DISCUSSION PAPER

Rethinking clinical placements: A response to changing healthcare demands

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Abstract

Clinical placements allow students the opportunity to apply theoretical knowledge and become workforce ready. Demand for clinical placements from education providers already exceeds supply. As healthcare workforce shortages continue, the need for increasing numbers of graduates will generate additional strain, and policymakers targeting health workforce shortages must be cognisant of their impact on the education and health sectors. At the same time, clinical placements must be fit for purpose and meet the learning needs of students. The diverse array of placement models has been compounded by rapid developments during the COVID-19 pandemic. Challenges and considerations include labour intensity, need for capacity building, importance of engagement at institutional and local supervisor levels, cost (including that to students), planetary impact, availability and equity. The future of high-quality clinical placements needs to be secured and built on a sustainable framework to support future clinical placement capacity.

Keywords: education; teaching; students; multidisciplinary; clinical placements

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Introduction

Clinical placements, which entail students spending a specified duration in healthcare settings, are crucial, not just for provision of healthcare education but also to meet the health workforce needs in Australia and Aotearoa New Zealand. Placement sites can range from hospitals and clinics to community health centres and other community-based settings across a range of metropolitan, regional and rural settings. During placements, students practise under the guidance of healthcare practitioners, who may be

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referred to by several terms, including educational supervisors, preceptors, clinical coaches or mentors. For this paper, we shall use the term "clinical supervisor", as distinct from an "educational supervisor", who may coordinate the planning of a clinical placement. The employment of these clinical supervisors may use a clinical, academic or hybrid supervision model. Placement and supervision terminology can differ across professions and locations. We have utilised the commonly used terms in the Australian and Aotearoa New Zealand context that are applicable across a range of professions, although we acknowledge that terms are not always strictly defined and/or that certain terms may mean different things to different clinical craft groups or in different settings. We also use the term *patient* to describe the recipient of clinical care, acknowledging that some professions prefer other terms such as client, participant or consumer.

The aim of this paper is to outline the purpose of clinical placements and the current challenges faced in securing these for students in all health professions, in an age of healthcare workforce shortages and additional challenges (such as a global pandemic), and to initiate discussion regarding potential solutions.

The role of clinical placements

The purpose of clinical placements is to give students the opportunity to integrate the theoretical knowledge they have learned in their coursework within real-life healthcare situations. Learning in the clinical context may be intentional and structured or opportunistic, informal and self-directed, guided by encountered experiences, thereby providing a powerful environment for learning (Hafferty, 1998; Isba & Boor, 2011). During these placements, students learn and practise essential skills, including patient assessment, diagnosis, treatment planning, project management, procedural and technical skills, and communication skills. They also gain exposure to a variety of clinical conditions and healthcare scenarios in a range of sociodemographic contexts, helping to broaden their knowledge and experience in preparation for their future careers. Experience in both hospital (inpatient and ambulatory care) and community settings is important because neither context alone provides complete exposure to curriculum content nor the desirable breadth of clinical experiences (Colquhoun et al., 2009; Jepson et al., 2011). Clinical placement hours are also required for completion of a degree in many health professions and to meet accreditation standards set by professional accreditation bodies (AMC, 2023; ANMAC, 2017; Australian Physiotherapy Council, 2024; Dental Council, 2021; ESSA, 2023; OCANZ, 2023; Pharmacy Council, 2024; WFOT, 2016). Placements play a critical role in professional socialisation and identity formation, where students experience being part of a healthcare team, understanding their roles and responsibilities, as well as navigating ethical and professional complexities and laying the groundwork for effective multidisciplinary collaboration (Craig et al., 2016; Roberts et al., 2017; Trede et al., 2012; van Dellen & Cohen-Scali, 2015).

In Australia alone, it is estimated that by 2026, the health and social care workforce will need to increase by over 300,000 to meet the needs of the population (NSC, 2022). Policy decisions designed to address this shortfall, such as the increases in Commonwealth supported university places in Australia (Department of Education, 2019, 2023), have increased the number of students in health professional programs. However, increased numbers of students studying health professional degrees have led to an increased demand for placements. Demand for clinical placements from education providers already far exceeded supply before 2019, and the COVID-19 pandemic circumstances served to exacerbate the issue further. The high burnout associated with the pandemic, coupled with attrition rates of health professionals (Bentley et al., 2021; Søvold et al., 2021), has worsened the shortfall of supervised clinical placements, which continues to escalate across health professions (WHO, 2022). Beyond simply securing placements, the quality of these placements needs to ensure safety for patients whilst also providing necessary clinical and professional development towards graduate preparedness and ability to meet future professional obligations.

