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COMMENTARY - ISSUE PAPER

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Allied health service–learning student placements in remote northern Australia during COVID-19

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Allied health services play a critical role in preventing and managing the disabling consequences of disease and injury,[1] which occur at disproportionately higher rates in northern Australia than for Australia as a whole.[2] Northern Australia supports a population of only 1.3 million people widely dispersed across 3 million square kilometres over a varied and often harsh geographical environment (cyclones, flood, high temperatures). The region includes the whole of the Northern Territory, and those parts of Western Australia and Queensland that are north of the Tropic of Capricorn. The northern Australian population includes over 190 000 Aboriginal and Torres Strait Islander people (~30% of Australia's Indigenous population,[3] most of whom live in remote communities). Aboriginal or Torres Strait Islander people have significantly poorer health status than the non-Indigenous population,[4] which makes them more vulnerable to the health and well-being impacts of disasters, including pandemics, both as individuals and as a community. Its vast size, small population and limited infrastructure mean that health service delivery in northern Australia is characterised by travel over vast distances.

Over the past decade, allied health service–learning student placements are one strategy that has been addressing a vital gap in remote northern Australian communities where allied health services are extremely limited or non-existent.[5] The ultimate intention of these services has been to pave the way for the creation of fully funded high-quality health services delivered by qualified allied health professionals that are responsive to community need.[6] Accordingly, there are examples across northern Australia where services that commenced as service-learning placements have progressed to become fully funded services, improving health outcomes through equitable access to allied health in the community.[6]

1 | STUDENT SUPPORT OF ALLIED HEALTH SERVICES

In 2019, more than 1500 allied health student placements (>9000 placement weeks) in northern Australia were supported by three University Departments of Rural Health (UDRHs) located in northern Western Australia, Northern Territory and northern Queensland (unpublished records). UDRHs support student placement activities from their home university and other universities in accordance with funding through a Federal government rural and remote health workforce development initiative known as the Rural Health Multidisciplinary Training program.[7] This initiative ensures access to quality rural and remote placements for a much greater number of allied health university students

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TABLE 1 University Departments of Rural Health (UDRH) supported student service-learning models across northern Australia in 2019 and the impacts of COVID-19 in 2020

Service location	Host organisation	2019 Student professions (no. of students; no. of total weeks of service-learning placement)	Supervision model	2020 Student placements planned (at January 2020)	COVID-19 short-term response (end of March 2020)	COVID-19 medium to longer term response (travel restrictions ease)
NARN Theme: Children developing well						
Alice Springs NT[a]	Special school	Physiotherapy (8, 64)	UDRH employed contractor	Physiotherapy (6:30) across school Terms 1-3	Term 1 students completed final week remotely; Term 2 placements cancelled due to COVID-19	Term 3 potential being monitored
Broome WA[b]	Primary schools, Preschools	Speech pathology (12; 72) Occupational therapy (58; 393) Physiotherapy (50; 250)	UDRH employed clinical educators	Speech pathology (24; 288) Occupational therapy (67; 535) Physiotherapy (47; 235)	Term 1 students completed final week remotely; Term 2 placements cancelled due to COVID-19	Term 3 potential being monitored. Negotiating potential placements via tele-supervision
Burketown, Mount Isa and Normanton QLD[c]	Kindergarten, primary schools	Occupational Therapy (10; 76) Speech Pathology (5; 29)	UDRH employed clinical educators and school employed occupational therapist.	Occupational Therapy (8; 61). Speech Pathology (9; 51). Nutrition and Dietetics (8; 16)	Term 1 students completed final week/s remotely; Term 2 placements cancelled due to COVID-19	Remote completion of quality improvement project placement offered (Occupational Therapy). Term 3 and 4 offers made and potential actively monitored
Katherine NT[a]	Primary schools	Speech Pathology (16; 112) Occupational Therapy (8; 58)	Local private practitioners contracted through the university.	Speech pathology (4; 24) in school Term 1; (6; 36) school Terms 2-4 Occupational therapy (4; 28) in Term 1; (6:43) Terms 2-4	Term 2 and 3 cancelled due to COVID-19 restrictions	Term 4 potential being monitored
NARN Theme: Young people growing up well and adults staying strong						
Broome, WA[b]	High school	Occupational Therapy (10; 60) Social work (2; 32)	UDRH employed clinical educators.	Occupational therapy (10; 60) Social work (2; 32)	Students completed placements remotely; new placements cancelled	Term 3 potential being monitored. Negotiating potential placements via tele-supervision
Burketown, Mount Isa, QLD[c]	Hospital and Health Service, local community organisations	Exercise Physiology (20; 120)	UDRH employed clinical educators	Exercise Physiology (19; 114). Nutrition and Dietetics (12; 48)	Some placements maintained but modified (telehealth, groups rather than individual programs); students from outside biosecurity area cancelled due to COVID-19	Remote QI project placements commenced for Nutrition and Dietetics in April 2020. Students from local region able to proceed

