

International collaboration in advanced practice education — a catalyst for workforce sustainability and health system resilience

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International Collaboration in Advanced Practice Education: A Catalyst for Workforce Sustainability and Health System Resilience.

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Abstract

Australia faces significant challenges in providing accessible, high-quality healthcare, particularly owing to workforce retention issues and the growing complexity of patient needs. Further development of advanced practitioner roles offers a promising solution to these issues by allowing healthcare providers to work at the top of their scope and expertise. To enable this, appropriate education and training are required. This article provides a commentary on the collaboration between universities to develop a contemporary postgraduate programme for advanced practitioners in Australia.

To support the development of advanced practitioner roles, the University of Canberra in Australia collaborated with Sheffield Hallam University in England to develop a sustainable programme tailored to Australia's diverse healthcare needs. This international collaboration, grounded in 'collaboration-as-intellectual generosity' involved an open exchange of knowledge and expertise. Unlike traditional, discipline-specific programmes in Australia, the new programme is inclusive of diverse healthcare professions and contexts, empowering them to provide advanced, evidence-based care.

The partnership between the University of Canberra and Sheffield Hallam University demonstrates how shared educational goals can overcome fiscal and administrative challenges. It also exemplifies how international cooperation can drive meaningful change in healthcare education, supporting workforce development and system resilience to meet the demands of modern healthcare.

Introduction

Like the UK, Australia faces various challenges in providing accessible and effective healthcare, including workforce retention and the increasing complexity of the population's health needs (Australian Bureau of Statistics (ABS), 2023; NHS England, 2023). The development of advanced practitioner roles can potentially meet several of these challenges. The workforce is changing and becoming more mobile, with health workforce fatigue following the COVID-19 pandemic exacerbating retention issues. Generation Z seeks change, fulfilment and work-life balance more explicitly, and are prepared to change jobs more readily (Gomez et al, 2019).

Health services are also looking for innovative models of care to address barriers to costefficient, effective and equitable care. For example, the Strengthening Medicare Taskforce in Australia seeks to provide better outcomes for patients seeking primary care, minimising costs and delays, and providing improved access (Australian Government, 2022). This is heightened in an ageing population with more complex healthcare needs and as the demand on emergency departments increases, illustrated by ambulance 'ramping' as they queue outside hospitals. Access to specialist medical appointments at hospitals also faces extended delays – with patients sometimes waiting years to be seen by a consultant (Australian Medical Association (AMA), 2023). Within Australian healthcare, access disparities exist between publicly- and privately-insured patients for planned care, such as non-emergency surgery. While these pressure points are monitored in Australia, little improvement is evident in reported trajectories (AMA, 2022; 2023).

Advanced practice roles are crucial to meeting these challenges (Morris et al, 2014). Equipped with autonomy, high-level clinical expertise, and the ability to make complex decisions, advanced practitioners are positioned to lead healthcare innovation, bridge gaps in patient care, and mitigate workforce strains. By developing advanced practice educational programmes, healthcare systems can empower practitioners to maximise their skills, while encouraging retention and job satisfaction through meaningful education and training to support career paths (Clarkson and Khine, 2024).

This article explores an international collaboration between the University of Canberra (Australia) and Sheffield Hallam University (England), which was created to support the development of a multiprofessional advanced practice education programme in Australia. This partnership, grounded in intellectual generosity, aims to create a flexible, sustainable programme that meets the needs of diverse healthcare settings and practitioner backgrounds.

Case for change in Australia

The health workforce in Australia and worldwide is grappling with critical issues of retention and mobility, while the complexity of healthcare needs continues to escalate. For instance, Australia reported a 66% increase in allied health professionals between 2013 and 2022; however, in 2023, the vacancy fill rate was only 60%, with shortages affecting 82% of health professions (Australian Institute of Health and Welfare (AIHW), 2024). The challenges faced by the health workforce are particularly acute in rural and underserved areas, where shortages lead to delayed care and poorer health outcomes.

