audit and reflective practice and finally leadership"* (4).

The need to promote effective team working across organisations and professions through interprofessional education has been substantiated further by the findings of the inquiry into the death of Victoria Climbié (5). It recommended not only the establishment of a National Agency for Children & Families but that such an agency should

"require each of the training bodies covering services provided by doctors, nurses, teachers, police officers, officers working in housing departments and social workers to demonstrate that effective joint working between each these professional groups features in their national training programmes"

(Recommendation 14).

Both the Bristol and Climbié inquiries were established in response to very different service failures, yet the extent to which traditional divisions and demarcations between professions appeared to impede the need to work collaboratively in the interests of the patient is a

consistent theme. Both inquiries have identified the need to radically reform the education and training of a range of professionals to promote collaborative working focused on the patient or client. This has substantial implications not only for the professions but also for the higher education sector, which has taken on the responsibility to provide professional education programmes. The complexity of the required educational change cannot be underestimated, intertwined as it is with operational realities, the politics of higher education, professional prejudice and the powerful processes of occupational socialisation (6).

The Department of Health response to these issues has been:

“that there should be more opportunities for different health care professions to share learning and that more emphasis should be placed upon the non-clinical aspects of care, such as communication skills, in the education, training and development of those working within the NHS” (2).

This intention appears in the publication of *Working Together – Learning Together*, (2) the Department of Health ‘s life long learning strategy. It highlights a commitment to ensuring the implementation of a common learning in all pre registration programmes across all universities in England by 2004 (2). This was accompanied by a

commitment to improve the regulation of health and social care education and training. Part of this commitment is the funding of four leading-edge sites to implement common learning in health and social care pre-registration programmes.

CLARIFYING THE TERMINOLOGY

Reform in health and social care pre registration education designed to promote team and collaborative working, must be accompanied by radical changes to the curriculum and learning experience if the students are to achieve such outcomes. Evidence available to date suggests that the greater the integration of interprofessional education into the wider curriculum the more positive the effect on attitudes towards interprofessional collaborative working (7;8). In this context, it is essential to draw distinction between providing interprofessional learning opportunities as opposed to multiprofesisonal learning. Interprofessional education has been defined as:

“Occasions when two of more professions learn with, from and about one another to improve collaboration and the quality of care”, whereas.

multiprofessional education is defined as

"Occasions when two or more professions learn side by side for whatever reason" (9).

There are clearly huge differences between these definitions in relation to the student experience. Multi-professional learning often involves large numbers of students being taught together at the same time, in the same space and about the same topic. Whilst there may be efficiency savings, Carpenter & Hewstone have indicated that *'simply putting students together in mixed classes...(may be).... unproductive'*(10).

Interprofessional learning necessitates that students learn *'with, from and about one another'* and in, operational terms, this leads logically to a model of small group learning rather than large group didactic teaching.

THE NEED TO GROW THE EVIDENCE BASE

In setting out the policy and regulatory context, Barr suggested that the need for interprofessional education springs from the need to *"resolve misunderstandings, overcome prejudice and negative stereotyping, improve communication and acquire collaborative competencies"* (11).

With the call for interprofessional education now firmly in place and in the context of the prevailing evidence based culture, the need to provide empirical data about the impact of interprofessional education has become essential. This issue was captured by Barr and colleagues in their review of the developing evidence base: "*persuasive though arguments in favour of interprofessional education may be, evidence to substantiate them is elusive*" (12). However, there is, as with all innovations: "*the dilemma simply put is that without innovation evidence cannot be developed...the mantra of the 'evidence base' could potentially become a constraint to the innovation necessary to address the significant workforce challenges faced by the future of health and social care*" (13). It is vital, therefore, that research investment is rapidly identified and directed towards addressing the outcomes and the impact of this current policy initiative (14).

Professionals learning together is neither new nor confined to the health and social care professions as Watson has illustrated in relation to the 'built environment', which bring together professionals engaged in the planning and construction industry (15). Over the past decade there has been a growing interest in the development and exploration of interprofessional learning (16). Barr et al (12) have systematically reviewed evaluations of interprofessional education in health and social care in the UK. The purpose of the review was to:

- Identify methods by which such interprofessional education in health and social care has been evaluated
- Assist others to replicate and develop those methods

Initial methodological requirements constrained the selection of studies to Randomised controlled trials (RCT), controlled before and after studies (CBA) or interrupted times series (ITS) designs. However, there were no such studies available. They concluded that this should not be interpreted as an indication of the lack of effectiveness of interprofessional education but simply pointed to the worrying lack of appropriate research. The need for future research to address methodological issues and clarify outcomes, interventions, timescale and participants is clear.