The challenge is, therefore, one of both quantity and quality of placements. High levels of burden may lead to supervisors leaving work (WHO, 2022), potentially reducing the available supervisory workforce, and such burden may be intensified if growth in student numbers needing supervision is inadequately supported. Policies designed to tackle health workforce shortages must consider their impact on both these sectors to prevent compounding existing problems. An interesting question is: How can hosting health professional student placements add to, rather than subtract from, workforce capacity?

Building sustainable capacity in clinical placements is challenging. Scaling clinical placements to include higher numbers of students is difficult in settings where a specific clinical supervisor to student ratio is required, with traditionally low supervisor:student ratios, e.g., 1:1 (Martin et al., 2004; Tiberius & Gaiptman, 1985) and/or where the clinical supervisor must maintain healthcare delivery alongside supervisory commitments. Funding initiatives, such as the Health Workforce Australia Clinical Training Funding program, were introduced to build clinical placements but have not been maintained. This program was established as part of the efforts of Health Workforce Australia (established 2009) to address healthcare workforce challenges and enhance the quality and capacity of clinical training (Lyle & Perkins, 2010). By providing targeted funding to healthcare providers and educational institutions, the program sought to increase the availability of clinical placements across the health professions. Until its abolition in 2014, it supported innovative training methods, including simulation technologies and interprofessional learning, with a particular focus on expanding access in rural and remote areas. While simulation—defined as "a tool, device, and/or environment (that) mimics an aspect of clinical care" (Cheng et al., 2016, p. 239; Cook et al., 2011)—may complement and sometimes substitute for some direct clinical experience (Bogossian et al., 2019), its use is conditional on high-quality human, physical and pedagogical

simulation resources. If clinical placements are to help address the health workforce shortage, multiple changes must occur.

Current approaches to clinical placements and future considerations

The premise of clinical placements is workplace learning and socialisation (Snell et al., 2020). How this is structured and achieved varies greatly within and across the health professions and depends on the context, and specifically, the nexus between academic institutions and clinical organisations. Issues such as historical legacy, legal formalities, resourcing, curriculum design, flexibility in implementation, availability and status of supervisors and accreditation of programs all play a practical role in shaping the eventual clinical placement model. In delivering placements to students, these aspects must be considered alongside factors such as location, duration, supervisor-to-student ratio, student role, supervisor role, paid or honorary supervision, clinicians' other teaching/academic responsibilities and university support, both in relation to placement structure and learning approach (Byrne et al., 2023).

The clinical learning approach relates to the educational activities that integrate theoretical learning of a profession with its practical application in the workplace. These include reflective practice, critical thinking activities, clinical tasks and how a supervisor supports students during these activities (Byrne et al., 2023). The centrality of the student within this approach may vary according to the level of skill, scope of practice and expertise of the student, the inclusivity and student-centredness of the clinical environment and the level of expertise of the clinician in supporting the student. An important aspect of clinical placements is the early detection of slower than expected learning progress, that is, where students are at risk of failing. This circumstance should be considered an urgent problem that requires timely intervention, potentially including assessments and support of the student by other faculty members.

Institutional relationships between education and healthcare providers are critical, but equally important are the clinical learning relationships among supervisors, clinical teams, patients and the community across multiple professions. Good relationships can support integration within the local placement context, building symbiosis, continuity and enhanced opportunities for learning in clinical placements (Ash et al., 2012). Symbiotic relationships between the learning value to the student and the benefit to clinical practice may drive the value of clinical placements to both parties. Ensuring these symbiotic relationships needs consideration when designing clinical placements (Prideaux et al., 2007; Worley & Dyrud, 2006).

Relationships at the learning level are equally important. Recent advances towards sustainable higher education assessment suggest that continuity of learning relationships better supports learning by allowing cycles of assessment and feedback from multiple sources, reflective discussion and self-regulated learning (Boud & Soler, 2016). Supporting this, Ellaway et al. (2016) found that many types of continuity of learning

relationships exist across the range of clinical placement types in different contexts and of varying duration. Continuity of learning relationships and forward-looking assessment for learning (Boud & Soler, 2016) better support learning. While students may already experience some continuity of learning (and assessment), this may need to look different in different clinical placement contexts (Ellaway et al., 2016), including when students must flow between different communities of practice, such as the academic and the clinical (Jaye & Egan, 2006).

