▲ Clinical Education and Practice Placements in the Allied Health Professions: An International Perspective

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This report describes the outcomes of extensive discussions surrounding clinical education and practice placement issues undertaken by an international group of allied health educators (in audiology, occupational therapy, physiotherapy, and speech pathology) who have met since 2001 as part of Universitas 21 Health Sciences annual meetings. The report outlines key issues associated with clinical education and practice placements from an international perspective and across these four allied health professions. The allied health practice context is described in terms of the range of allied health educational programs in Universitas 21 and recent changes in health and tertiary education sectors in represented countries. Some issues and benefits related to supervision during allied health students' practice placements are addressed. A new approach is proposed through partnership such that frameworks for the provision of practice placements can be created to facilitate student learning and educate and support clinical educators. A set of guidelines that can enhance partnerships and collaborative practice for the benefit of clinical education within complex and changing health/human service and educational environments is proposed. J Allied Health 2008; 37:53–62.

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UNIVERSITY EDUCATORS of students in many allied health professions have in recent years faced increasing challenges in providing sufficient practice placements for students. These placements provide tertiary or postsecondary education students with the opportunity to integrate theoretical knowledge with practical skills.[1] Staffing shortages, fiscal constraints, and increasing complexity within the health/human service and education sectors, as well as increasing student numbers, have been experienced across allied health professions internationally.[2] In this report, the term "clinical education" refers to the provision of students with practice placements (ranging from acute care to community settings within health, education, and human service sectors, including public, private, and not-for-profit organizations) and the educational experiences of students while in these practice settings. The professionals who supervise and manage students' learning during practice placements are referred to as "clinical educators."[3] These professionals are also variously referred to in the literature as "preceptors"[4] or "clinical supervisors."[5] They are charged with the responsibility for providing education for practice while the student is "out in the field."

First, the international context of allied health education programs across the four professions comprising Universitas 21 (U21) will be outlined. This will be followed by a discussion of some of the changes that have occurred in the health/human service and education sectors internationally that specifically have impacted on the clinical education of allied health students. Some of the issues and benefits related to clinical supervision will then be addressed. Finally, a set of guidelines is proposed that supports clinical education and aims to improve access to these critical practice experiences for these students.

Background: U21

The U21 network provides an international context for the discussion of clinical education and other educational mat-

TABLE 1. U21 Health and Rehabilitation Sciences Member Universities and Type of Entry Level Programs Offered

Profession/Country	U21 Member University	Entry-Level Course/Program*
Physiotherapy		
Australia	University of Melbourne	Bachelor of Physiotherapy
	University of Queensland	Bachelor of Physiotherapy
		Master of Physiotherapy Studies
Canada	University of British Columbia	Master of Physical Therapy
	McGill University	BSc Physical Therapy
		Master of Physical Therapy
Sweden	Lund University	Bachelor's Degree in Physiotherapy
United Kingdom	University of Birmingham	BSc Physiotherapy
		MSc in Physiotherapy
	University of Nottingham	BSc Physiotherapy
Occupational Therapy		
Australia	University of Queensland	Bachelor of Occupational Therapy
		Master of Occupational Therapy Studies
Canada	University of British Columbia	Master of Occupational Therapy
	McGill University	Master of Occupational Therapy
Sweden	Lund University	BSc Occupational Therapy
Audiology		
Australia	University of Melbourne	MSc Clinical Audiology
	University of Queensland	Master of Audiology Studies
Canada	University of British Columbia	MSc Audiology
Hong Kong	University of Hong Kong	MSc in Audiology
New Zealand	University of Auckland	MSc in Audiology
Sweden	Lund University	MSc Audiology
Speech–Language Pathology		
Australia	University of Queensland	Bachelor of Speech Pathology
	Master of Speech Pathology Studies	
Canada	University of British Columbia	MSc Speech Language Pathology
	McGill	MSc Speech Language Pathology
Hong Kong	University of Hong Kong	BSc in Speech & Hearing Sciences
New Zealand	University of Auckland	MSc Speech Language & Therapy Practice
Sweden	Lund University	MSc Speech Language & Therapy

*Bachelor programs also include honors streams.

