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Student placements in rural health services: developing an interdisciplinary model

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Background

The provision of student experiential learning in interprofessional (IP) collaboration is a critical but challenging area of student placement provision, across the disciplines of allied health, nursing, and medicine[1,2,3]. In rural areas IP provision is often superseded by the struggle to attract placement students and capacity to deliver high quality learning outcomes within the specified discipline[4,5]. The focus of rural services is ensuring student placement provides opportunities to acquire the knowledge, skills, and professional behaviours essential for a professional degree and practice as emerging practitioners[5].

Student placement models have evolved to incorporate IP education (IPE) to learn and increase skills in collaboration. Three interdependent elements stand out in these models, interdisciplinary (ID) approaches, supervision arrangements, and research understanding and experiences (to increase translation of evidence to practice)[6,7]. Models must firstly fully appreciate IP team collaboration and the importance for students to understand and develop this ability.

Research suggests that many students are inadequately prepared for IP team practice[8]. IP teamwork involves developing skills in facilitating collaboration namely[2,9].

- exchange of information through shared discussion
- learning from peers and collective problem-solving
- engaging in activities conducted in IP groups
- respectful integration of experience between professionals
- active involvement in clinical learning in IP teams
- applying evidence-based practice and identifying (research and practice) synergies across disciplines.

IP collaboration within health care teams is an enabler for delivery of high quality care which results in better client outcomes across community, primary, and secondary care settings[1,2,8]. To construct an enabling environment to provide IP collaboration requires moving IPE out of the artificial environment of the lecture room (often now virtual), and into the real word context of service delivery and the complex nuances of IP practice dynamics[2].

This paper explores IPE approaches from a rural health student placement perspective in the primary healthcare setting. Presented as a case study the paper describes the work of one small Victorian rural health service to consider, through student placement models, key factors of: future workforce needs; strengthening rural models of care (MoC) which are dependent on IP teamwork and; potential enablers for the efficient and effective functioning of care teams involved in rural MoC.

Introduction

The allied health workforce is critical to supporting rural communities primary and secondary care needs[10,11]. They provide services to enhance and maintain function and independence to individuals across the lifespan in a range of settings including hospitals, private practice, community health, and in-home care[10,12]. These professional disciplines as care teams, join general practitioners and nurses to work across the health continuum in rural MoC (MoC).

A 'model of care' is a multifaceted concept, which broadly defines the way health services are delivered. It can be applied to health services delivered in a program, service or whole of region; targeting a person, population or patient cohort[13]. A MoC aims to provide: the right care; at the right time; by the right team; in the right place.

The efficiency and effectiveness of MoCs in rural areas are impacted by the capacity of the rural health workforce. Recruitment and retention of allied health practitioners to positions in outer regional, remote, and very remote areas in Australia is problematic; often resulting in limited access to specific care disciplines in some communities[10,14]. Current research has highlighted that workplace conditions, career advancement, and social and personal factors are a key determinants' in attracting and retaining staff in rural health settings[14]. Encouraging students to *'go rural'* has been a strategy to address rural workforce shortages[11,14]. Interdisciplinary (ID) approaches are integral to these concepts.

Rural allied health team arrangements are continuously evolving to be responsive to complex care and MoCs designed to meet community needs. Approaches are designed to assist with care team 'practice dynamics' and the functioning of models. Terms such as interdisciplinary, multidisciplinary, and transdisciplinary have been used interchangeably to describe these collaborative team approaches. There are often distinctions between these approaches dependent on the service setting.

Interdisciplinary functioning aims to integrate the knowledge of two or more disciplines to form an innovative (holistic) solution[15]. Interdisciplinary team approaches provide all members with knowledge and skills from their disciplinary expertise whilst incorporating views from other team members[9,15]. Basically, working together across a range of theoretical perspectives and methods to generate solutions in complexity, rather than being limited from a single discipline approach.

Whereas, multidisciplinary modalities can remain single discipline focused. Practitioners come together from different academic traditions to express their practice view[16]. This can occur in case conferences where each perspective is aired but the opportunity to merge expertise is not facilitated and a gap therefore remains in the 'solution' generation.