In terms of potential benefit to the supervisor or practice, Prideaux and colleagues (2007) outline the concept of mutual benefit (where students add value to a placement), which suggests that when clinical services invest in student education, this investment is counterbalanced by contributions students make to the workload, resulting in a net positive impact on healthcare (Prideaux et al., 2007). Students, often with more time than the practitioner, may contribute in terms of providing more health services, potentially enhancing patient outcomes (MDANZ, 2018; Nisbet et al., 2023; van Schalkwyk et al., 2018), especially when service delivery is designed with student placements in mind (Nisbet et al., 2023). For example, an investigation of the impact of six redesigned hospital-based services that purposefully incorporated occupational therapy and physiotherapy students into patient care found improved quality of patient care and perceived efficiency gains, such as improvements in patient (bed) flow as patients progressed through the clinical system (Nisbet et al., 2023). Even without such models in place, longer clinical placements may see senior students becoming net assets after about 6–8 weeks in the practice (Walters, 2014).

The challenges—Room for opportunities

The challenges of developing, maintaining and growing clinical placements will be familiar to many. These issues may have been compounded by the complexity and variety in how placements have developed organically over time (Table 1). At the same time, the needs of students are evolving, ranging from variation in learning preferences to shifting demographic profiles. These factors—and the interplay between them—may influence the student's prior experiences and current commitments and may also have been amplified by the recent pandemic and currently escalating economic pressures. Models of healthcare are changing, and models of education need to be agile to accommodate these changes. Primary concerns with current clinical placement models include sustainability, capacity in terms of both supervisors and placement locations, reliance on engagement by clinical supervisors, the availability and cost of clinical placements and equity (Figure 1). Furthermore, the evidence for individual student placement models has not always been well assessed or well reported, with a lack of consensus regarding critical outcome measures.

Figure 1

Challenges in Provision, Maintenance and Growth of Clinical Placements

Labour **Engagement** Scheduling and Ensuring ongoing engagement ongoing maintenance of clinical supervisors and of clinical placements their organisations Carbon cost Expense This is exacerbated Increased community care plus direct and indirect with regional and rural placements costs of clinical placements **Capacity building** Equity Development of supervisors May disadvantage those who are vulnerable or and professional relationships must be experiencing hardship supported

Clinical Placement Challenges

Table 1

Common Approaches to and Models of Clinical Placement: Clinical Placement Approach and the Clinical Supervision Approach

Clinical Placement Approach	
Structure	Description
Traditional rotational placements	Students rotate through different departments or specialties for a specified period. This provides a broad understanding of various healthcare disciplines, but the frequent changes may limit the depth of experience in any one area.
Longitudinal placements	These are extended placements in a particular setting, which allow students to develop a deeper understanding and competence in that area. Students also can build stronger relationships with staff and patients and see the progression of care over time.
Integrated placements	Placement activities are integrated with academic learning throughout the course. This provides students with immediate opportunities to apply their learning in a practical context and to bring their placement experiences back into the classroom for further discussion and reflection.
Block placements	These are intensive placements over dedicated blocks of time (Nyoni et al., 2021). They provide focused, immersive experiences, but the separation from academic learning can make it more challenging to integrate theory and practice.
Interprofessional placements	These placements involve students from different healthcare professions learning together in a clinical setting. They provide opportunities to understand the roles of different team members and to develop skills in interprofessional collaboration.
Micro-placements	Micro-placements are typically 3–5 days in length and allow students to attend several sites and/or complete a project, such as a health promotion activity (Kay et al., 2019).