Access to consultations with medical specialists in Australia is particularly inadequate, especially for patients using public services. The gap between the initial consultation with a general practitioner (GP) and subsequent referral to a medical specialist in public hospitals is considerable. For example, in Victoria, the wait from referral to consultation is 769 days to see an orthopaedic surgeon, 454 days to see a gynaecologist, and 468 days to see a rheumatologist (AMA, 2022). This phenomenon is termed 'the hidden wait' and remains unreported, in contrast with the documented timeframe from consultation to surgical intervention, which is reported nationally and closely monitored (AIHW, 2025). The Australian Bureau of Statistics (ABS) (2022) recorded that 30.3% of patients suffering from a chronic condition deemed the waiting periods to see specialists unacceptable, citing cost and extended wait times as significant impediments to seeking care. This issue has created pressure to reassess specialist clinics and strengthen multidisciplinary teams to support clinical decision-making at the highest level of their capabilities, thereby reducing waiting times, particularly in public hospital specialist and urgent care clinics.

Globally, robust evidence demonstrates that advanced practitioners provide high-quality care. A systematic review by Saxon et al (2014) showed nineteen studies of physiotherapists in advanced roles, one of occupational therapy and five of several disciplines. They describe the roles of advanced practitioners and positive findings for waiting times and patient satisfaction. Another systematic review demonstrated that advanced practitioners contributed to accurate diagnosis, appropriate triage, and improved patient treatment outcomes and access to care. (Vedanayagam et al, 2021). Consistency in the successful application of advanced physiotherapy practitioners in specialist clinics has been supported in a systematic review by Lafrance et al (2023). Therapeutic radiography also has a growing evidence base for excellence in advanced practice (Oliveira, 2022). In the UK, nursing, physiotherapy and pharmacy, as well as diagnostic and therapeutic radiography, are among the most advanced professions in developing and evaluating advanced practitioner roles (Evans et al, 2021).

Advanced practitioners working in specialist clinics, emergency departments and urgent-care clinics at the top of their scope of practice are not new in Australia. In Victoria and Queensland, advanced practitioners have been recognised since 2005 (Harding et al, 2015) and by 2012, at least 13 healthcare services had advanced practice

physiotherapists with musculoskeletal expertise working in orthopaedic clinics and emergency departments. There is evidence for good outcomes and patient satisfaction with seeing an advanced scope practitioner instead of a medical specialist (Desmeules et al, 2012). However, barriers persist, including a lack of support for non-medical prescribing, the national poisons legislation, and the absence of a consistent and recognised education framework or curriculum (Stanhope et al, 2012; Morris et al, 2014; Morris and Grimmer, 2014). Stanhope et al (2012) and Harding et al (2015) recommended a national framework and curriculum content for advanced practitioner training.

Australia's state-based healthcare structure has led to diverse and fragmented development of advanced practice competency frameworks, education and legislation. Unlike England, which benefits from a unified approach through the NHS and frameworks like NHS England's (2025a) 'Multi-professional framework for advanced practice', Australia lacks a national standard for allied health advanced practice outside of nursing and midwifery. This fragmentation hampers workforce mobility and consistency in qualifications. While states like Queensland, Victoria and South Australia have developed their frameworks, other jurisdictions remain in progress, and in-house credentialing has become a standard but inconsistent workaround. In contrast, the UK model enables coherent career pathways and recognition across professions and regions. A nationally recognised university-level programme grounded in international standards is essential for Australia to foster a more integrated and mobile allied health workforce.

Rationale for collaboration

In England, healthcare challenges mirror Australia's, with increasing demand for specialised care and the ongoing need for workforce development to meet these demands. Advanced practice roles are thus strategically positioned to provide flexible, high-quality care, where advanced practitioners can reduce bottlenecks and improve patient access (Evans et al, 2021). These roles are supported by education and training at the master's level. In England, these are often 'generic' programmes of study in advanced practice. However, there is now an increase in the need for specialist advanced practice programmes (Clarkson and Khine, 2024); for example, radiotherapy and oncology, radiography, podiatric surgery, and ophthalmology (NHS England, 2025b).

Several universities across Australia have developed postgraduate programmes in specific fields of practice to advance clinical expertise (the opposite of England), such as paramedicine, midwifery, radiation therapy or even paediatric physiotherapy. Other programmes are client-population specific and interprofessional, such as the Master of Clinical Rehabilitation. These post-registration programmes usually have smaller cohorts than larger university entry-to-practice programmes, which supports viability. To build a programme to map the frameworks of advanced practice in Allied Health,

University of Canberra sought a programme open to a wide range of professional groups and client populations but focused on achieving advanced practitioner status.