ters within the health professions. The U21 network of research-intensive universities across 12 countries was established in 1997 as a model for universities in the 21st century, facilitating collaboration and cooperation on an international basis, and creating opportunities otherwise unavailable to individual organizations or through traditional alliances. Collectively, member universities enroll more than 650,000 students and employ more than 130,000 staff (http://www.universitas21.com). The U21 health sciences group was formed in 2000 and has met annually to network and discuss issues of global significance to its members. The group comprises representatives from medicine, nursing, dentistry, health and rehabilitation sciences, and pharmacy (http://www.u21 health.org). Within the health and rehabilitation sciences subgroup, the professions of occupational therapy, physiotherapy, speech pathology, and audiology are represented (http:// www.u21health.org/ contacts/rehabsci.html).

Across the U21 network, a range of preregistration or prelicensure educational programs is offered at bachelor's- and master's-degree levels providing entry to practice. Table 1 illustrates these programs for each of the U21 member institutions with allied health programs across the United Kingdom, Canada, Hong Kong, Australia, New Zealand, and Sweden.

For each of the allied health professions, slightly different practices occur in relation to (1) how preregistration or entry-level programs are approved or accredited (enabling graduates to become registered for practice as required by regional/state or federal/national governments), (2) the methods by which clinical competence is ensured, and (3) the way in which clinical education is provided. These aspects are summarized in Table 2 for the four professions across the U21 member countries.

What is consistent is that all programs require students to undertake a significant amount of clinical education through practice placements before graduation, usually in the latter years of the programs. Some examples of accreditation requirements related to clinical education include the following: 1,000 hours of fieldwork in occupational therapy practice involving clients across the life span; acute, chronic, congenital, and acquired conditions; and focusing on the person, occupation and environment[6]; and meeting specific competencies in particular areas of practice such as in physiotherapy (e.g., cardiorespiratory, musculoskeletal, neurologic physiotherapy across the life span)[7]

TABLE 2. Some Examples of Accreditation and Regulation Bodies and Clinical Practice Requirements across U21 University Programs and Professions

Profession	U21 Country	Accreditation or Regulation Bodies	Clinical Practice Hours Requirement	Competency/Standards Requirement
Audiology	Australia	Audiological Society of Australia (http://www.audiology.asn.au)	Not specified	200 hrs
	Hong Kong	Hong Kong Society of Audiology	Not specified	Master's degree in audiology
	New Zealand	New Zealand Audiological Society (accreditation in progress)	250 professional contact hrs (including 200 direct client contact)	250 hrs and meeting New Zealand Audiological Society competency standards
	Canada	Canadian Association of Speech Language Pathologists & Audiologists, Council of Accreditation of Canadian University Programs in Audiology and Speech-Language Pathology (program accreditation)	350 clinical hrs (direct contact)	In process of being developed (goal 2009)
Occupational Therapy	Australia	Occupational Therapy Australia & Registration Boards (state based)	World Federation of Occupational Therapists (http://www.wfot.org.au) 1,000 supervised practice hrs	Must also meet Occupational Therapy Australia Competency Based Standards (AAOT, 1994).
	Sweden	Swedish Association of Occupational Therapists The National Board of Health and Welfare (state based)		
	Canada	Canadian Association of Occupational Therapists		
Physiotherapy	Australia	Australian Physiotherapy Council 2006 (www.physiocouncil.com.au/index_html) World Confederation of Physical Therapy (www.wcpt.org/index.php)	Not specified	Australian standards for physiotherapy
	United Kingdom	Health Professions Council Chartered Society of Physiotherapy	1,000 hrs of satisfactory clinical practice	Health Professions Council standards of education and training
	Canada	Accreditation Council for Canadian Physiotherapy Academic Programs; National Agency for Higher Education	Not specified	Accreditation Council for Canadian Physiotherapy Academic Programs physiotherapy competency standards
	Sweden	The National Board of Health and Welfare (State based)	880 hrs	Assessments according to learning outcomes in the curriculum for clinical education (at Lund University, three different courses)

continued on next page

or speech pathology (e.g., speech, language, voice, fluency, and swallowing in adults and children).[8]

These specific requirements become significant drivers of the types of clinical education experiences that students must undertake before graduation. This leads to demands for specific types of learning experiences within practice placements. If access to one of these areas becomes problematic for any reason, this hampers the capacity of a university to graduate students with appropriate competencies. For example, physiotherapists in Queensland, Australia, were recently unable to continue to support clinical education, leading to reduced availability of cardiorespiratory placements in the public sector (personal communication, B.Vicenzino, Head Physiotherapy Division, University of Queensland, April 30, 2007). In the absence of sufficient placement agreements or available patients in the private hospital sector, there are limited avenues by which these experiences can be garnered.

