

Interprofessional learning in rural south-east New South Wales: an opportunity to collaborate across educational institutions, health disciplines and health services

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Daniel Heard is a final year medical student at the Australian National University Medical School. Born in rural north Queensland and moving to Canberra as a teenager, as an undergraduate he completed a Bachelor of Science/Bachelor of Laws majoring in immunology and genetics at the ANU. He then worked for several years as an IT consultant to government, creating legal decision support systems to assist organisations to comply with complex areas of law. One of the systems he designed is the Australian Department of Immigration's international award winning 'Visa Wizard', which is used by 2 million people a month to determine the Australian visa they should apply for. He has also worked as a freelance science journalist, writing pieces for the Australian Academy of Science's 'Nova—science in the news' series and 'Velocity', the Australian Nuclear Science and Technology Organisation's online science magazine. Dan chose to study medicine as a graduate out of a desire to return to his primary love academically, the biological sciences, and to be able to help people in a less abstract way than was possible in the field of IT. He has just completed a year as a rural clinical student in Bega, NSW where he enjoyed the breadth and hands-on nature of rural medicine, the unique and resilient patients he encountered and the stunning natural environment of the NSW South Coast. Dan enjoys physical pastimes and has competed in judo and represented the ACT as a weightlifter at national championships. He currently spends his spare time SCUBA diving, running and cooking.

John Sullivan is in the final year of an MBBS at the Australian National University. He grew up in a rural areas (Parkes, NSW), moving to Canberra for work and study. Clinically John has a strong interest in general practice and the rural practice of medicine, strengthened by his experiences completing the entirety of his third year of medical school in Bega district in NSW, under the auspices of the ANU medical program in that town. During that time John completed the interprofessional learning project that forms part of the basis of his group's presentation.

Abstract

The Health 'Hubs and Spokes' Project is a collaborative partnership between the Australian National University (ANU) and the University of South Australia (UniSA) aimed at increasing opportunities for ANU medical and UniSA pharmacy, allied health and nursing students to participate in interprofessional clinical placements in rural and remote settings in SE NSW, the Spencer Gulf region of South Australia and the Northern Territory. Students are assigned to their usual supervised clinical placement with some time allowed for working together in IPL teams comprising ANU/UniSA students.

The Project aims to achieve a win-win-win situation for the students, supervising professionals, and for the local community. Local health professionals work together to develop meaningful IPL learning activities for the students; the more these activities can demonstrate real value for the local context, the higher 'return' for all involved. One such experience involved UniSA Physiotherapy and Occupational Therapy (OT) students joining ANU rural stream medical students at Bega on the NSW South Coast in 2010.

Two teams, combining the UniSA allied health and ANU medical students, met for a minimum of one half day per week during the UniSA students stay, under the guidance of a local 'IPL Facilitator'. The teams worked on a project based around difficulties arising when adults with an intellectual disability accesses mainstream hospital facilities. The stimulus for the project was an actual case of an intellectually disabled woman presenting for an elective hip replacement. One team developed an educational presentation for hospital and other medical staff with practical tips on dealing with patients with intellectual disability, specifically in the settings of obtaining bloods, imaging, and undergoing anaesthesia. The other team developed a discharge resource for the patient consisting of post operative rehabilitation instructions in an appropriate social story format.

Choice of the IPL team activities was influenced by the existence of Tulgeen Disability Services, a local facility which provides support to people with disability from across the Bega Valley Shire, and existing good working relationships between Tulgeen and the local node of the ANU Rural Clinical School. Tulgeen has long experienced difficulties arising when its clients access mainstream health services.

This paper presents the results of our IPL experience in Bega, discusses the successes and difficulties encountered, and our evaluation from organisational, educational and student perspectives. We hope that it will be the forerunner of many future IPL activities involving ANU medical students.

Introduction

There is an expectation that health professionals will work together effectively in teams once they graduate, despite the tendency to learn within their professional silos throughout their training. At the same time there is increasing evidence of the benefits of students learning together and for the positive impact of interprofessional learning (IPL) activities on learners' capacity to work together¹.

