# Appendix

## **Part 1: Project Advisory Committee**

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## **Part 2: Mapping Activities**

The aim of the mapping exercise was to explore in the NMCPN region:

1. the capacity of aged care providers to provide CP for AH students
2. the demand for AH clinical placements
3. the potential to increase the quantity of AH CPs

Three sources of data were used to map current and potential AH clinical placements in aged care in the Northern CPN region: 1) the VicProfile website, 2) an on-line survey of aged care providers, and 3) consultations with aged care providers.

### VicProfile database

The VicProfile database provides data from the 2011 CPN Profiling Survey of clinical placements providers. Facility-level – Learning Environment and Infrastructure data were downloaded for the NMCPN region. Seventy-three services identified themselves as aged care service providers in the NMCPN region[[1]](#footnote-1):18 residential aged care facilities, 7 public hospitals, 11 community health services, 2 aged mental health services, 8 GP practices, 13 mental health services, 13 private hospitals, and 1 women’s hospital.

##### **VicProfile Survey**

The VicProfile survey data indicated that all public hospitals and most of the community health settings provided AH CPs (see Table 1). Only 18 RACFs responded to the VicProfile survey and very few community-based aged care services (with the exception of those based in community health services) responded to the VicProfile survey. Only two of the 18 participating RACFs provided AH CPs (allied health assistants and dietetics). Sixteen RACFs did not provide CPs in any of the nine AH disciplines. One aged mental health service provided CPs in psychology and social work in 2011.

Table 1: Number of aged care providers in the NMCPN region that offered AH clinical placements in 2011 (VicProfile data)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Type of AH clinical placement | | | | | | | | | |
| Type of facility/ organisation | Total | AHA | Diet | Ex. phys | OT | Physio | Pod | Psych | Social Work | Speech path |
| Public hospitals | 7 | 3 | 5 | 4 | 7 | 7 | 4 | 6 | 6 | 6 |
| Community health services | 11 | 6 | 7 | 2 | 9 | 9 | 7 | 2 | 8 | 6 |
| Residential aged care facilities | 18 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Aged Mental Health Services | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| Total | 38 | 11 | 13 | 6 | 17 | 17 | 11 | 9 | 15 | 12 |

**Project Survey of Aged Care Providers**

Due to the low response rate, the project team, with the support of the Project Advisory Committee, conducted an on-line survey of aged care service providers to identify capacity for Allied Health CP in the Northern CPN region. Thirty-seven aged care providers completed the survey—a response rate of 30.8%. Seventeen aged care providers in the Northern CPN interested in AH CPs. Other findings include:

* The most commonly provided AH services were: physiotherapy (94.6%), speech pathology (62.2%), podiatry (83.8%) and dietetics (75.7%). The least commonly provided AH services are exercise physiology (5.2%) and psychology (8.1%).
* Only 31% of services that provided physiotherapy services delivered over 40 hours per month.
* 81.1% of respondents reported brokering some or all of their AH services either through an agency or through sole practitioners.
* 40.5% of the participating aged care providers had offered CPs in the last two years.
* The most commonly offered AH CPs were physiotherapy (16.5%) and occupational therapy (13.5%).
* The main barriers to offering AH CPs were perceived to be not having enough relevant staff (50.0%) and lack of supervision training (35.3%).
* Sixteen respondents expressed interest in greater involvement in AH CPs.