Because clinical education is critical for ensuring competence to practice, the issue of the provision of adequate numbers of practice placements has been a major focus for the U21 health and rehabilitation sciences subgroup and a regular agenda item at annual meetings over the past few years. To this end, members of this group recognized the need to (1) document the universal issues facing allied health educators with respect to clinical education and (2) propose a set of guidelines for collaborative partnerships between health and education sectors to facilitate student learning, enabling the future allied health workforce.

TABLE 2. (continued)

Profession	U21 Country	Accreditation or Regulation Bodies	Clinical Practice Hours Requirement	Competency/Standards Requirement
Speech Pathology	Australia	Speech Pathology Australia & Registration Board (Queensland only)	Not specified	Must adhere to a set of competency-based standards/clinical practice competencies
	Canada	Canadian Association of Speech Language Pathologists and Audiologists Council of Accreditation of Canadian University Programs in Audiology and Speech-Language Pathology (program accreditation)	350 clinical hrs (direct contact)	In process of being developed (goal 2009)
	Hong Kong	Royal College of Speech and Language Therapists (Hong Kong)	Not specified	Accredits training program
	United Kingdom	Royal College of Speech and Language Therapists (United Kingdom)	Not specified	Must adhere to a set of competency-based standards/clinical practice competencies. New graduates must complete approximately one year under clinical supervision before being accepted as autonomous clinicians by the Royal College of Speech and Language Therapists
	New Zealand	New Zealand Speech Language Therapists' Association	Not specified if graduated from New Zealand universities (300 hrs supervised hours if applying from overseas)	Must adhere to a set of comp tency-based standards/clinical practice competencies

Changes in Health/Human Service and Education Sectors

The education of health and human services professionals in clinical settings currently occurs in an increasingly complex and changing environment.[2,9] Fiscal constraints in both health and education sectors worldwide have resulted in changes to educational programs. Reduced funding, mergers, and new models of care (e.g., clinical pathways, diagnostic related groups, managed care) have presented challenges to clinical education of students around the world, suggesting the need for alternative models.[9–11] Reductions in health sector staffing have decreased the flexibility of these organizations to effectively support the clinical education of students.[12,13] Meanwhile, major structural changes in both of these sectors are dramatically influencing the education process and contributing to growing pressures relating to human resources in health.[9–11]

Increasing numbers in student cohorts (e.g., in physiotherapy in the United Kingdom[12]) and a proliferation of new programs (such as in occupational therapy and physiotherapy in Australia[14]) have also led to nationwide placement shortages. Allied health clinical training is no longer limited to large city hospitals with affiliated medical schools[15]; rather, it has become increasingly reliant on diverse settings such as nursing homes, community health centers, school settings, people's homes,[15] and private practices.[16] Concurrently, significant issues related to duty of care and liability/insurance in off-campus practice placements have required the instigation of formal contractual agreements between universities and clinical sites, such that responsibilities of each party are delineated. Specific policies and procedures resulting from these contracts must be developed and implemented by university practice placement managers that are relevant to individual placement sites.[17]

From a health sector perspective, significant changes have occurred with respect to financing and organization of health care (such as program management, diagnostic related groups, regionalization, and its analogues worldwide) and service delivery such as technological advances impacting on life span, quality of life, and shift of care from institutions to the community.[9,11,18] Hospital patients are often more acutely ill with more complex needs[19] and are transferred to the community earlier. Clinical educators have reported having less time to spend with patients (and therefore students) and needing to spend more time on increased documentation.[18] To deal with this new landscape, health sector staff require increased educational and clinical competencies[20] at a time when education budgets and human resources have been constrained.