(Continues)

TABLE 1 (Continued)

Service location	Host organisation	2019 Student professions (no. of students; no. of total weeks of service-learning placement)	Supervision model	2020 Student placements planned (at January 2020)	COVID-19 short-term response (end of March 2020)	COVID-19 medium to longer term response (travel restrictions ease)
NARN Theme: Older people ageing well in place						
Broome, WA[b]	Residential aged care facility	Speech Pathology (2; 24) Physiotherapy (10; 50) Occupational therapy (20; 140)	UDRH employed clinical educators	Occupational Therapy (20; 140) Speech Pathology (12: 72) Physiotherapy (10: 50)	All cancelled due to COVID-19	Potential for re-opening being monitored
Mount Isa, QLD[c]	Community rehab, Hospital and Health Service, residential care facility	Occupational Therapy (8; 62) Physiotherapy (17; 85) Speech Pathology (9; 54)	UDRH employed clinical educators	Occupational Therapy (10; 81), Physiotherapy (16; 80), Speech Pathology (5; 38)	Final 3 wk of placement completed remotely. Placements increased for students from North Queensland with program changes including transition to telehealth, groups shifted to individual programs	Placements increased using telehealth for program delivery. Additional QI project placement offered for Occupational Therapy for remote completion
Nhulunbuy NT[a]	Regional Council Community Services	Speech Pathology (2; 16) Occupational Therapy (2; 16)	University academic re-deployed as educator; clinical education contractor; plus tele-supervision	Funding and supervision issues prevented 2020 service-learning placements. Four oral health placements (16 wk) were cancelled (July-August)	NA	Potential for re-opening being monitored
Weipa and Napranum, QLD[c]	Hospital and Health Service and Aged and Disability Services	Occupational Therapy (3; 21) Physiotherapy (2; 10 wk) Dietetics (2; 10)	Combined local allied health employed through the public health service and a university employed clinical educator	Occupational Therapy (12; 67), Physiotherapy (6; 30)	Final 2 wk completed remotely. All student placements cancelled as directed by the local hospital and health service	Quality improvement project placements, completed remotely for Occupational Therapy; Potential for Terms 3 and 4 being monitored

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than would otherwise be possible. Placement learning is the hallmark of health professions education, is mandated by accrediting bodies and has been reported as a graduate recruitment strategy for health services.[8] In addition to traditional apprenticeship placement models, service-learning models of student placement[9] auspiced through UDRHs, are an important source of learning in remote and rural Australia.[10]

Service-learning models for allied health student placements mean that students are supported to provide direct clinical services where there otherwise would not be a service. Sometimes called *student-led*, *student-assisted* or *student-implemented* services, service-learning models seek to balance the need for student learning with service outcomes that address the needs of the community in which they are located.[10] Community partners are integral to the design of curriculum within this model, ensuring beneficial outcomes to both the community and the students.[11] Service-learning models are embedded in community host organisations such as schools, residential aged care, and home and community care organisations. Evaluation of northern Australian service-learning placements[12] from the perspective of community members has highlighted three important outcomes: two-way learning between community and students, the time that students have to listen to community members and the flexibility of the service to address community-identified needs and aspirations.

