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# Australian Clinician's Views on Interprofessional Education for Students in the Rural Clinical Setting

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## Abstract

*Background:* Collaboration between education providers and clinical agencies to develop models that facilitate cross-disciplinary clinical education for students is essential to produce work-ready graduates.

*Methods and Findings:* This exploratory study investigated the perceptions of and opportunities for interprofessional education (IPE) from the perspectives of 57 clinical staff from three regional/rural health services across Victoria, Australia. Data were collected through a semi-structured questionnaire, interviews, and focus group discussions with staff from 15 disciplinary groups who were responsible for clinical education. Although different views emerged on what IPE entailed, it was perceived by most clinicians to be valuable for students in enhancing teamwork, improving the understanding of roles and functions of team members, and facilitating common goals for patient care. While benefits of IPE could be articulated by clinicians, student engagement with IPE in clinical areas appeared to be limited, largely ad hoc, and opportunistic. Barriers to IPE included: timing of students' placements, planning and coordination of activities, resource availability, and current regulatory and education provider requirements.

*Conclusions:* Without the necessary resources and careful planning and coordination, the integration of IPE as a part of students' clinical placement experience will remain a largely untapped resource.

*Keywords:* Students; Interprofessional education; Clinical placements; Collaboration; Clinicians; Rural

## Introduction

In Australia, there is an identified need to address the shortage of healthcare professionals by increasing undergraduate student numbers and improving the quality of clinical placements to promote students' work readiness upon graduation. Traditional approaches to providing sufficient quality clinical experiences for increasing numbers of students are no longer sustainable. Collaboration between education providers and clinical agencies to develop clinical education models capable of facilitating quality, practice-based clinical learning experiences for greater numbers of students across a range of health disciplines is vital to suitably prepare them for graduate practice [1]. Interprofessional education (IPE) is seen as one method to enable undergraduate health professionals to learn how to practice effective teamwork [2-3]. Although IPE has been encouraged in countries such as the UK and Canada for some time, it is yet to become a focus for health professional education in Australia [4-5]. This article presents the findings of a study that sought

to explore the views of clinical placement coordinators about the feasibility of incorporating IPE into the clinical placement experience in three regional/rural health services across Victoria, Australia.

Interprofessional education involves all health professions and is education expressly intended to promote the effectiveness of a health team to support interprofessional practice (IPP) and improve the quality of care (Table 1) [2,6-7]. An understanding of different disciplinary practices and values increases interprofessional cultural competence, an identified pre-requisite for collaborative practice [8]. Optimizing use of the different skill sets of each healthcare discipline can enhance collaboration, coordination and quality of care and lead to improved patient health outcomes and safety in a wide range of healthcare contexts [5,9]. More specifically, IPE enhances communication and decreases conflict, miscommunication, and clinical errors [2-3,10].

*Table 1*  
**Definitions**

Interprofessional education (IPE)	Two or more professions learning from, with, and about each other to improve collaboration and the quality of care.
Interprofessional practice (IPP)	Two or more professions working together as a team with commitment, mutual respect, and a common purpose to improve quality of care.
Interprofessional learning (IPL)	Learning arising from interactions between members of two or more professions. This may be a result of IPE or happen spontaneously in the workplace or education setting.

Source: [11, p. xiv-xv]

Collaboration and teamwork feature prominently nationally and internationally as priorities for healthcare reform; however, it cannot be assumed that they will automatically occur without recourse to appropriate training [2,5]. In the United Kingdom, IPE is incorporated as a core component of education for all health professionals at the undergraduate level [5,12]. In Australia, IPE has been recommended but not mandated, resulting in a limited and variable uptake in undergraduate health professional curricula [12-14].

Although IPE is purportedly a cost-effective means of improving teamwork and patient-centred care [10], there are barriers to its implementation. These obstacles include: lack of government and political support to encourage the implementation of IPE, little research available to justify implementation, lack of funding to undertake IPE research, and resistance of public policy toward change [5]. There is an identified need for regulatory bodies, universities, and other education providers to work more closely with clinical agencies to develop models of clinical education that provide interprofessional learning (IPL) experiences for students across a range of health disciplines [15]. This collaboration would provide a stronger foundation on which to build interprofessional cultural competence and encourage more collaborative and responsive patient-centred practice.