Meanwhile, health sector staffing patterns have changed, resulting in chronic shortages, fewer supervisory/managerial positions, and more part-time and often less experienced staff.[18,19] Workforce reengineering and staff reductions have led to increased responsibilities and workloads for allied health practitioners, affecting the time practitioners have to devote to students.[18] Part-time staffing due to the predominance of the female gender is common in

some professions; for example, 85% of audiologists and more than 90% of occupational therapists in Australia are female and about 15% of audiologists are working part time.[21] McAllister described the detrimental impact on clinical education of almost half of the Australian speech pathology workforce working part time (49%).[19,22] Additional issues in the health care environment, such as increased productivity expectations, workload, and increased documentation, have also impacted negatively on time for continuing education, student supervision, and quality patient care.[10] A recent survey of Queensland occupational therapists revealed that the challenges of clinical education reported most often related to staffing issues (e.g., having only part-time, temporary, or less experienced staff), a lack of physical resources (e.g., desk space, computers), and prohibitive workload pressures.[23] At a health and human service organizational level, these factors combine to decrease the ability and flexibility of the organization to effectively support students in complex clinical settings.[9]

From an educational perspective, changes in health care delivery systems are placing new requirements on the skills and competencies needed by graduates. These include the requirements for interprofessional learning and collaborative practice in complex and culturally diverse contexts[24]; the need for graduate competencies in evidence-based, clinically competent care; critical thinking, reflection, and problem-solving skills; preventive and population-based care and services; relationship-centered and culturally sensitive care; and lifelong learning.[25] There is also a reported need for developing students' and practitioners' skills in leadership, environmental scanning, strategic planning, and management.[9]

The Pew Commission[25] in the United States identified several critical challenges for revitalizing health professions for the 21st century, including redesigning the ways in which health professionals work in hospitals, clinics, community and private practices; re-regulating health professional practice; right-sizing the health professional workforce; and restructuring education to make efficient use of allocated resources.[25] Curriculum modifications to meet these workplace changes influence placement requirements[19]; for example, the need for access to diverse and nontraditional settings and placements at earlier stages of the educational program has been noted in occupational therapy and speech pathology in Australia[19,26,27] and in Canada,[11] and the need for nontraditional models for placement and supervision in physiotherapy has been recognized in the United Kingdom.[12,28] The Pew Commission made specific recommendations for revitalizing all allied health curricula in the United States, including the following:

- restructuring education programs to focus on community needs, partnerships with health delivery systems, professional associations, and consumers
- multiskilling and interdisciplinary core curricula
- improving articulation and career ladders within and between disciplines
- improving education-practice linkages with diverse care delivery systems such as community, home, managed care, and ambulatory care
- recruiting minority groups
- enhancing faculty leadership in clinical outcomes and effectiveness research
- developing innovative collaborations with professional associations
- improving collection, evaluation, and dissemination of research and educational innovations.

One recommendation that emerges repeatedly is the need for coordination and communication between tertiary education and health/human service sectors with respect to clinical education.[2] It is important to understand the issue of clinical education from the perspective of both sectors in terms of benefits to students and clinical educators, as well as the educational supports required by clinical educators, and the inevitable issues/challenges that arise.

Clinical Education

An overview of the literature relating to clinical education and supervision highlights a number of themes, including the benefits of clinical education for students, clinical educators, and health/human service organizations; the supports required for effective practice placements; and the respective responsibilities of health/human services and educational organizations.

Benefits

Benefits for students include the exposure to practice, the ability to apply theory to practice, and the ability to develop clinical competence and strengthen skills and self-confidence.[1] Benefits perceived by clinical educators include satisfaction from sharing knowledge and expertise, stimulation of personal growth, recognition, satisfaction from watching the student develop, and the opportunity to improve teaching skills[29] (note that there is usually specific funding for nurses to undertake this role).[18] Benefits for organizations include exposure to recent theoretical knowledge including evidence-based practice knowledge, enhanced confidence and expertise of staff in supervision, the opportunity to undertake special projects, quality assurance activities or research,[23] and future staff recruitment potential (Rodger et al., manuscript in submission).[30]

Clinical Educators

While there are examples of excellence in clinical education and the training and support of clinical educators, a number of issues are consistently identified in the literature.[1,5,31] Firstly, selection of clinical educators is often based on availability or seniority rather than demonstrated skills such as clinical expertise, leadership, effective communication, decision making, interest in students' profes-