Transdisciplinary approaches are more esoteric and therefore challenging to translate directly into the clinical practice setting without a bridging step. This approach 'transcends' disciplines and

integrates other sources of knowledge. It suits theoretical development and the research environment, which must then be tested in the real word context [17].

The emerging interdisciplinary (ID) student placement model is now explored through case study description. The case study approach is useful for contemporary events to examine how and why research questions[18]. In the current study the method utilised included examining the literature; health service records and processes; student placement documents and feedback (survey and interview); student placement site supervisor's knowledge, experience, field notes and discussions, academic institutional documents (such as learning guides), and partner and community scoping.

Context

The case study site is a small rural health service located in the local government area (LGA) of Moira Shire in north-east Victoria. Numurkah District Health Service (NDHS) is one of four (4) health services in the Shire, supporting the communities of east Moira. The Numurkah Township population was 4,470 (2016 Census), the total Moira LGA population was 29,112 (2016)[19]. The nearest major health centre (and large regional service) is Goulburn Valley Health (GVH) at Shepparton (a 30 minute drive).

NDHS officially opened in April 1957 as the *Numurkah and District War Memorial Hospital*. In line with progressive development of health service delivery and changing community needs the hospital has grown and moved forward. One of the most significant events came in 2012 when the hospital building suffered major damage due to floods in the district. Funding from state and federal governments, community fundraising, and hospital board of management contributed to a new integrated health service with state of the art facilities commenced operating under the one roof in 2015.

An onsite, privately owned general practice (G.P) clinic and dental clinic, make NDHS an integrative, accessible community hub. Presently NDHS employs approximately 210 staff across various departments. The range of services and programs include; a 16 bed acute ward, theatre, radiology, urgent care centre, district nursing, primary health, palliative care, and two residential aged care facilities. Primary health encompasses: central primary care intake and assessment, chronic disease support (including diabetes education); health promotion and prevention; allied health, including dietician, occupational therapist, physiotherapist, counsellor, psychologist, and allied health assistant. These positions are funding dependent which determines equivalent full-time (eft) allocations. All disciplines cover the 16 bed acute ward, outpatient community referrals, and aged care facilities.

The NDHS education environment for allied health and nursing consist of a clinical nurse educator and allied health educator (0.9 eft and 0.2 eft respectively). These educators are responsible for ongoing staff education and student placement learning needs. Coordination of student placements occurs through liaison with education providers via the web-based system, Placeright, a Victorian Department of Health and Human Service (DHHS) initiative[20]. Placeright provides a consistent and secure mechanism for managing student placements, ensuring optimal learning environments, and meeting OH&S requirements. It supports all 88 Victorian public health services and 86 education providers across Australia[20].

NDHS is currently moving into a time of innovative change (and challenge) with the proposed merger of three of the small rural health services in Moira Shire; Nathalia, Cobram and Numurkah (NCN). The *NCN Strengthening Partnerships approach,* aims to improve access to care for local

communities. Historically the three services operated as 'practice siloes', being managed as separate entities[21]. The creation of a combined NCN governance and management structure is an opportunity for staff career advancement opportunities, and for the NDHS student interdisciplinary placement model to be trialled, evaluated, and reviewed before being implemented across the partner sites.

Student placement challenges

As a small rural health service there are different needs involved with clinical or research/project based placements. NDHS has been actively involved with student placements for enrolled and registered nurses for a number of years. Traditionally allied health placements were not occurring due to; staffing numbers, placement coordination logistics, and minimal networks with educational providers. Many rural allied health positions are part-time and often staff can be the sole clinician for their discipline. This leads to lack of time and resourcing to support students, and adds burden to the clinician's already busy role.

The rural context has its own unique challenges; climatic events such as drought and flood, economic impacts of rural business collapse, and ongoing challenges with service access and availability[22,23]. Rural communities turn to the local health service for support and solutions when challenges arise, highlighting the importance of strategic planning to meet community needs.