The four pillars of professional practice

The University of Canberra aimed to develop a programme that, while highly customisable, is anchored in the 'four pillars' central to advanced practice: clinical practice; leadership and management; education; and research (NHS England, 2025a). Each pillar is integral to building a robust advanced practitioner role, while enabling specific clinical expertise development is a long-term goal. Each of these is defined by the authors' collaboration team (CS and JS) as follows:

- Clinical practice: Apply specialised clinical knowledge and skills to make complex decisions. They are responsible for managing their workload and can work autonomously
- Leadership and management: Leaders within their specialty lead improved practice through research and evaluation, knowledge translation and education, and lead teams in strategic innovation and change practices
- **Education**: Integrate clinical, educational and research knowledge to ensure holistic, evidence-based patient care. They mentor others, share expertise to build skills within their field, and are committed to lifelong learning, staying current with healthcare advancements to maintain competence and innovation
- **Research**: Through research initiatives, practitioners contribute to evidencebased practices and innovations that can improve patient outcomes and healthcare efficiency.

It is important to note that the pillars should not be seen in isolation but holistically, considering the application of the practitioner's knowledge, skills and attributes within their scope of practice.

Including the four pillars is unlike other university programmes in Australia, which have concentrated on expertise in clinical skills and knowledge, with the mandated research content for the Australian Qualifications Framework at Master's level (Australian Government Department of Education, 2013), but limited leadership and education content. Research, education and leadership skills are essential to these advanced practitioners becoming capable agents for change in practice improvement.

University of Canberra, therefore, sought an international partnership and collaboration. Sheffield Hallam University in England is an established higher education institution with three Master of Advanced Clinical Practice programmes accredited by the NHS England Centre for Advanced Practice. The university uses a balanced, integrative approach to develop advanced practitioners across nursing, midwifery and allied health professions,

ensuring that graduates are clinically proficient and capable of leading and innovating practice.

Intellectual generosity and shared goals

The fiscal interests of higher education institutions, in the current global climate, can be seen to provide barriers to collaboration; often, it is the passion of the educators to drive innovative programme design that overcomes this barrier.

The partnership between University of Canberra and Sheffield Hallam University was founded on 'collaboration-as-intellectual generosity' (Macfarlane, 2017), which means sharing knowledge, curriculum development and programme design without financial exchange. Initially an informal engagement, the collaboration quickly expanded into a structured exchange, with regular online meetings facilitating discussions on programme design, assessment frameworks, and the unique demands of advanced practice in the Australian healthcare context. Through altruistic collaboration, Sheffield Hallam University was able to share its expertise and experience, and contribute to the Australian context, further broadening its knowledge base.

A formal memorandum of understanding (MoU) was later established, allowing both institutions to recognise the contributions made by faculty members, while ensuring that the collaboration was protected and sustainable. Fostering the growth and development of advanced practice educators through collaborative mentorship ensured knowledge sharing. This structure underscored the role of intellectual generosity in advancing shared educational goals – particularly in higher education, where fiscal and administrative challenges often pose barriers to open collaboration.

Discussion

The collaboration between the University of Canberra and Sheffield Hallam University is a compelling example of how international partnerships can drive innovation in advanced practice education. It highlights the potential to build global capacity in advanced practice education by leveraging collective expertise and sharing resources. These efforts avoid 'reinventing the wheel' and focus on co-developing adaptable, sustainable educational models tailored to diverse healthcare systems.

An important opportunity arising from this collaboration is the potential to establish international standards for advanced practice roles. Such standards ensure consistency in advanced practitioners' education, training and practice, fostering mobility and mutual recognition across borders. This is especially important in addressing global healthcare workforce challenges, such as practitioner shortages and inequitable access to care, which require unified efforts and shared solutions.

The development of an advanced practice programme, anchored in the four pillars of practice, demonstrates a structured approach that is both flexible and robust. This model provides a foundation for healthcare systems worldwide to empower practitioners, encourage retention, and enhance workforce resilience. Through global initiatives like the Global Advanced Practice Network (GAP) and the International Advanced Practice Educators Network (IAPEN), these frameworks can be shared, adapted and refined to suit local contexts, ensuring their relevance and effectiveness.

Moreover, this collaboration exemplifies the importance of intellectual generosity and shared goals in overcoming fiscal and administrative barriers. By embracing a spirit of partnership, the University of Canberra and Sheffield Hallam University have created a foundation model for other institutions seeking to innovate within resource-constrained environments. This model supports advanced practice education and underscores the value of collaborative ecosystems that transcend institutional and geographic boundaries.