Despite repeated comment on the scarcity of IPL programs in Australia compared with developments elsewhere^{2,3}, it should be noted that other such programs have been initiated before in rural Australia. These include RIPE (Rural Interprofessional Education Network)⁴ in rural Victoria and RIPPER (Rural Inter-professional Program Emergency Retreat) in Tasmania⁵. RIPPER offered simulated learning activities, thus allowing practice in a 'no risk' environment while still using of authentic rural learning examples. RIPE consisted of 2-week rural clinical placements between student volunteers from Victorian health professional schools. These students undertook a community-based project relevant to local needs, and despite the time-limit, demonstrated that significant, small-scale achievements were possible⁶. These programs were useful models for the Health 'Hubs and Spokes' Project.

Health 'Hubs and Spokes' Project

The Health 'Hubs and Spokes' Project is a collaborative partnership between the Australian National University (ANU) and the University of South Australia (UniSA). Third year ANU medical students and final year UniSA pharmacy, allied health and nursing students participate in interprofessional clinical placements in rural and remote settings in SE NSW, the Spencer Gulf region of South Australia and the Northern Territory. The Project aims to boost rural health workforce capacity through formation of student learning teams to undertake shared practical clinical placements, and is funded by a DEEWR Diversity and Structural Adjustment Grant.

A requirement of Health 'Hubs and Spokes' was that the IPL experience would be practical, equip students to engage in interprofessional practice in clinical settings, and encourage graduating students to consider working in rural and remote areas. Thus the associated IPL activities needed to be firmly embedded in the local rural context. We considered the benefits of using simulation for practicing and developing skills, but wanted our students to gain experience using real local rural issues in association with one of their regular clinical placements.

Given the current workforce shortages in rural areas (the rationale for the rural focus for the Project), it was important that the IPL clinical placements did not result in substantial additional workloads for those supervising students in their clinical placements. For this reason we employed a local IPL Facilitator to meet weekly with the student teams and guide the IPL process.

Establishing IPL teams in rural SE NSW

Creating the IPL team experience required collaboration on a number of levels.

Initially, representatives across all the disciplines from the ANU and UniSA agreed on joint learning objectives and guidelines for the IPL clinical placements. The timing, length and overlap between clinical placements for each discipline and the availability of the relevant discipline specific clinical supervisors dictated whether it would be possible to form IPL teams at each location. Students were assigned to their usual supervised clinical placement with some time allowed for working together in ANU/UniSA teams.

Before the UniSA students arrived, the local health professionals who would be supervising the students met with the IPL Facilitator and ANU academic coordinator to identify potentially useful, locally focused IPL project

topics or issues for the students to work on. In this way the students could engage in a project for which they would not only be learning in a rural context but also 'giving something back' to the community. Once the students commenced, they were to be given a high degree of autonomy over how they would approach the topic, thus allowing them to develop ownership of the project.

Aim

The aim of this paper is to describe our IPL experience in Bega on the south coast of NSW, and present our evaluation from organisational, educational and student perspectives, including the successes and difficulties and recommendations for the future.

The context

Approximately one quarter of medical students at ANU spend the whole of third year in rural placements in SE NSW. One node of the Rural Clinical School is located in the Bega Valley. The long term rural students were expected to take part in IPL activities. Two medical students were available at times that coincided with that of UniSA OT and physio students who had accepted undertaking one of their clinical placements at Bega. The available number and mix of students suggested the formation of two small IPL teams.

Choice of IPL activities for these teams was greatly influenced by two factors: the existence of Tulgeen Disability Services, a local facility which provides support to people with disability from across the Bega Valley Shire; and the existing good working relationships between Tulgeen and the local node of the ANU Rural Clinical School.

Tulgeen Disability Services has long experienced difficulties when one of its clients access mainstream health services. In particular these difficulties arose when an adult with intellectual disability and a short attention span has to wait for a long time in a waiting room or is required to undergo a non- familiar and thus frightening procedure, such as MRI. In the past this has led to panic and uncontrollable behaviour necessitating cancellation and rescheduling of the procedure under general anaesthetic.

The IPL Project

In collaboration with Tulgeen, a client with an intellectual disability who was booked to undergo surgery at Bega Hospital was identified. This provided a concrete starting point for the project, while still allowing the students latitude to decide exactly what it would be about.

The proposed project was developed to address the difficulties arising when an adult with an intellectual disability presented at mainstream hospital facilities for surgery. The client was a middle-aged woman, P*, with a brain injury acquired during childhood who needed hip replacement surgery for a severely osteoarthritic hip.