TABLE 3. Rewards and Supports for Clinical Educators[18,29,33]

Rewards and Supports for Clinical Educators Identified in the Literature
1. Financial rewards (e.g., per institution or per supervisor)
2. Formal recognition (e.g., academic titles, certificates of appreciation)
3. Feedback on supervision performance (e.g., student placement coordinator, peer review)
4. Guidance and support from educational institutions (e.g., in-service workshops, clinical visits)
5. Formal training workshops and continuing education
6. Supportive relationships and communication with clinical faculty and hospital management
7. Training in clinical evaluation/assessment of students
8. Faculty support in terms of accessibility, information, and evaluation/assessment of student performance

sional growth, a sound knowledge base, organizational abilities, effective teaching skills, and commitment to supervision.[4,32] Secondly, clinical educators may have little or no preparation for clinical education and evaluation/assessment of students.[1,4,33] Thirdly, clinical educators may be challenged by some of their role expectations, particularly that of evaluator/assessor. This can be exacerbated when clinical educators are confronted by failing students.[1] These issues demonstrate that clinical expertise does not necessarily translate into supervision expertise, reinforcing the importance of clinical educator training and the need to select clinical educators based on specific criteria.[32,34] Fourthly, there are sometimes discrepancies between the goals of the health care sector (e.g., focus on service provision) or private practitioners (e.g., focus on client services and "time is money") and educational institutions.[4,16] Finally, there is the potential for supervisor burnout, particularly given the pressures of existing clinical workloads and lack of monetary compensation.[18,26] In Table 3, a variety of rewards and supports are documented in recognition of the role of clinical educators.

Practice Placement Issues

This brief overview of the literature reinforces the importance of collaborative efforts and ongoing communication among clinical educators, their managers, and academic faculty. Consistent with the available literature, a broad range of issues related to the provision of practice placements has been identified. A snapshot of experiences from Queensland, Australia, is provided to highlight some contemporary issues and challenges. During the recent industrial action in Queensland in 2006–2007, no placements were lost in occupational therapy; however, delays occurred with commencement dates for 6% of students. In speech pathology, no placements were withdrawn; however, a number of placements (7%) were only confirmed the day before placements commenced. In physiotherapy, as many as 30% of students have been impacted by industrial action and risk not being able to graduate (personal communication, B. Vicenzino, May 10, 2007).

A further issue is the proliferation of some allied health programs; for example, there have been three new physiotherapy programs in five years in Queensland and seven new programs in speech pathology across Australia.[19] Increases in program numbers (quotas) have been noted across Australia despite difficulties nationally with finding placements (personal communication, C. Fitzgerald, Clinical Education Liaison Manager, May 10, 2007). Data from the Australian and New Zealand Occupational Therapy Fieldwork Academics Group indicate that up to 2.3 working days were required to allocate each occupational therapy student to a practice placement. McAllister reported that speech pathology staff at Charles Sturt University in New South Wales, Australia, had spent 300 hours calling clinics across four states to find 30 student placements in adult neurologic settings.

There has been no decrease in quotas in any of these professional programs in Queensland; in fact, quotas have been increased and new programs commenced due to health professional workforce shortages, despite clinical education placement issues. Innovative clinical education alternatives such as the use of standardized/simulated patients have been utilized to augment the clinical experience and overcome the shortage of clinical placements.[35,36]

At U21 annual meetings, delegates have highlighted a range of challenges, including communication and coordination issues associated with the lack of dedicated positions supporting the placement coordination process and the students and staff involved, changes to clinical services (e.g., reduction in beds, caseload changes) that are implemented without an appropriate lead time for the educational programs, and greater expectations of the clinical experience by students (as a result of the introduction of full fee-paying master's places in Australian universities).