## **Part 3: Identifying models for AH CPs in aged care settings**

Eight models for AH CPs in aged care settings were identified. Consultations with stakeholders were held to examine their applicability and sustainability. The results are presented in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Setting** | **Brief description** | **Viability** | **2013 implementation** |
| **Model 1: Inter professional** | RACFs | A CP for students from a number of AH disciplines. | Not viable (lack of AH supervision) | Not piloted |
| **Model 2: Patchwork** | Day Therapy Centre | Shared supervision by staff from different AH disciplines | Viable for AHA courses not in scope for this project. | Not piloted |
| **Model 3: Outreach** | RACFs | University supervision for students working one-on-one with RACF residents. | Viable for Masters-level psychology students as direct supervision not required. | Model successfully tested by Swinburne Uni. |
| **Model 4: Traditional in-house** | Day Therapy Centres | In-house AH clinicians provide supervision | Viable for exercise physiology and physiotherapy CP in DTCs. | A pilot was set up but did not proceed due to staffing changes within the aged care agency |
| **Model 5a: Mobile nursing home service** | RACFs | Private practice with students provides extra clinical services to a single aged care agency. | Potential benefits for students, clients and RACFs but limited due to cost. | Piloted with UoM speech pathology students in UAC RACFs |
| **Model 5b: Mobile nursing home service** | RACFs | Health Service clinician provides supervision and take students on usual nursing home service “rounds” | Potential benefits for students, clients and RACFs | Pilot with La Trobe University SP students and Northern Health Nursing Home Service |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **Setting** | **Brief description** | **Viability** | **2013 implementation** |
| **Model 6: Private Practice Shadowing** | RACFs | Students shadow a private practitioner CE who is paid on a fee-for-service basis. | Suitable for novice CPs | Not piloted |
| **Model 7: Private Practice Internship** | RACFs | Mentorship program aimed at preparing entry-level students for aged care and to screen and select students for employment. | Viable for physiotherapy practice. | Implemented with 5 UoM physiotherapy students. |
| **Model 8: Inter-professional residential care CP module** | Hospitals and RACFs | An IP residential care module is built into CP in acute or sub-acute settings. | Potential to improve quality of gerontology CPs and Health Service capacity for supervision. | Model was explored with St Vincent’s Health. No pilot resulted. |

### **Part 4: Aged Care Providers in the NMCPN interested in AH CPs — Survey respondents**

Uniting Aged Care – Lumeah Day Therapy

Uniting Aged Care – Carnsworth

Vasey RSL Care

Corpus Christi Community Greenvale

Little Sisters of the Poor Aged Care

ACSAG – Rosanna Views

Aberdeen Aged Care

Principal Meadowglen

Cabrini Residential Care

Hawthorn’s Victoria Gardens

Bupa Greensborough

Wesley Aged Care Housing Services

Glenlyn Aged Care

Alphington Lodge

San Carlo Homes for the Aged

Embracia – (student development program across all sites)

Carrington Aged Care – Hilltop Aged Care

**Part 5: An inter-professional aged care placement experience for 1st year Health Sciences students**

**Background**

An inter-professional aged care placement experience for La Trobe University first year Health Sciences students was developed and piloted to address:

* The limited opportunities for inter-professional experiences in community and residential aged care settings;
* A lack of preparedness among UAC AH clinician for supervising students; and
* The low profile of ageing and aged care in the Health Sciences course curriculum.

**Goals of the placement experience were:**

* To offer an inter-professional clinical placement experience in an aged care setting;
* To promote positive attitudes towards older people and working in aged care;
* To expose students to clinicians who are enthusiastic about working in aged care;
* To provide an opportunity for students to develop oral communication skills with older clients;
* To increase education providers’ interest in offering aged care clinical placements to students and strengthening teaching on ageing into the undergraduate curriculum;
* To assist in promoting a ‘student friendly’ culture in aged care organisations; and
* To assist in improving allied health staff confidence, skills and enthusiasm for student placement supervision.

The model was piloted in August 2013 with 14 first year La Trobe University Health Sciences students at two Uniting Aged Care (UAC) sites. The selected sites employ a mix of allied health professionals on staff. One site offers a day therapy centre and a residential aged care facility and the other offers a day therapy centre and a planned activity group.

The pilot placement involved a preparation session at the university and a half-day visit at one of the two participating sites (six to eight students at each site). Student participation was entirely voluntary and did not relate to any subject assessment.