Northern Australia Research Network (NARN) together with Indigenous Allied Health Australia (IAHA) is a cross-jurisdictional network conducting research to improve the health and well-being of people living in northern Australia. NARN has been active in networking, championing and researching service-learning student placements. Based on the principles of community co-design to ensure community needs are central and Indigenous ways of knowing, being and doing are privileged,[13] NARN-championed services have focused on four strength-based themes: children developing well, young people growing up well, adults staying strong, and older people ageing well in place. Underlying these themes are the IAHA and community partnerships to ensure that culturally safe and responsive practice is prioritised.[14,15] Table 1 summarises the service-learning models across northern Australia under the NARN themes and shows the sizable number of students and remote communities who have mutually benefited. Each of the services have been developed and funded in context-specific ways using a variety of models with the key principle being equitable access to services (see Table 1).

2 | IMPACT OF COVID-19 ON ALLIED HEALTH SERVICES ACROSS NORTHERN AUSTRALIA

With the outbreak of COVID-19 within Australia and the resultant public health policy response, much of northern Australia was decreed a designated biosecurity area[16,17] to restrict non-essential travel to and from remote communities. The designation aimed to prevent disease transmission given the risk of more severe outcomes from COVID-19 for Aboriginal and Torres Strait Islander people with multiple co-morbidities living in communities at significant distance from tertiary care hospitals.[17]

Service-learning placements, and decisions around continuation in the emerging pandemic, were guided by policy and advice from all levels of government and the university sector. While official advice on physical distancing and restriction of travel movements impacted on these placements, there was a flow-on effect of these restrictions that included a decline in flight availability and increase in cost, management of 2-week quarantine by students (voluntary or mandated) and risks to students of either bringing COVID-19 into a community, or contracting COVID-19 while on placement. Health services anticipated a reduction in supervision capacity and availability of safe learning environments free from COVID-19. UDRHs, as host organisations for service-learning placements, were typically conflicted over continuing much needed service provision for their community and the need to comply with official (and changing) advice that would keep their community safe from spread of COVID-19. The result was that many 2020 service-learning student placements were cancelled particularly those involving students from interstate (see Table 1). This led to substantial reduction or cessation of many allied health services particularly in communities within a designated biosecurity area, likely leading to poorer health outcomes.

Given the importance of allied health services across northern Australia, the remainder of this commentary describes the strategies implemented to support continuation of allied health service–learning placements and the corresponding culturally safe and responsive services[15] being provided across northern Australia during the early stages of the COVID-19 pandemic. Strategies that are emerging to ensure services are re-established beyond COVID-19 are also described.

2.1 | NARN service-learning activity COVID-19 response (early and later stages)

Allied health student placements that have continued in northern Australia following the outbreak of COVID-19 are being guided by three underlying principles. The first principle has been to ensure that service-learning allied health services, as an essential service, continue for as long as possible without risking disease transmission. The classification of allied health as essential services, however, was inconsistent between jurisdictions. The second principle has been to ensure students meet the required competencies to allow for timely graduation and, in turn, to allow newly graduated

allied health professionals to join the workforce, particularly the northern Australia workforce, without delay. The third principle has been to maintain relationships between universities and communities to ensure allied health services continue to be proactively responsive to community-identified need and that the momentum for the development of quality services in northern Australia is maintained.[18] Demand for services has not only continued, but in some cases increased, as restrictions on social contact have led to the loss of community connectedness.