Coordination between service sectors and the universities has been hampered by the lack of systematic data collection for practice placements (http://www.health.qld.gov.au/publications/corporate/annual_reports/annualreport2006.docs/chpt5.pdf). This is exemplified in that practice placements are generally coordinated on a program- and institution-specific basis in most U21 programs represented. There is frequently no common database to facilitate placements across disciplines, institutions, and health and human service agencies. One exception to this is the electronic coordination and database options provided through the Health Sciences Placement Network of British Columbia in Canada (HSPnet) (http://www.hspcanada.net). HSPnet allows receiving agencies to track the numbers of students throughout the organization and to identify underused and overused areas so that clinical educator workload balance can be achieved. Requesting agencies can see at a glance where placement options exist. While it is still critical to establish and maintain working relationships with receiving agencies, the education placement coordinators can easily track placement options. The enhanced

coordination approach facilitated by HSPnet will, once all agencies are engaged with the system, allow for improved placement planning, careful tracking of volume and utilization patterns, and improved communication between requesting and receiving agencies (http://www.hspbc.net/docs/hspnet_overview.pdf).

A New Approach for Consideration

Discussions among U21 health and rehabilitation members have led us to believe that we need to revisit current approaches to clinical education. We propose that this requires three key elements for partnership that will be discussed individually. Firstly, there needs to be a commitment at the level of the national government (between health/human service and tertiary education sectors) to collaboration and to the shared goal of facilitating the provision of skilled professionals who will be the health and human services workforce of the future. Development and education of the future workforce must be recognized as the collective responsibility of both the human service (health, social services, and disability) and the tertiary education sectors. Health care organizations need competent and qualified staff to meet human resource requirements and to implement program/service plans based on the needs of their communities. Meanwhile, educational organizations are responsible for ensuring the provision of competent graduates. Efforts to ensure "work-ready" health professionals are germane to all stakeholders.

Secondly, clinical educators need to be appropriately supported and recognized[16,18] by their professions, the universities, and their employers for their contributions to student clinical learning and therefore to the future workforce. Opportunities for reward include additional payment; credit toward postgraduate degrees; access to a range of resources such as university libraries, e-mail, and Internet; reduced fees; and leave for continuing education activities. Demonstration of appreciation can be evidenced by letters, certificates, attendance at celebratory events, and adjunct appointments to the educational institution.[18,37] Support for clinical educators includes an appropriate orientation period in a new rotation before responsibility for student supervision, reduction in clinical caseloads while supervising students, appropriate briefing by academic staff, and provision of clear guidance for supervision, evaluation, and assessment of students.

A comprehensive program of informal and formal education is required to support clinical educators. Where possible, interprofessional training should be utilized to increase peer support among clinical educators across various professions.[38] Such education should be delivered in a range of formats (e-learning, face-to-face, and combined formats), be consistent with principles of adult learning, and be recognized as part of ongoing professional development. This recognition enables appraisal of clinical education skills to be a part of formal performance review processes. Other education formats are required, including experiential routes through a portfolio-based assessment, formal short courses/workshops, and postgraduate level modules with academic credit. Clinical educator training needs to ensure that these educators can

- describe the role and identify the attributes of an effective clinical educator
- apply learning theories appropriate for adult and professional learners
- plan, implement, and facilitate learning in a clinical setting
- apply sound principles and judgment in the assessment of clinical performance
- evaluate the learning experience
- reflect on the experience and formulate action plans to improve future practice.[32,34,39,40]

Thirdly, innovative models of clinical education need to be utilized, which provide valuable learning experiences for students and contribute valuable clinical resources for health organizations. Some of these alternative models include project-based placements (which focus on health prevention/promotion and the development of educational materials), collaborative models and multiple mentoring (such as two or three students to one supervisor),[28,41,42] and role-emerging placements (where there are new opportunities for practice and students are not necessarily supervised by a professional from the same background).[42] The traditional one-on-one apprenticeship is no longer an appropriate educational model and is unlikely to be a long-term viable option given the changes described in clinical practice.[19,27,34,44–47] Peer-assisted learning through collaborative placement models requires different educational strategies to facilitate student learning; thus, clinical educators will require different teaching and learning paradigms.[19,40] The opportunity to develop and enhance learning through technology, such as Web-based telecommunications, clinical simulation laboratories, and standardized patients, also needs to be included.