The initial review was expanded to include all studies of interprofessional education that were formally organised and involved more than 15 participants. Within this framework, the studies now included a range of learning methods and types of interprofessional education and settings (12). The focus of the analysis was on the methodology and outcomes of the studies. These were placed within a theoretical framework, drawing upon Kirkpatrick's typology of learning outcomes (17). This framework characterised outcomes related to *"learners' reactions, modification of attitudes or perceptions, acquisition of knowledge and skills, changes in behaviour, impact on*

the community or organisation and benefits to patients or clients”

(17).

The reviewers found very few studies measured outcomes and those that did, focussed on the initial acquisition of knowledge and skill often based on participants' perspectives. The need to utilise a wider range of methodologies to reflect both process and outcomes was clearly identified but the methodological challenges of randomised controlled trials in this area were also recognised. The review further revealed that:

- The majority of evaluations reported post registration continuing professional development
- The educational experience usually occurred in a practice or work setting.
- The location of interprofessional education was often in practice rather than a university.
- Less than 30% of studies involved pre registration students
- The quality of the studies was variable and largely adopted pre and post intervention designs (12).

The review concluded that more prospective and longitudinal studies are needed. These should be designed to reflect the complexity of factors that influence interprofessional education, including both those that facilitate and those that restrict the process. Of the studies available many are largely atheoretical, based on short term

interprofessional inputs and have used process measures as self reported short term outcomes – some of them, often immediately post intervention. Very few studies have been designed to provide evidence of longer term outcomes, in particular on professional practice. The majority of evaluations have been more concerned with student satisfaction than meeting external requirements (12).

In the same year Barr (11) produced a further review of interprofessional education to inform regulatory bodies on this issue. The review reflected the growth in the evaluation of interprofessional education and stated the difficulty of drawing generalisations from evidence that was of such a variable nature.

Much of the early development of interprofessional learning in the UK focused on work with existing professionals learning together in order to work together more effectively. In these circumstances participants came to such events with their preconceptions and prejudices about other professionals already constructed through their pre qualifying period. The changes suggested by the NHS Plan and the NHS Human Resource Strategy seek to influence that process at the pre qualifying stage. One of the interesting tensions in the development of interprofessional learning, therefore, is the extent to which it has been viewed as a means to bring together existing professionals or as an element in the pre qualifying preparation. The '*conventional wisdom*'

Barr suggests (11) has been that interprofessional education is 'better left' to the post registration period when practitioners have 'secured their respective identities and have experience to *share*'. However, as Melia (6) has suggested it is the very nature and power of the process of professional socialisation that can in turn create negative stereotypes and prejudices towards other professionals. So whilst interprofessional learning has mainly emerged in the post-qualifying arena, there is now a growing imperative to introduce interprofessional learning as part of the pre registration preparation of health and social care professionals (11) and assess its impact at this level.

THE FUTURE RESEARCH

Whilst interprofessional learning is not new, the commitment by the Department of Health to see the introduction of 'common learning' in all pre registration health programmes by 2004 signals a significant policy shift (2). This in turn requires a commitment to research investment that will develop the evidence base in relation to the impact of interprofessional developments on professional and on health & social care outcomes and services.

There is a need to commission longitudinal impact studies designed on sound theoretical principles. The evaluation of programmes in their entirety following whole cohorts of students over time into practice is fundamental. Without this we will fail to build on the existing evidence

or to find out the extent of the sustainability of any educational impact (18). Such studies must inform a better understanding of how students deal with the existing environment on entry to practice and how attitudes and knowledge acquired in the pre-registration period convert to practice behaviour. However, this does raise a key question about what is meant by long term outcomes.

There are no quick fixes. It will take another 10-12 years to evaluate rigorously the impact of pre-registration interprofessional learning as new courses in their entirety unfold. Clarity about the intended outcomes of these interventions will be vital given the complexity of variables that impact upon such changes.

There is a clear need to identify sound theoretical underpinnings and to move beyond the study of student experience and satisfaction. The focus must be around the themes of student and new practitioner trajectories in response to interprofessional learning and the influence of such learning on multidisciplinary team working. As the Department of Health takes forward its commitment to see common learning in all pre-registration programmes by 2004, so the need to gather baseline and interim data on student cohorts becomes more urgent. Study designs will need to make use of multiple methodologies to address issues and outcome that are, to a large degree, psychosocial in nature and heavily influenced by institutional and practice contexts.

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