Reinvigorating student placement

At NDHS a partnership had emerged as a result of two recent appointments (research coordinator and allied health clinical educator) at the health service. The allied health educator role emerged in late 2017 following invitation, support, and funding through *Going Rural Health* (GRH), an initiative run by University of Melbourne, the University Department of Rural Health (UDRH). Their programs have been developed to tackle the issue of rural workforce shortages [24]. GRH supports students enrolled in a nationally recognised nursing, allied health, or other health science undergraduate or postgraduate degree at an Australian university. NDHS was identified as a site to employ an allied health educator as a way to further utilise the integrative facilities it has, provide staff with further career development opportunities, and promote working in rural practice by offering high quality rural health placements to allied health students.

The research coordinator role is similarly a University of Melbourne, UDRH initiative. The position is part of the Rural Health Academic Network (RHAN)[25]. The network co-locates academics in rural health services to support the ethical governance of research and build capacity to embed an evidence based approach into practice. RHAN has been operating across north-eastern Victoria for 12 years, with projects and research reflecting the diversity of rural health needs and priorities[25]. RHAN coordinators work closely with their respective health services and their communities. NDHS as a new partner to the network have embraced the additional academic research support and University collaboration.

The research coordinator and the allied health educator roles have overlapping and reinforcing responsibilities to build workforce, evaluation, and research capacity whilst, supporting evidence based practice and translation of research to practice. The partnership identified early the challenges for student placements in small rural health services. Hence, the exploration of a placement model which is valuable within the small rural health service setting.

Placement results

Since the appointment of the allied health educator role, as of August 2018 NDHS has increased allied health placements to n=5 (previously 2016, n=1; 2017, n=1). Resources have been designed to promote placement learning opportunities. Networks internally within the organisation and externally have been strengthened, including a new partnership with the local area Department of Education. Processes and awareness is being developed for an interdisciplinary approach to supervision for better utilisation of the range of skills, knowledge, and experience available at the service and in the community. The many benefits that students can contribute to the service and the community are also being explored and highlighted in the process of opening placement learning opportunities. Students and staff feedback has been encouraging in relation to placement experiences at NDHS;

> "It has been great being able to meet with the allied health educator each week." **Fourth year Dietetics student.**
>
> "Just thought I'd let you know how good today's Cultural Competency workshop was! I would highly recommend it for future students completing placement around this area if it runs again! Thanks for signing me up for it too, I learnt a lot more than I expected and it was great to hear about their own perspective on how to respectfully treat Aboriginal people in health settings." **Fourth year OT student.**
>
> "I've enjoyed supervising my first student. Sharing the placement has worked well." **OT staff member.**
>
> "I would definitely consider a job in a rural area after this placement". **Fourth year Dietetics student studying in a metropolitan area.**
>
> "I can see the benefit of joint nursing and allied health debrief sessions. It is great that we can zoom in with other students in the region". **Third year community nursing student.**
>
> "It has been a real asset to having the students here. They have obtained such valuable data that we can continue to use". **Health promotion and prevention staff member.**

Emerging model

The aim of developing this model is to move from student placement as an operational activity which is at times reactive, to a proactive approach incorporated within strategic planning. The model intends to encompass and combine the skills set of the various allied health, nursing, and education staff to enable NDHS to offer a positive and comprehensive rural placement experience, while also trying to prevent staff from feeling overwhelmed by the task of supervising students.

Student numbers in the primary care setting have significantly increased with 20 students in total completing their placement at NDHS in 2018, and presently 13 students are scheduled for 2019. The model recognises that effective student learning occurs in multiple contexts and modalities, and that placement experiences should not be limited to just the profession the student is studying.

The benefit of students engaging in IP teamwork both in the health setting and the wider community enable a true reflection of the diversity of rural practice to be explored by students. Career diversity was a common theme raised by 3rd yr registered nursing students completed their community health placement as part of their primary healthcare nursing subject at NDHS.