**Placement schedule**

Day 1: One-hour preparation meeting at La Trobe University

Day 2: On-site placement (half a day)

*Site 1: Strathdon Community Day Therapy Centre and Residential Aged Care Facility (RACF)*

* Presentations and Q&A with a panel of allied health professionals
* Tour of the facility
* Observing individual and group therapy sessions in the day therapy centre
* Conversation and afternoon tea with Strathdon RACF residents

*Site 2: Elgin Street Day Therapy Centre and Planned Activity Group (PAG)*

* Presentations and Q&A with a panel of allied health professionals
* Observing individual and group therapy sessions in the day therapy centre
* Participating in a PAG activity
* Conversation and afternoon tea with PAG participants

**Evaluation**

* Over 30 students voluntarily submitted expressions of interest to participate. (For some students, the dates and times clashed with their semester timetable so they were not able to participate.)
* 14 Health Sciences students from eight AH courses participated in the placement.
* 15 clinicians from eight AH professions participated in the placement.
* Students commented that they had ‘a great time’ and that the placement was ‘inspiring’, and ‘fun’ but most felt that the placement was too short.

*Overall satisfaction:*14 students reported being ‘very satisfied’ with the placement experience.

*Improved knowledge:* Thirteen students reported that their knowledge of the roles of health professionals in aged care settings was improved ‘a lot’ by placement experience.

*Expectations***:** Students were asked whether the sites they visited fitted their expectation of a day therapy/residential aged care setting. Nine students reported that they had a much more positive experience than they were expecting. The ways in which the sites exceeded their expectations were as follows:

* A more positive social environment than expected (reported by 6 students)[[2]](#footnote-2)
* More activities, equipment and facilities than expected (reported by six students)
* A wider range of health professionals involved in aged care than expected (reported by two students)
* DTC clients’ levels of participation and motivation were higher than expected (reported by two students)

**Summary**

Evaluation findings indicate that the placement experience contributed to students’:

* Insight into the lives of older people who require various levels of support
* Understanding of the role of allied health professionals who works in aged care settings
* Understanding about how allied health professionals can work with older people to enhance their independence and wellbeing.

Discussions have begun within the Faculty of Health Sciences at La Trobe University to tie this CP model in with the existing first year profession mentoring programme in 2014. Senior management and site managers at UAC as enthusiastic about continued involvement with allied health student placements. There is potential to transfer this model to other aged care and education providers.

## Part 6: Literature Review

This review seeks to examine current models for AH CPs and the applicability of these models in aged care settings. Given that this project aims to create a sustainable framework, the review focuses on recent and innovative supervisory models which are consistent with current trends in clinical education. The literature review seeks to answer the following questions:

1. What CP models have been shown to be effective in AH education and training?
2. What CP models have been shown to be effective in aged care settings?
3. What placement models are suitable for AH clinical education and training in aged care settings?

### **Methodology**

A search of the literature on models of student CPs in AH education and training was conducted through electronic databases (CINAHL, Medline and PsychInfo). Searches were restricted to English language, peer reviewed articles published in 2001 or later from OECD countries with aged care and public health systems comparable to Australia's.

Searches were conducted using two groups of search terms:

* clinical placement OR student placement OR fieldwork OR clinical education
* allied health OR allied health assistance OR dietetics OR exercise physiology OR occupational therapy OR physiotherapy OR podiatry OR psychology OR speech pathology OR social work)

With one or more of the following groups of terms:

* interdisciplinary OR interprofessional
* collaborative OR 2:1 model OR 3:1 model OR group model
* aged care OR geriatrics OR nursing home OR residential care OR community care
* cross organisation OR across settings OR across services OR multiple services OR two settings OR two services

Altogether, 389 articles were identified, 88 potentially relevant articles were located, and 20 papers were used in the review.

#### Findings

This review begins by briefly describing three types of models used in AH education identified in the literature: ‘traditional’, ‘collaborative’ and ‘inter-professional education (IPE)’. The research that has evaluated the use of these models in AH education in general and in aged care setting in particular is then presented. Lastly we consider the factors that may facilitate and impede AH CPs in aged care settings.

##### Traditional supervision model

The ratio of one supervisor to one student is the traditional model for CPs in AH placements. This model typically enables the student and educator to build a strong relationship   
through observing each other and working together. It is easy to organise the student’s time and integrate the student into the team and department ([Martin, Morris, Moore, Sadlo, & Crouch, 2004](#_ENREF_16)).

##### Collaborative supervision models

There has been a move in some countries towards models of supervision for CPs in which one supervisor is shared between two or more students. These models have come about in response to a shortage of placements available to education providers and recognition of the value of collaborative learning amongst students ([Dawes & Lambert, 2009](#_ENREF_6); [Martin, et al., 2004](#_ENREF_16)).