## Method

This article draws on the results of a larger project that aimed to increase the capacity of healthcare organizations to accommodate medical, nursing, and allied health students for clinical placements. One of the goals of the study was to obtain baseline data on participants' ideas about the potential for and role of IPE in clinical education. An exploratory methodology was used because this approach is useful when little is known about a topic. An exploratory approach guides the research process and encourages researchers to gather as much information as possible from a variety of sources [16]. A semi-structured questionnaire comprising open-ended questions, interviews, and focus group discussions were used. The data elicited were triangulated to test the trustworthiness of the findings and to provide a better understanding of the current perception of IPE in the health services than is possible using one approach alone [17]. Ethics approval was obtained from the university and also from participating health care agencies, when this was required.

Health professionals ( $N=57$ ) from three rural/regional health services in Victoria were sampled to ascertain their views on the role of IPE in clinical education. The chief executive officers who consented to their organization participating in the study designated a local facilitator to assist with the study. The sample comprised key individuals (clinicians) identified by the local facilitator as being responsible for the management of clinical placements for each clinical health discipline group.

Once consent was obtained, preliminary semi-structured questions were circulated to these "local experts" to gather orientating data about local processes prior to the interviews. Two hospitals returned responses to the questions circulated ( $N=27$ ) (Box 1).

### *Box 1*

#### **Survey and interview questions**

- Is there any placement-related engagement with IPL/IPE?
- What opportunities are there to use IPL/IPE strategies to expand placement capacity, e.g.:
  - in the coordination/management of student placements across disciplines,
  - in the clinical supervision of students,
  - as part of the clinical debrief (of students and staff), or
  - through the use of structured IPE learning sessions while students are on placement?
- How could IPL/IPE be encouraged and facilitated?

Two members of the project team undertook each semi-structured interview with participants ( $N=51$ ). These lasted approximately 30–45 minutes. Notes from each interview were subsequently returned to participants for confirmation prior to manual coding and thematic analysis. The research team coded the questionnaire and interview data, allocating a numeric code for the hospital and an alpha code for the individual participant. All members of the team were involved in the analysis. Differences of opinion were resolved through team discussion.

Following manual thematic analysis of the information elicited from the surveys and interviews, three focus group discussions, each lasting approximately 60 min-

utes, were held with participants ( $N=30$ ) to provide feedback on the preliminary findings pertinent to their specific organization and to generate further discussion. This approach enabled the participants to confirm, clarify, question, and add new ideas to the data previously generated. Notes were taken at each focus group discussion and thematically analyzed by the team immediately afterward.

**Results and discussion**

The procedures used to collect data allowed us to explore different clinician and disciplinary perspectives regarding the use of IPE and to identify existing or potential opportunities for IPE. The participating agencies provided clinical placements for multiple education providers (range: 13–19) and multiple health disciplines (range: 11–15) (Table 2).

*Table 2*  
**List of participating health disciplines**

Allied health assistants	Audiology	Dental
Dietetics	Exercise physiology	Medicine
Medical imaging/Radiology/Nuclear medicine	MICA paramedic	Nursing and Midwifery
Occupational therapy	Pathology	Pharmacy
Physiotherapy	Podiatry	Psychology/Mental health
Social work	Speech pathology	

**Benefits of IPE**

The benefits of incorporating IPE into clinical education for patient care and preparedness for practice identified by participants—namely, developing a greater understanding of other health professional roles and functions, improving teamwork skills, and setting common goals for patient care—were similar to those cited in the literature [2,4,6].

Although participants could articulate the benefits of IPE for students, its use was sporadic across all three health services. Mental health was the only area that consistently incorporated IPE as a regular placement practice. The majority of staff expressed interest and some enthusiasm for its inclusion. For example, a pharmacist asked, “Why hasn’t it been happening forever? Pharmacists work with doctors and nurses, and yet there is no interaction—neither knows what the other does. It takes time to learn about and appreciate each other’s concerns.” In contrast, some participants were unsure of the value of including IPE as an integral part of students’ clinical placement experiences. Another pharmacist was “not sure if IPE is really necessary, as the clinical placement for pharmacy is to learn the pharmacy role, not to learn other roles.”