The two IPL teams groups identified two separate tasks:

- The first team (a medical and an OT student) was to provide suggestions for hospital staff on how to effectively communicate with the patient and minimise her distress during the perioperative period. This team developed an educational presentation for hospital and other medical staff with practical guidelines for dealing with patients with intellectual disability, specifically around inevitable hospital situations such as performing medical imaging, administering anaesthesia, managing the client on the ward and taking bloods. This package was presented at hospital grand rounds and at another hospital meeting.
- The second team (one each of medical, OT and physiotherapy students) created educational materials for P* to take home about post-operative care of her hip that were customised to her level of understanding. This resource could then be used by Tulgeen staff for one to one work with the client.

Following the IPL placements, feedback was collected from the students, supervisors, the facilitator, and key local organisations involved in the IPL learning process. These are presented below as observed from different perspectives.

Outcomes

The organisational perspective

- **IPL project host organisation:** Tulgeen Disability Services (TDS) provides in-home support for people with disability with a specific focus on developing independence, managing and accessing health care and being a part of the community. In the past, Tulgeen clients faced great challenges particularly when accessing hospital for emergency consultation, day surgery and/or long term surgical admission. For some, unfamiliar environments, routines and care arrangements can be a daunting experience—in particular hospital care. As a result, clients become fearful of contact with hospital staff, behaviours may spiral, become challenging and may result in socially inappropriate outbursts.

Involvement with the IPL Program proved to be an invaluable and meaningful experience. The opportunity for TDS support staff to become part of this project made it possible for valuable and meaningful interaction with medical practitioners and hospital staff. This sharing of knowledge and responsibility resulted in a reduction of pressure on support staff as the patient with disability was well informed, prepared and comfortable about the upcoming procedure. Medical professionals involved in the process also benefited by being educated in not only the needs of the person with disability, but the critical nature of preparation and follow up planning which alleviated the fear, stress and possible complication arising from the lack of communication with the patient with disability.

The project enabled one to one interaction between the medical, OT and physiotherapy students, the person with disability and their key worker. This interaction created awareness among hospital health professionals and paved the way for support staff to liaise with and assist in meeting the patient's needs.

- **Educational host organisation:** It was important to be mindful of the fact that ANU medical students already had a heavy workload, and by the time of the IPL project had established a working routine which enabled them to meet the demands and requirements of the third year of their studies. The IPL project was both optional and extracurricular.

There was some value in the project from mainstream health services better understanding how people with intellectual disability interact with others, and interact with other organisations. As a result of their participation, the links between the TDS and ANU Rural Clinical School were further strengthened, as were those between TDS and a local government agency which hosted one of the OT students.

Ultimately such projects have the capacity to contribute to local medical workforce succession planning. ANU students have now been coming to Bega for some 7-8 years and some of the earliest students are now coming back to the community as RMOs and GP registrars. We look forward to the day when they start contributing to the permanent medical workforce as rural GPs and Specialists. We hope that the allied health program can similarly develop to provide the rural OT's and Physiotherapists of the future. (It should be noted that one of the UniSA students was invited to think about going back there to work; and another has made enquiries about future employment in the area.)

The educational perspective

- **Educational host organisation:** The students developed two excellent projects that had practical local application in the areas of education of the local medical workforce and providing a useful post operative resource to a Tulgeen client.
- **Allied health supervisors:** Being involved in IPL provided an opportunity for the students to interact with other disciplines and learn about their areas of expertise. It also enhanced the students' ability to solve problems using a team approach.
- The **UniSA allied health students** noted the value of:
 - being exposed to an experience (ie. TDS) they were not usually exposed to;
 - working with the medical student in a context that was not treatment planning;
 - the opportunity to demonstrate their own professional role;
 - being able to work on a real project with a tangible outcome.

- **IPL Facilitator:** Participating in IPL exposed the students to local rural health staff and gave them the opportunity to collaborate to create a real life, patient-centred project that was of use to the community. The relatively short timeframe was a benefit; it meant that prioritising and time management skills were essential. This is a realistic learning experience for their future working life.

Each of the medical students provided their own reflections on the educational process.

- **Medical student, Team 1:** I participated in the inaugural year of the ANU/UniSA IPL Project with some initial trepidation. Nobody, supervisors included, knew exactly what to expect from it. Should it be academically rigorous? Practically focused? How do we produce something relevant to both medical and occupational therapist professions? The green fields of this new initiative seemed threateningly wide-open, and we had only the equivalent of two cumulative days in which to narrow down our options and produce something of value.