Through consultation and collaboration, the placement was designed to be completed as a project and students were provided with a research opportunity. This design enabled greater diversity than just placing students into the primary care services. Various individuals of different discipline backgrounds from NDHS, RHAN, GRH, Department of Education, and Goulburn Area Nurse Unit supported the students during the placement. The main objectives of the project were to:

- facilitate collaboration across academic, health, and education settings;
- provide a primary care learning opportunity for third year, student nurses and;
- explore health literacy amongst rural young people.

In total 12 students completed the placement in 3 groups of 4 students over 2 weeks per group. Feedback from the first group was taken on an implemented in the second group and so forth to further shape the placement experience. Student nurses all expressed that the placement was different to their expectations, previous placement experiences, and from what had been taught in the university classroom. Students identified that the placement experience had highlighted the diversity and scope of practice for nurses and the importance of health promotion.

> "It was very good, very engaging and especially in the early stages of nursing seeing the importance and identifying their importance of nurses in the primary care role. How much of an influence they can in the development of children and in their growth and development. Also how primary care nurses are able to tap into the literature and then connect that into the school and also into the communities." **Student Nurse when asked what they thought of the placement experience.**

Networking and collaboration along with community involvement and interaction was at the forefront of the placement experience.

> "I think it was very important to do this, to have the nurses coming in, because it gives the nurses a different perspective. Different from the usual weeks in just hospital based work. It opens up a different avenue for them to explore. In itself it is positive." **School Nurse at a collaborating site.**

Students were provided with diversity and opportunity in accessing the community and understanding how rural communities work. This included; access to local primary and secondary schools; school nurses; neighbouring rural town health services; community events such as the local agricultural show, *Restart a Heart* education day, and *Foodbowl Festival*; and community groups such as the local State Emergency Service (SES).

Development of new skills such as examining population characteristics and school data, as well as consolidating research skills such as literature searching were other outcomes students obtained. Data on local primary and secondary school student's health literacy and attitudes were acquired, and now provides stakeholders involved with a clearer picture of local health perceptions and assist in strategic planning and prioritising.

Progress of model development

Reflection and learning to date has provided an opportunity to refine the model. Examining previous research has additionally been informative. The literature evidenced several elements common to the current exploration and context. These elements were combined with the identified NDHS requirements and developed into seven (7) broad implementation domains:

1) interprofessional education (IPE),

2) interdisciplinary (ID) placement,

3) interdisciplinary (ID) supervision,

4) interdisciplinary (ID) research,

5) stakeholders and partners,

6) community engagement and,

7) health service strategic planning.

An implementation framework (see Appendix 1) supports the emerging model and sets out for each domain; actions, potential benefits and outcomes, in addition to considering risks and barriers. An action research approach continues to improve this broad framework, as the research coordinator and allied health educator applied findings of direct practice relevance in real time. The action research cycle is particularly complimentary to reflection, participation and partnership[26,27]. Findings from each cycle inform and shape the next iteration[26]. To progress this broad framework will require further research, planning and continued monitoring and evaluation.

Policy recommendation

This model has great potential, for students of any practice discipline in social or health care. It will be strengthened by integrating community engagement and strategic health planning relevant to each unique context. Current research regarding interdisciplinary practice has been criticised for a single focus on learner satisfaction rather than adding to a body of theoretical knowledge[27]. This point supports and leads to our policy recommendation of further research into developing place-based student placement models. Similar to the findings of Cosgrave and colleagues[14,23] 'place' is an influencer across rural health workforce recruitment and retention. Enabling meaningful connections through ID approaches in the critical time of student field placements will enhance learning experiences in rural settings.

Conclusion

The interdisciplinary team of social worker (research coordinator) and occupational therapist (allied health educator), are working to promote rural student placement opportunities and explore ways to overcome the barriers. The essential strategic element of this emerging model is understanding complex community needs and incorporating community engagement. Moving forward the team are now refining implementation from experience and research.

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Presenters

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Rochelle Barbaro is employed at Numurkah District Health as the Allied Health Educator via a grant through Going Rural Health, which is an initiative run by Melbourne University Department of Rural Health. Rochelle's background is as an occupational therapist with a particular focus in community paediatrics in rural area.