Despite appreciating the benefits of IPE in clinical education, several participants expressed concern about developing a balance between generic interprofes-

sional learning and students learning the necessary clinical competencies specific to their discipline. An occupational therapist explained IPE was “okay, depending on the weighting of experience spent in IPE versus learning discipline-specific skills—the majority of time needs to be discipline specific.” These comments reflect the need for maintaining professional identity, one of the principles required for IPE highlighted by Keleher, Parker, Fry, and King [18]. In addition, most participants indicated they would have difficulty incorporating IPE into clinical placements. Current arrangements for clinical placements were seen to present barriers to implementing IPE more broadly.

### Logistical issues associated with incorporating IPE in clinical placements

Clinicians expressed the belief that incorporating IPE into clinical placements would require some changes to the way clinical placements are currently organized and assessed. As one nurse identified, “Everyone says they should be doing IPL, but it can be very difficult to actually make it happen.” Although the changes that clinicians felt would be necessary to incorporate IPE into clinical placements—such as timetabling, planning, and coordination—are similar in many health services, some changes appear to be more problematic for rural and regional organizations due to limited staff, students, and resources.

Timetabling was seen as a significant barrier to IPE by many participants across all three health services. The considerable variation in the number of students and timing of placements in each health service was seen as making it difficult to coordinate IPE activities. The smaller health services indicated they would have greater difficulty in coordinating IPE due to the decreased range of students attending them. One allied health manager explained, “It is rare that students from different disciplines are there at the same time.” A doctor reported, “Timetabling is also a barrier to running an IPE session. The supervision requires structure and organization and the intricacies make it difficult.” A pharmacist indicated there was an “opportunity for student exposure to different areas, but time management can be a barrier.” Timetabling and logistics have also been identified as barriers to IPE by others [6,18]. Copley et al. [6] suggest that timetabling barriers can only be overcome by planning for IPE and building it into the curriculum.

Facilitating IPE in rural settings requires particular attention to the planning and coordination of placements because exposing students to IPE requires the participation of experienced clinicians, and in smaller health services, there are limited numbers to share the student load. Many participants expressed concern that because much of the clinical education of students was undertaken by clinicians on top of their normal case loads, they would be unable to accommodate the extra responsibility of IPE, unless it was effectively planned and coordinated and factored into their workload.

Coordination and careful planning is also required to facilitate interaction between students from different disciplines, as it does not “just happen” [2,5,19]. The clinicians in this study felt that the appointment of a coordinator to work



across disciplines to manage placement timetables and coordinate and plan IPE sessions was a feasible way of implementing IPE into clinical placements. A social worker suggested:

It would need a coordinator position to facilitate IPE, as all managers carry case loads and cover staff when absent. The coordinator could keep a spreadsheet and organize opportunities. Structured IPE coordination would allow for forward knowledge and planning for IPE opportunities.

Coordination would include keeping track of all student placements within the health service and organizing structured IPE opportunities. The coordinator would also need to be responsible for the development and preparation of learning sessions. A doctor warned, “The PBLs [problem based learning] would need to be written, and these would need to be approved by all faculties. Bureaucratic inertia might not be easy to deal with.”

Many participants noted that regulations from statutory authorities and professional bodies around clinical practice constrained the use of IPE for some disciplines. Pulman et al. [12] also reported that balancing professional body requirements was a challenge for IPE. The now superseded Nurses Board of Victoria stipulated that clinical supervision of nursing students could only be undertaken by a registered nurse [20]. This limits the ability for nursing students to engage in cross-disciplinary supervision. Several nurses suggested

being able to have other disciplines supervise nursing students other than nurses could open up placement options enormously—community, psychiatric, disability support services, etc.

Another stated,

As these places don't have Div 1 [registered] nurses, we can't have students placed there—due to regulatory board requirements for the supervision of nursing students.

A dietician expressed that

there is some capacity for supervisors to not always be from the same discipline—a lot of the placement “thing” is not clinically based, but concerned with relationships with people, time management, [and] managing your day.