Clinical Placement Approach continued		
Structure	Description	
Service-learning placements	These involve students in community service projects, which enhance their learning while also contributing to community needs.	
Project-based placements	Students work on a project that meets a genuine community need while also using the project as a context for learning and skill development.	
Location type	Description	
Student-led university- based clinics	Students run clinics for specific populations in the university, with support and supervision from practice educators and academics.	
Rural or remote placements	These placements provide students with experience in rural or remote healthcare settings, which can be very different from urban healthcare. They often include a focus on primary care, community engagement and interprofessional collaboration.	
International placements	These placements provide intertwined professional and personal experience, independence, differences in culture, conditions, service provision and treatment regimes.	
Hospitals	These are often the primary sites for clinical placements. They provide a broad range of experiences across different departments, such as emergency, surgery, paediatrics, radiology, pathology and internal medicine.	
Primary care clinics	These placements provide experience in family medicine, general practice and chronic disease management. They allow students to understand healthcare in a community context.	
Specialised clinics	These may include mental health facilities, rehabilitation centres, palliative care units and outpatient clinics. They offer focused experience in specific areas of healthcare.	
Community health centres	These centres focus on public health, preventive care and health education. Placements expose students to community-based healthcare and often involve working with diverse populations.	
Rest homes and residential aged-care facilities	These sites provide experience in geriatric care, chronic disease management and end-of-life care.	
Community	Some placements may involve providing care in patients' homes. This offers experience in managing health in a home setting and often involves supporting patients with long-term conditions or disabilities.	
Schools	Placements in school health services provide experience in paediatric and adolescent health, preventive care and health education.	
Pharmacies	Pharmacy placements allow students to gain skills in medication management, patient counselling and the business aspects of running a pharmacy.	
Role emerging	These take place in non-conventional settings without the specific health professional employed, e.g., refugee centres.	
Simulation placements	Simulated placements use mannequins, actors, simulated environments, video or interactive computer packages for learning.	

Clinical Placement Appro	ach continued
Location type	Description
Virtual and hybrid models	The COVID-19 pandemic triggered several models of virtual and hybrid clinical placements—models where the student, supervisor and patient are all linked through telehealth, those where the student and supervisor work onsite and link virtually with a patient and those where the student is based onsite with a patient and assists them to link in with the supervisor. These models have incorporated both synchronous and asynchronous tele- and digital health.
Clinical Supervision Appr	oach
Supervision type	Description
One-to-one model of supervision	This is the traditional one student to one supervisor placement model used in several professions—preceptorship.
Group supervision	Learning models involve two or more students working with one educator.
Collaborative/shared supervision	Shared placement model, or team supervision, allows two or more supervisors to share the supervision of one or more students. They largely reflect the traditional apprentice-style of supervision but can also incorporate project work (Nyoni et al., 2021). This is an important model in areas where there are complementary services or when the workforce is largely part time (e.g., rural areas).
Multiple mentoring model	The multiple mentoring model describes a team of educators supervising a team of students.
Interprofessional supervision	Students from more than one profession undertake placement concurrently at a given setting to engage in planned interprofessional learning opportunities. Commonly, each student has a primary supervisor from their own profession with interprofessional education opportunities being facilitated by their profession-specific supervisor and/or supervisors from other professions. This model is also frequently used in student-led clinic settings.
Long-arm supervision/role emerging/service learning	Supervision is provided by an experienced clinician who is not based at the same location as the student. May provide a community service that otherwise would not be possible.
Agency supervision	Agency supervision can be an important component for students undertaking project-based learning or service learning. This is usually done in combination with academic supervision as part of an integrated placement.
Peer-assisted supervision	Peer models of supervision are an approach where students are supervised or mentored by their peers—those at the same level of training or slightly ahead.

With increased demand but reduced capacity, the ongoing sustainability of clinical placements and their alternatives must be considered (Darnton et al., 2022). If clinical placements are to evolve, this must occur in parallel with capacity building, to foster leadership, administration and growth of large placement programs while maintaining relationships and supervisor and supervision standards. Ongoing relationships between decision makers at educational and healthcare institutions are crucial. Supervising a student is a complex task (Griffiths et al., 2022), often perceived as additional labour with insufficient rewards. Consequently, some placement providers have shown a preference for students nearing the end of their education, seeing them as potential additions to the

workforce, while showing reluctance to accommodate students in the earlier stages of their studies. To build capacity to offer placements at all stages of student learning, the development of educational staff/supervisors must be supported. While some supervisors may be offered training, this is not always offered within typical working hours (Griffiths et al., 2022), and training and expertise as a supervisor is not often recognised formally as a qualification, further detracting from the role (Smith et al., 2022). In addition to capacity building, nurturing relationships is also important. Education providers must build and continue to nurture positive relationships with multiple and diverse placement partners and embrace relationships with the full gamut of service providers to accommodate additional placement options. The traditional paths for placements may not be sufficient in terms of quantity or learning opportunities, and if established placements break down, it can be difficult to restart relationships (Tempest et al., 2022).

At present, clinical placements remain highly reliant on engagement from placement partners and clinical supervisors, who are key to sustaining student placements (Nyoni et al., 2021). The interaction between the governing health and educational institutions is vital, especially if pressures of student numbers and/or workload increase. Attention to the relationships and interplay between educational and clinical providers and settings may cultivate a greater capacity for student placements to positively impact healthcare and services, as well as better scaffold continuity of learning across the range of placements.