Some research indicates that despite contrary beliefs, the presence of a more experienced physiotherapy student can actually statistically increase clinician productivity (e.g., number of patients seen per day, daily billing of occasions of service).[48] The presence of fieldwork students reportedly delivers a raft of other indirect benefits to many organizations, including the development of staff supervisory, mentoring, time management, conflict resolution, and clinical reasoning skills. Other indirect benefits demonstrated in occupational therapy include role promotion within organizations, the strengthening and enrichment of team environments through diversity and injection of fresh new perspectives, and a reduction in workloads in the later stages of placements.[23] Alternative placement models in occupational therapy such as role emerging placements (where there is no occupational therapist employed but a faculty staff member provides weekly supervision)[27] are being utilized internationally.[44,49] Anecdotal evidence reveals that these placements have resulted

TABLE 4. Guidelines for Universities and Health/Human Services Sectors to Support Clinical Education and Practice Placements

Guidelines for Universities	Guidelines for Both Universities and Health & Human Service Organizations	Guidelines for Health & Human Service Organizations
Recognize health profession and employer representatives as partners in health profession curriculum planning, design, and delivery	Recognize that once admitted to an allied health profession education program, students deserve a quality learning experience Recognize student education as a joint responsibility that presents opportunities for both sectors Collaboratively and strategically plan admissions to education programs and desired graduate competencies for health professions	Recognize students and their education represent a positive investment for future workforce and staff professional development Recognize educators as partners in human resource management and planning
Establish policies and guidelines for clinical education within each profession Approval of expansion/creation of education programs subject to secured placements Increase clinical educator development and support through various mechanisms (e.g. face-to-face, CD, DVD, Web based) Utilize technology-based learning for clinical educators and students (e.g., videoconferencing)	Initiate timely communication and consultation regarding significant changes in either sector (e.g. in curricula) that could impact clinical education Clearly identify best estimates for human resource needs for allied health professions Link students to employment pathways (e.g., placements link to recruitment)	Establish policies and guidelines for clinical education relevant to the organization Identify allied health workforce needs Optimize opportunities for staff to attend clinical educator training (e.g., release time)
Provide dedicated clinical education liaison personnel Identify resources currently allocated to the practice education component of health profession education programs Develop and evaluate effective and efficient clinical education models (e.g., two students to one supervisor, or three students to one supervisor) Adjust curriculum and program structure to allow maximum flexibility for timing of practice education Develop and provide educational materials for clinical educators Approval of expansion/creation of education programs subject to secured placements	Enhance dedicated resources for practice education of health profession students Clarify roles and responsibilities for clinical education Resolve funding/resource issues for clinical education through joint advocacy Fund research to investigate alternate models of clinical supervision and education Develop new and enhanced practice placement opportunities and alternate models of supervision Share educational learning materials across organizations and disciplines Clearly identify best estimates for human resource needs for allied health professions	Establish student clinical coordination officers Identify where and when staffing limitations impact on availability of practice placement capacity Provide flexible placement alternatives Identify allied health workforce needs

in the creation of occupational therapy positions in organizations after the placements have been completed. Additionally, students undertaking these placements have been found to be more autonomous and independent and have developed a range of lifelong learning and professional skills not otherwise evident in traditional placements.[44,49] Other alternative models such as collaborative models, interagency models, and multiple mentoring have been found to have different learning benefits for students compared with traditional apprenticeship models.[27] These positive outcomes of clinical education need to be acknowledged and marketed to the professions as benefits of student supervision.

Guidelines for Developing a Coherent and Collaborative Approach to Clinical Education

The importance of health professional education, and particularly the clinical education component, must be firmly established in the minds of senior health managers and academics. The focus of attention needs to be on the associated mechanics, logistics, communication, and working relationships to improve the effectiveness and the efficiency of the practice education process.[18] Table 4 outlines proposed guidelines and responsibilities from the perspectives of the health and human service sector, the tertiary education sector, and both sectors in combination as a