Other participants supported the idea of shared supervision and recommended that “what accounts for clinical should be questioned” (mental health). Although the idea of cross-disciplinary supervision was raised, some participants held particular views that the majority of supervision should be discipline specific, again raising the issue of professional identity [18]. One participant was a “strong believer that the clinical fieldwork needs to be primarily managed by the specific discipline they are training in; the notion of clinical supervision being given by generic health profes-

sionals is foolish” (occupational therapy). Stone [5] implied that because of the wide range of health areas required to collaborate for IPE to occur, it is prone to political and institutional “buck passing.” No one profession wants to take responsibility or risk weakening their professional identity through incorporating IPE. Despite the differences in opinions, the majority of participants expressed the view that using other disciplines to teach IPE and other skills would be of benefit to all students.

Education provider requirements were also seen to inhibit IPE. Participants stated that “clinical is set by the universities who set requirements for placements—they don’t require cross discipline work, so the hospital won’t provide it” (nursing), and “[we] have to follow the curriculum, which is the priority, so if IPE was worked in with that, it would be possible to increase the opportunity” (medicine). In addition, “time is a factor, as students have to achieve learning needs and have particular competencies to master during placements. No time [is] left for IPE activities” (radiology). Inflexible course structures were identified by Williams et al. [19] as impediments to IPE. One participant suggested that “IPE could be better encouraged by universities” (speech pathology). According to Thistlethwaite [14], the need for IPE to be incorporated into healthcare courses has been acknowledged by many Australian universities, with plans to increase the amount of IPE offered in healthcare courses.

### Adequacy of resources to facilitate IPE

A lack of physical resources was identified as an obstacle for IPE, particularly the availability of space in which to run IPE sessions and access to computers and workstations. One speech pathologist stated that “IPE would require infrastructure requirements to facilitate this, space in particular.” A doctor suggested “the skills lab equipment is ideal for IPL. However, further resources are required in order to run mock scenarios in the ward areas, as moving the mannequin is not easy.” The need for space was also identified by Copley et al. [6]. Although space can be a limiting issue, using small group sizes, providing designated student learning areas, and incorporating routine cross disciplinary learning in those units and departments that students do not usually have exposure to may provide opportunities for increasing IPE without requiring large learning spaces.

Personnel were also identified as being necessary for IPE to be successfully implemented. One nurse suggested administrative staff could help support IPE: “Appropriate resources are required to get things done. One way this could be achieved is to free up clinical teachers by giving administration staff more of the administrative work.” The involvement of administrative staff to assist with the paperwork involved with accepting students, such as attending to placement contracts and viewing the outcomes of student screening procedures like “police checks,” was seen by several participants as a way of decreasing the management burden on clinical staff involved with increasing student placement numbers and freeing up clinical staff for teaching.

### Suggestions for IPE activities

Although IPE is not currently a structured component of clinical placements, the



majority of participants offered suggestions for how it could be incorporated. These included: developing a common orientation program; having an integrated clinical debrief session for students from all disciplines; facilitating group sessions, such as in-services, grand rounds, simulation scenarios; developing IPE case studies; working with other disciplines to gain an understanding of their practice; developing journal clubs; increasing the use of screening sessions; and increasing online IPE learning opportunities. Many of these activities were already incorporated into student placements in some form, although not undertaken with an IPE focus. It appeared from the identified activities that participants viewed IPE as a realistic part of student learning and not beyond the scope of current practices, if resourced adequately.

Shared accommodation and common learning spaces were also identified as means for developing relationships and teamwork between different health professional students. Several of the participants lamented the loss of nursing homes that provided accommodations for clinical placements from multiple disciplines. The use of shared accommodation was seen to have enhanced the interaction and socialization of students between disciplines and was felt to help break down interdisciplinary rivalry. Many students undertaking rural placements have to find accommodation away from their usual residence and support networks. Most participants indicated that access to shared accommodation facilities would considerably enrich students' placement experiences, mitigate their isolation, and enhance relationships between students of different disciplines.