The University of Canberra now has a validated multiprofessional advanced practice programme that is ready for delivery. Unfortunately, the global climate in higher education institutions has impacted the planned implementation, causing a delay in its start. Although disappointing, the learning within this collaboration has been invaluable, and the relationship will continue to support the evaluation and impact of this work.

Future directions

This collaboration between the University of Canberra and Sheffield Hallam University serves as a model for other institutions aiming to address global health workforce challenges through advanced practice education. Intellectual generosity in supporting the development of a programme addresses the practical needs of healthcare systems while supporting practitioners' career advancement.

This collaboration has yielded several positive outcomes including:

- Enhanced knowledge exchange: Both universities shared insights into advanced practice education, allowing for the cross-pollination of ideas and methods that strengthened each programme. For example, adaptable assessment methods ensure flexibility in applying and assessing the practitioner's specialty expertise
- Collaborative programme design: The collaboration has potential beyond the partner institutions, providing a flexible template for advanced practice programmes that could be applied to global requirements, building upon the firm foundations of a successful programme
- **Research opportunities:** Both institutions are pursuing ongoing research initiatives focused on the impact of advanced practice roles on healthcare

delivery. These initiatives contribute to the evidence base for advanced practice education, such as on 'generalist' vs 'specialist' advanced practice roles.

Conclusion

The collaboration described within the present article highlights the transformative power of intellectual generosity and international partnerships in tackling global health workforce challenges. By sharing insights, resources and frameworks, the partnership between the University of Canberra and Sheffield Hallam University has established a benchmark for advanced practice education that resonates well beyond institutional boundaries.

Looking forward, the Global Advanced Practice Network and Summit (The Allied Health Academy, 2025) provides an ideal platform to expand this work, fostering a collaborative ecosystem that drives global capacity building in advanced practice education. By codeveloping international standards and leveraging shared knowledge, such initiatives can empower practitioners worldwide, ensuring sustainable and resilient healthcare systems, which meet the evolving needs of diverse populations.

The development of these global networks offers a unique opportunity to align advanced practice education with broader goals of workforce sustainability and health system resilience. Through continued collaboration and innovation, stakeholders can create a shared vision for advanced practice, ensuring that practitioners are equipped to lead transformative change in healthcare delivery.

This collaborative model invites global stakeholders to join efforts in shaping the future of advanced practice education, creating a shared vision for innovation, excellence and equity in healthcare delivery.

Declaration of interest: None.

Key points

- Collaboration among educational institutions in advanced practice exemplifies
 the transformative impact of intellectual generosity and international
 partnerships in addressing the pressing challenges of the global health workforce.
- Initiatives such as the Global Advanced Practice Network and the Global Summit are pivotal platforms for fostering a collaborative ecosystem that strengthens global capacity building in advanced practice education.

• This collaborative model compellingly invites global stakeholders to co-create the future of advanced practice education, underpinned by a shared commitment to innovation, excellence and equity in healthcare delivery.

Reflective questions

- In what ways can you identify, or have you experienced, barriers to effective collaboration between educational institutions in the context of advanced practice?
- What enabling factors have you encountered or considered as contributing to successful collaboration among educational institutions in advanced practice?
- How do you see the future of the development, structure and implications of international advanced practice programmes?