Time spent sourcing and allocating placements, alongside the general administration of student placements, is labour intensive for university professional staff and requires long-term investment to be sustainable; this is in addition to the potential labour involved for clinicians, discussed below. High staff turnover in both the higher education and healthcare sectors, especially in rural and remote areas (Zhao et al., 2019), coupled with limited succession planning, may be contributing to decreased effectiveness of staff involved in the day-to-day organisation and implementation of clinical placements. In addition, the turnover of practitioners who supervise students continues to create increased workload for training and support. Amongst its many effects on the healthcare system, the COVID-19 pandemic highlighted the fragility of clinical placements in healthcare education. Internationally, healthcare systems struggled under the combined effects of increased clinical workloads and a workforce disproportionately affected by illness (Ali & Kumar, 2023; Hick & Biddinger, 2020; Martin et al., 2023; Winkelmann et al., 2022).

It is important to highlight that there are also factors beyond the scope of health and education that influence the sustainability of clinical placements. The carbon cost of dispersed students in clinical settings cannot be ignored and is an increasing concern as the climate crisis worsens. Clinical placements contribute to the carbon cost through staff and student travel, space requirements to accommodate students—e.g., in GP practices (Darnton et al., 2022)—and need for extra consumables, such as personal protective equipment (PPE), which must be considered when evaluating the sustainability of these

education models. It is a goal of universities and health professions that students are engaged in rural and regional placements, both in order to buoy recruitment to these settings as well as to expand options to accommodate increasing student numbers, but ideally whilst minimising adverse planetary impact, which might be achieved by minimising transfers between locations.

It is also evident that placement availability, patient presentation type and cost of clinical placements must be considered. In terms of availability of placements and patient exposure, in hospital, for example, changing models of care have resulted in shorter hospital lengths of stay, more same-day treatment day cases and more community-based care. Types of patient presentations (and thus student exposure to certain conditions) also change over time. For example, the impact of COVID-19 has seen some professionals dealing with more emergencies and/or more advanced stages of disease than previously. Depending on the model of clinical placement, there may be substantial and increasing costs associated with these placements, including direct (e.g., staff salaries, physical infrastructure) or indirect (e.g., clinicians seeing fewer patients in a given time period if trying to teach/supervise in parallel, with associated loss of revenue), although the evidence regarding such drawbacks is not clear cut (Forbes et al., 2022; Hudson et al., 2012). There are also indirect costs of ongoing accreditation of education providers and programs, a necessary, yet costly, time-intensive process. There does not appear to be a definite cost advantage to any specific supervision model (Bowles et al., 2015).

Costs to students, such as lost wages, parking and travel (Foster et al., 2021), especially for dispersed placements, are rarely afforded consideration, although they may influence entry and retention in health professional programs, especially in the context of a current cost of living crisis. Lack of access to appropriate and timely placements close to students' homes may pose a barrier to completing the clinical requirements of their degree. Further strengthening of student placement systems and processes is needed to ensure placements do not disadvantage those who may be most vulnerable, such as those experiencing financial hardship or who have parenting or other caring commitments. Additionally, broader equity issues exist regarding the availability and the quality of placements for students of differing health professions, for example, allied health students have less variability and availability of placements compared to nursing and medical students (Rodger et al., 2008; Twyford, 2024). Inequity of access to funding, such as the lack of rural placement funding for international students, may also adversely impact students. To increase the diversity and inclusion of a broader range of students to be trained as health practitioners, strategic planning is needed.

There is great variability in clinical placement model structure, availability and accessibility across all healthcare professions, making it challenging to discern what, if any, models provide value to key stakeholders—patients, communities, students, higher education providers, healthcare organisations and accreditors and regulators of programs—but there are opportunities moving forward.

Innovative options emerging

While the challenges may be multiple, these in themselves provide opportunities. Responding to evolving needs and increasing student numbers, a multitude of innovative clinical placement models have emerged over the past decade (Beveridge & Pentland, 2020). For example, service-learning placements require students to complete project or service-based work aligned to their clinical and profession-specific requirements (Nyoni et al., 2021). Service learning has been embraced in professions such as occupational therapy, physiotherapy and speech pathology (Moran et al., 2024; Salter et al., 2020).