Participants were able to articulate the logistical issues and resources required to include IPE in their clinical learning environment. What emerged from this study was the local experts' lack of knowledge of other student placement activities within the organization and the volume of repetition and duplication attached to individual disciplines. Currently, each discipline deals with multiple education providers, negotiating multiple contracts, providing multiple orientation sessions, multiple preceptor training programs, and multiple debriefing sessions. The administrative duplication associated with placing students from multiple education providers across multiple disciplines has been given scant attention in the IPE literature—perhaps because elsewhere healthcare agencies are not confronted with the complexities associated with servicing so many education providers and disciplines. By participating in this study and engaging in the focus group discussions with interdisciplinary colleagues, these rural clinical placement coordinators were able to recognize efficiencies and opportunities for IPE that have the potential to build clinical placement capacity and, in the process, harness the learning opportunities available within the organization.

### **Limitations**

Data collected from the interviews were validated by individual participants, though no attempt was made to test this information with others from the same discipline or department. Therefore, it is possible that different perspectives on student placements may have emerged, had a broader constituency been sampled. However,

participants were the key persons identified by the local facilitator as having responsibility for student placements and were therefore likely to have been in the best position to offer informed views on the issues raised. Some caution should be exercised in interpreting the results of the interview data drawn from each agency. It should be noted that only staff responsible for undergraduate (U/G) pre-professional registration student placements were included in the study. Placement and student information from students undertaking post-graduate, allied health assistant training, or work experience was not included. This study was also limited by including self-reports from a small sample of health services in one state of Australia. This could lead to bias in the reporting and decreases the ability of the results to translate to other health practices.

### **Conclusion**

This study ascertains the understanding and attitudes of clinical staff involved in coordinating rural undergraduate clinical placements in Victoria, Australia, toward the inclusion of IPE in clinical placements. It elicits their perceptions regarding the complexity, barriers, and impediments to IPE being successfully implemented. This exploratory study was limited to investigating the perceptions of staff from 15 disciplines employed in three rural health services across Victoria. However, it clearly demonstrates that the clinicians from most disciplines involved in the coordination of clinical or field placements support, in-principle, the value of IPE as part of student learning and preparation for clinical practice. Nonetheless, pharmacists and occupational therapists from one of the three participating organizations displayed some opposition to the concept of IPE being incorporated into students' placement experiences.

Consistent with other findings, improving teamwork, developing a greater understanding of professional roles and responsibilities, and setting common patient goals were seen as the main benefits of incorporating IPE into clinical education. Nevertheless, with the exception of the more senior staff, awareness and knowledge of IPE appeared to be generally low across the three participating health services. Staff education about IPE is required to ensure that all disciplines have a common understanding of the concept and to create an environment in which the potential of IPE to enrich students' placement experiences and improve their work readiness for interprofessional practice can be realized.

Participants were confident that appointing a central figure to coordinate and plan for IPE would enable implementation in the rural clinical setting. These findings have implications for policy and practice. Incorporating IPE into clinical placement requires commitment from health services, education providers, and regulatory bodies. Formalization and development of a more systematic approach to this process would allow IPE to be delivered more efficiently and emphasize the importance of the role of interprofessional teams in promoting patient-centred care. Incorporating IPE as part of the curriculum places it as a focus for both the education providers and health services. Although not currently a focus of education in Australia, as curricula are reviewed, IPP should be incorporated as part of the basic

professional skills required. Sufficient resources to develop and implement IPE are required. Such change also requires the appointment of designated staff able to explain the benefits of more collaborative partnerships and translate these into meaningful clinical placement learning opportunities and experiences for students.

Participants identified a broad range of IPE strategies consistent with adding value to students' placement experiences and were keen to participate in IPE, provided existing barriers were addressed and clinicians' workload did not increase. In this study, IPE was seen by participants as "additional" to clinical practice. Without champions, sufficient resources, and support, IPE is likely to remain a theoretical concept that many students will not experience in the practice setting until after graduation. Further research, across metropolitan health services and integrated community-based services, should be undertaken a) to establish further opportunities for IPE and b) to develop cross-disciplinary models of clinical supervision to gauge the potential impact IPE could have on building placement capacity and better preparing graduates for collaborative models of practice.

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### Abbreviations

IPE – Interprofessional education

IPL – Interprofessional learning

IPP – Interprofessional practice

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