Allied health service delivery models are now being re-created in northern Australia to address the aforementioned three underlying principles. Firstly, placements involving face-to-face service delivery have continued if they can be considered safe in line with the COVID-19 response. Although the experiences across the UDRHs in northern Australia have differed, some of the key features enabling continuation are as follows: (a) placements not in a designated biosecurity area, and therefore, students do not have to self-isolate for 14 days prior to placement; (b) students from the relevant disciplines are available from within state; and (c) students are able to drive to the placement location.

Secondly, time has been invested in redesigning placements that can be conducted remotely, yet still contribute to local service quality or directly to community well-being. Telehealth, via videoconferencing, has been offered as a viable and physically safe alternative that has been supported by government policy changes.[19,20] When connecting virtually with service recipients, it was our experience that students' value-adds compared to traditional allied health services, bringing greater time and flexibility to telehealth services. Yet, telehealth success relies on stable Internet connections and local access to set up and support services and use of personal communication devices, much of which we found to be more limited in remote and Indigenous communities of northern Australia. Furthermore, the success of telehealth is dependent on support for the service recipient, from a family member or support person, much as would be required for delivery of a face-to-face service, particularly in the context of intercultural or cognitive communication barriers. This need for support has become increasingly apparent as people's lives and routines have been disrupted with the COVID-19 response. Carers who are family members do not necessarily have capacity to support telehealth because of increased demands including multiple roles, for example, the need to also manage care for children whom might be home full time due to school closure. The challenge is to capitalise on the time and flexibility that students can offer to be able to connect with existing supports within the family and local community.

Thirdly, project-type placements built upon a community development approach have been developed to allow students whom are at a distance, to provide a service that is responsive to community needs and aspirations. Typically, this has involved students preparing evidence-informed program guidelines and resource materials for community-based workers and for future students for programs that have been prioritised by the local community. For instance, in one location (see Box 1), an intergenerational story-telling program was established between the local pre-schoolers and older people including those living in the residential aged care facility. Such community development activities continue service-learning for the student while at the same time, support continuation of services during the COVID-19 response and prepare for allied health services to be rapidly re-established beyond the pandemic. Most importantly, such activities preserve community-university relations that are critical in maintaining the momentum to ensure timely rebuilding and continued expansion of allied health services into the future.

Box 1 The continuation of an intergenerational rehabilitation and lifestyle service in a COVID-19 environment

On request from the remote community, a service-learning rehabilitation and lifestyle service had been supporting an intergenerational weekly session with 3- and 4-year-olds from a local day care attending the residential aged care service. In line with COVID-19 policy guidelines, the students will be continuing to support these sessions as a remote project placement. The project will involve a literature review on the benefits of intergenerational engagement in residential aged care and develop evidence-informed session plans that can be delivered by a staff member at the aged care facility or by subsequent students

3 | RECOMMENDATIONS AND CONCLUSION

Overall, the early stages of the COVID-19 pandemic in northern Australia resulted in significant loss of allied health student placements and, consequently, allied health services that are often the only services available for vulnerable children, adults or older people living in remote communities. Given the long-standing gaps in allied health services in northern Australia, maintaining, re-establishing and expanding service-learning student placements and the corresponding allied health services in northern Australia are critical.

As the global pandemic moves beyond the acute stage, it is imperative to initiate plans that support a timely re-establishment of culturally responsive services that empower a good life for people of all abilities by focusing on preventing, minimising and managing disabling consequences of disease and injury. Re-establishment will also consider the risks and opportunities for service-learning placements

should communities cycle through closures and re-openings to manage COVID-19 case increases. To ensure that service re-establishment into 'out of sight and out of mind,' collaboration will occur on plans to rebuild services that continue to be responsive to community-identified need and that support children developing well, young people growing up well, adults staying strong and older people ageing well in place.

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AUTHOR CONTRIBUTIONS

All authors are accountable for the accuracy and integrity of this work and contributed to all aspects of authorship as defined by The International Committee of Medical Journal Editors (ICMJE).

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