Approaches to clinical placements are shown in Table 1, detailing the "who" (supervision), the "what" (structure) and the "where" (location). Placements might also be conceptualised in terms of the "when", but timing of expected skills acquisition and levels of responsibility vary. Some learning trajectories might follow a path from observation and increasing confidence through to managing a dedicated caseload as a near-fit-for-purpose professional. Others may include provision of services using micro-skills as early as the first year of education and include observation in specialised environments even late in the program. So, it is important to remember when looking at innovative models that we still need to cater for the variety of needs in relation to the timing of skills acquisition and levels of responsibility.

The impact of the COVID-19 pandemic has brought an evolution in the terminology and structuring of placements and fast-tracked the use of nascent models. The recent need for geographic distancing highlighted the potential advantages and disadvantages of virtual and hybrid clinical placements. These include models where student, supervisor and patient are all linked through telehealth, those where student and supervisor work on-site and link virtually with a patient and those where the student is based onsite with a patient and linked in with the supervisor via synchronous and/or asynchronous tele- and digital health. These models have shown some success in speech pathology, occupational therapy, physiotherapy, social work and mental health services (Hong et al., 2020; Kamper et al., 2021; Lyons et al., 2021; Robinson et al., 2021; Salter et al., 2020; Whitehead et al., 2023). Tele-supervision has also been utilised to supplement interprofessional clinical placements, allowing a student to complete clinical and/or project work under the supervision of an interprofessional team onsite, while having their profession-specific competencies assessed virtually. Similarly, positive outcomes seen with virtual debriefing can be easily transferred to clinical placement virtual supervision (Goldsworthy et al., 2022). The evidence base for these models continues to evolve, highlighting both benefits and limitations of individual programs, as does perceived acceptance by accrediting bodies. The effectiveness of emerging models must also be examined in relation to costeffectiveness, work-readiness, graduate employability and stakeholder satisfaction.

Such new models of clinical placement may allow for growth in the number of placements within a host organisation, facilitating the achievement of learning outcomes, without the need for the one-to-one discipline-specific supervision required in traditional apprentice-

style placements. However, at present, these styles of placement may be limited by their acceptance (or otherwise) from accrediting bodies. Irrespective of the model, supervisors need to be skilled in supporting learning. Options that might promote clinical supervisor buy-in, such as integration of supervision and supervisor study days into a formal post-graduate qualification or micro-credential, need further investigation. At the same time, the health system should have a vested interest in developing and upskilling the healthcare workforce, both in terms of individual supervisor professional development and capacity-building to accommodate future healthcare professional students.

Further work needed

The time is ripe for high-quality clinical placements to be created and their future secured. Education and training of health practitioners needs to be targeted at areas of need, workforce gaps and predicted populations/associated conditions (e.g., ageing and dementia/frailty and community-based training to build up primary care). Responses to the challenges should be evidence informed, sustainable and scalable. This requires deeper exploration of whether the current models used across healthcare professions meet the educational and wider needs of the students (Barrett et al., 2017; Nyoni et al., 2021). Publication of evidence for or against certain models, and sharing of related resources, is likely to enhance efficiencies across settings. Challenges may be overcome by building on interprofessional education, including supervisory models, simulation-based learning and models that provide structure but are flexible to encompass local strengths, as well as harnessing the wide array of resources available in less traditional settings, such as private, community and non-government organisation (NGO) sectors. When (new) models are developed, these need to be assessed, not just in terms of teaching efficacy and achievement of learning outcomes but also in terms of translation to other settings, costs and sustainability. Consideration must also be given to who—clinical placement providers, educational institutions and/or government—is responsible for assessing and ensuring these outcomes.

Conclusion

As student numbers grow and the healthcare workforce shortage worsens, tension between sustainability of optimising student clinical learning and practicalities faced by universities and clinical placement providers is increasing. The effectiveness of clinical placement models must be examined in relation to cost-effectiveness, work-readiness, graduate employability and stakeholder satisfaction. The sustainability of placements also needs to be considered. The COVID-19 pandemic has identified gaps but also opportunities to harness existing resources in collaborative and innovative ways. Organisations should use this impetus to consider the current models and investigate if they are effective and sustainable. Any individual clinical placement model in each academic—clinical context needs to be fit for purpose and effective, driven by not only practicalities but also shared understanding of what optimal clinical education looks

like and supportive processes scaffolding the partnership between academic and clinical organisations. More studies investigating the effectiveness of models of clinical education or placements, and factors that impact on implementation, are needed to better inform context-specific placement planning. The development of a framework to structure further analysis and implementation is essential to promote shared understanding and cross-fertilisation of clinical placement evidence across disciplines. The time is ripe ...

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