As the project progressed however, the things I were most concerned about turned out to be great opportunities for my OT colleague and I, providing us with just the right amount of latitude to identify a useful project and one that would give us both insight into the other's professional contribution.

We met P* during a pre-surgery home visit with a Bega Hospital OT. Attending a home visit gave me an insight not only into our client's level of communication and comprehension, but also into the process OTs follow and take into consideration when conducting home visits. This is something not taught to us formally in our medical curriculum but very valuable as practicing doctors whose patients benefit if we are aware of the services our colleagues provide.

Speaking for myself, I found it very useful to have an OT's knowledge to draw on when forming recommendations on how best to diminish anxiety for an intellectually disabled patient. This impressed upon me in a practical sense the usefulness of a multidisciplinary approach to patient care. Having reflected on the IPL project, I think this was its greatest benefit for me—to convert an intellectual understanding of the importance of multidisciplinary teamwork into a personal experience that proves it, laying the groundwork for future productive collaboration with my allied health colleagues.

- **Medical student, Team 2:** At the initial planning session I had some concerns about a lack of direction for the project as neither the students, Tulgeen staff, nor our academic supervisors had a clear vision of what our collaboration was to entail. This concern was allayed in subsequent meetings as the student group, together with Tulgeen staff, settled on producing the educational resource for P*.

With just 16 hours allocated to conceive, execute and present a workable resource, I felt that a more concrete initial project outline would have resulted in a better end product; the project conception took up nearly a quarter of our allocated time. At the same time I recognised that this limited time span and lack of project direction was of direct educational benefit to our team, as it was obviously a more realistic simulation of a real working environment than having a project concept handed to us on a plate. There was a trade off to be made between the quality of the educational experience and the quality of the project outcome. In retrospect, I feel that the short time frame actually assisted us in focusing on collaboration, division of labour and inter-professional communication.

Another valuable aspect of this project was the opportunity to interact with the challenging patient group whom Tulgeen Disability Services support. Opportunities to observe and share strategies for professional communication and interaction with patients with limited communication skills were provided that were of high educational value.

The overall experience was a positive one from an educational point of view but only time will tell if the resource we produced will be of value to Tulgeen, the hospital and future patients with intellectual disability.

Successes, difficulties and recommendations

While the students were initially concerned with the lack of direction, most eventually appreciated that this was an essential part of the process of learning to work together. The short time frame assisted them to focus and manage their time more effectively.

Some of the students and supervisors were concerned that more time was not spent working together in a multidisciplinary team with a patient case load, rather than working together on a project. While this may be useful for the participating students, it would have provided less opportunity to produce meaningful outcomes for the local community. The students who did spend time shadowing the other health professionals in their team, in addition to working together on the project, found this to be a very valuable experience. We will explore the possibility of including this as part of the IPL experience in future.

The opportunity to interact with a person with a disability was seen as an enriching and valuable experience. Students also appreciated having the opportunity to work with a real client as the focus of the project.

Although in retrospect most accepted the importance of the team development process, it took the first 2 weeks to decide how to do the project and what to do. Students were divided as to whether more time was necessary. Some noted the value of learning to work within a time frame; others felt that the four half days was an insufficient timeframe in which to research and implement a project effectively. A 6-week time frame in future would allow an initial 2 weeks for discussion and deciding what to do and how to approach the project, still leaving 4 weeks of working together.

While the supervisors noted that participating in IPL meant less time working in their own discipline, this needed to be weighed against the benefits of gaining a better understanding each others' roles and learning how to work together. Timetabling issues made involvement in the IPL team more difficult during particular medical student attachments, and these will be taken into account in future.

Conclusions

Overall, implementation of the Health 'Hubs and Spokes' Project in the Bega Valley has had a number of positive outcomes with evident benefits at both organisational and educational levels. The IPL project raised the profile of a latent local issue and offered some strategies for addressing it which further facilitated inter-service communication. There was increasing interest among participating allied health students in rural employment. It also provided an opportunity for the students to work and learn together on a real local issue in a rural context.

Although initially concerned with the amount of time it took to plan their approach, students later realised that this was an essential part of learning to work together. Allowing more time for the initial discussion and searching for direction could be valuable. All students expressed their appreciation of the valuable opportunity of working with the Tulgeen Disability Services.

Not only did students learn more about each others' roles and how to work together, but also had an opportunity to apply their professional learning to a local issue. Personal experience of working together productively is likely to lay the groundwork for future productive collaboration in providing patient-centred health care.

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