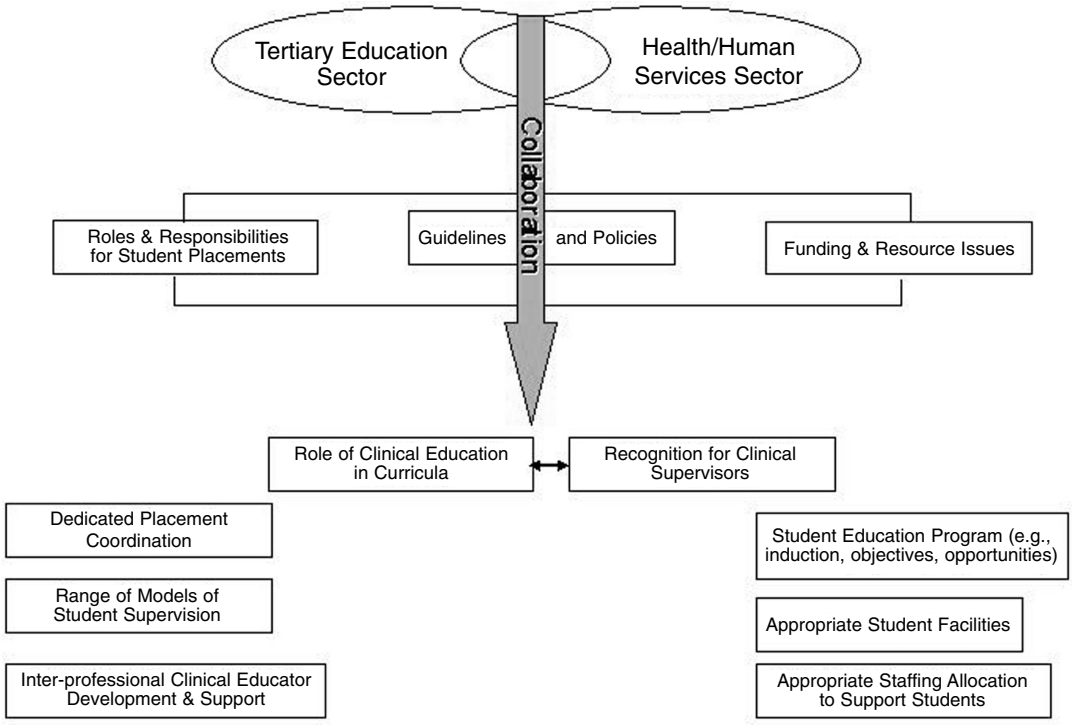

FIGURE 1. Desired outcome: sufficient quality and number of practice placements for allied health students.

framework for ongoing development of a coherent and collaborative approach to clinical education. Both care and tertiary education sectors must assume responsibility for developing and consolidating a range of partnerships as outlined in Figure 1. There needs to be tripartite involvement of students, clinical educators, and universities if clinical education is to be effective.[2] These partnerships necessarily involve other stakeholders such as consumers and professional associations.

In combination, the roles and responsibilities (Table 4) and partnerships (Figure 1) suggest that the tertiary education sector take the lead by investigating the role of clinical education in health profession curricula and a variety of alternative clinical education models and in providing both interprofessional and profession-specific clinical educator training.[39] Concurrently, the health care/human services sector needs to take the lead on assessing opportunities to expand practice education opportunities and evaluating workforce needs. Together the two sectors must work toward securing dedicated resources for clinical education. To consider appropriate workforce planning, both sectors need to consider the following:

- Best estimates for human resource needs for all health professions. As health agencies are frequently asked to accept students beyond their own individual identified needs, they want to be assured that the system overall needs the graduates, both in terms of numbers and competencies.
- The strategic relationship between student placements and recruitment (Rodger et al., 2007).[31]
- Approval of new educational programs subject to secured placements. Public and private education programs must demonstrate that they have secured placement opportunities for additional students as part of new or expanded programs.
- The provision of adequate funding support for clinical education.

Conclusions

The provision of sufficient appropriate clinical education opportunities for the U21 allied health disciplines (audiology, occupational therapy, physiotherapy, speech pathology) has been a major focus for the U21 health and rehabilitation group. In this report, we have outlined a number of issues that impact on the provision of clinical education and practice placements internationally. We have proposed a set of guidelines to capture the collaboration required across the health/human services and tertiary education sectors involved in providing clinical education. To have a sustainable allied health workforce in the future, the implementation of these guidelines is imperative. Collaboration between the two sectors is critical to gaining appropriate educational outcomes for allied health graduates who need to be "work ready" in an increasingly complex global health environment.

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