References

- Australian Bureau of Statistics. Patient experiences. Barriers to health service use. 2022. https://www.abs.gov.au/statistics/ health/health-services/patient-experiences/ latest-release#barriers-to-health-service-use (accessed 8 September 2025)
- Australian Government. Strengthening Medicare Taskforce report. 2022. https://www.health.gov.au/sites/default/files/2023-02/ strengthening-medicare-taskforce-report_0. pdf (accessed 8 September 2025)
- Australian Government Department of Education. Australian qualifications framework. 2013. https://www.aqf.edu.au/ (accessed 8 September 2025)
- Australian Institute of Health and Welfare. Health workforce. 2024. https://www.aihw.gov.au/reports/workforce/health-workforce (accessed 8 September 2025)
- Australian Institute of Health and Welfare. Waiting times overview. 2025. https://www.aihw.gov.au/hospitals/topics/elective-surgery/waiting-times (accessed 8 September 2025)
- Australian Medical Association. Shining a light on the elective surgery 'hidden' waiting list. 2022. https://www.ama.com.au/sites/default/ files/2022-09/Shining%20a%20light%20 on%20the%20elective%20surgery%20 'hidden' %20waiting%20list.pdf (accessed 8 September 2025)
- Australian Medical Association. Ambulance ramping report card, 2023. 2023. https://www.ama.com.au/sites/default/files/2025-04/ ambulance-ramping-report-card-2025.pdf (accessed 8 September 2025)
- Clarkson M, Khine R. Understanding the education and training requirements of advanced practice within specialist roles in radiography. Malta J Health Sci. 2024;11(1):4–7. https://doi.org/10.14614/ THERARADIOGRAPHY/11/24
- Desmeules F, Roy JS, MacDermid JC, Champagne F, Hinse O, Woodhouse LJ. Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. BMC Musculoskelet Disord. 2012;13(1):107. https://doi.org/10.1186/1471- 2474-13-107
- Evans C, Poku B, Pearce R et al. Characterising the outcomes, impacts and implementation challenges of advanced clinical practice roles in the UK: a scoping review. BMJ Open. 2021;11(8):e048171. https://doi.org/10.1136/bmjopen-2020-048171

- Gomez K, Mawhinney T, Betts K. 2019. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/welcome-to-gen-z.pdf (accessed 8 September 2025)
- Harding P, Prescott J, Sayer J, Pearce A. Advanced musculoskeletal physiotherapy clinical education framework supporting an emerging new workforce. Aust Health Rev. 2015;39(3):271–282. https://doi.org/10.1071/AH14208
- Lafrance S, Vincent R, Demont A, Charron M, Desmeules F. Advanced practice physiotherapists can diagnose and triage patients with musculoskeletal disorders while providing effective care: a systematic review. J Physiother. 2023;69(4):220–231. https://doi. org/10.1016/j.jphys.2023.08.005
- Macfarlane B. The paradox of collaboration: a moral continuum. High Educ Res Dev. 2017;36(3):472–485. https://doi.org/10.1080/07 294360.2017.1288707
- Morris JH, Grimmer K. Non-medical prescribing by physiotherapists: issues reported in the current evidence. Man Ther. 2014;19(1):82–86. https://doi.org/10.1016/j.math.2013.04.003
- Morris J, Grimmer K, Ashman B et al. Principles to guide sustainable implementation of extended-scope-of-practice physiotherapy workforce redesign initiatives in Australia: stakeholder perspectives, barriers, supports, and incentives. J Multidiscip Healthc. 2014;7:249–258. https://doi.org/10.2147/JMDH. S59473
- NHS England. NHS long term workforce plan. 2023. https://www.england.nhs.uk/long-read/nhs-long-term-workforce-plan-2/ (accessed 8 September 2025)
- NHS England. Multi-professional framework for advanced practice in England. 2025a. https://advanced-practice.hee.nhs.uk/ multi-professional-framework-for-advanced-practice/ (accessed 8 September 2025)
- NHS England. Workforce, training and education. Programme accreditation. 2025b. https://advanced-practice.hee.nhs.uk/our-work/programme-accreditation/accredited-programmes/ (accessed 8 September 2025)
- Oliveira C, Barbosa B, Couto JG, Bravo I, Khine R, McNair H. Advanced practice roles of therapeutic radiographers/radiation therapists: a systematic literature review. Radiography. 2022;28(3):605–619. https://doi.org/10.1016/j.radi.2022.04.009
- Saxon R, Gray M, Oprescu F. Extended roles for allied health professionals: an updated systematic review of the evidence. J Multidiscip Healthc. 2014;7:479–488. https://doi.org/10.2147/JMDH.S66746
- Stanhope J, Grimmer-Somers K, Milanese S, Kumar S, Morris J. Extended scope physiotherapy roles for orthopedic outpatients: an update systematic review of the literature. J Multidiscip Healthc. 2012;5:37–45. https://doi.org/10.2147/JMDH.S28891
- Vedanayagam M, Buzak M, Reid D, Saywell N. Advanced practice physiotherapists are effective in the management of musculoskeletal disorders: a systematic review of systematic reviews. Physiotherapy. 2021;113:116–130. https://doi.org/10.1016/j.physio.2021.08.005