##### Interprofessional education (IPE)

Interprofessional education involves collaborative learning involving members of two or more professional groups. IPE was first discussed in policy documents in the 1990s as a potential strategy for improving collaboration between health and social care professionals. This discussion led to an increase in IPE initiatives since the 1990s ([Reeves & Freeth, 2002](#_ENREF_19)).

Interprofessional education for students aims to better prepare them for a health care environment in which teamwork is seen as an effective strategy for providing better quality care. Potential benefits of administering IPE initiatives for students include addressing negative perceptions held about other disciplines; an increased understanding of the roles of other professionals; improvement in inter-professional communication; preparation for working in an inter-professional setting ([Davidson, Smith, Dodd, Smith, & O'Loughlan, 2008](#_ENREF_5); [Reeves & Freeth, 2002](#_ENREF_19); [Smith & Seeley, 2010](#_ENREF_24)).

Interprofessional training wards which are care units in which students from different health disciplines work together to develop their own professional identity and to collaborate with the team have been used to provide students with an inter-professional experience during CPs ([Mackenzie et al., 2007](#_ENREF_15)).

#### Clinical placement (CP) models in allied health (AH) education

##### Evaluation of traditional 1:1 supervision

There has been some research contrasting the traditional 1:1 model of supervision for AH placements, with collaborative supervision involving 2:1 and 3:1 ratios. In an international survey on clinical education models in speech pathology the 1:1 model was rated by university staff as the most effective model for the improvement of student competency ([Sheepway, Lincoln, & Togher, 2011](#_ENREF_23)). However, a British comparison of placement models in occupational therapy highlighted the disadvantages of using the 1:1 model. It was noted that the student does not have any peer company for reassurance and shared learning and there is a potential for the student becoming dependent upon their supervisor (Martin, 2004). Thomas, Penman and Williamson ([2005](#_ENREF_27)) argued that the 1:1 traditional model is unlikely to be the future trend for CPs in occupational therapy in Australia and New Zealand because it is not conducive to adult styles of learning and that it rests on the assumption that the supervisor is the expert while the student has limited skills to offer. The authors emphasised that this is unlikely to assist students to become innovative and critical thinkers or reflective practitioners as is now expected of new graduates.

##### Evaluation of collaborative supervision

The most thorough investigations of the use of collaborative models of supervision for AH CPs have been conducted in physiotherapy and occupational therapy. The 2:1 model of supervision for AH CPs has been shown to be conducive to a more adult style of learning which is consistent with trends in clinical education more generally. This model has been found to promote teamwork, peer support and peer learning, to provide a broader patient experience and to provide a more satisfying experience for clinical supervisors ([Baldry-Currens & Bithell, 2003](#_ENREF_3); [Moore, Morris, Crouch, & Martin, 2003](#_ENREF_17)).

In their qualitative study which focused on clinical educators and undergraduate physiotherapy students using the 2:1 model in a hospital setting, Baldry-Currens and Bithell ([2003](#_ENREF_3)) found that 98.3% of the students appreciated peer discussion and 81.4% found peer support to be beneficial. In physiotherapy ([Moore, et al., 2003](#_ENREF_17)) and occupational therapy ([Martin, et al., 2004](#_ENREF_16)) the 2:1 and 3:1 models have been shown to benefit students by enabling peer support and peer learning opportunities and helping them feel more confident and less intimidated ([Martin, et al., 2004](#_ENREF_16)). In the same study educators suggested that the students enhanced their learning through discussion of clients, assessments, treatment techniques and plans, they were able to motivate each other, problem solve and exchange feedback. Physiotherapy supervisors also reported that students were more likely to ask more challenging questions of their supervisor (Moore, 2004). With respect to the impact on clinical educators, Baldry-Currens and Bithell ([2003](#_ENREF_3)) found that although many of the physiotherapy clinical educators initially expected difficulties in managing 2 students, 35 out of 37 clinical supervisors were willing to use the model again. Occupational therapy educators reported that teaching sessions were more rewarding and they appreciated student questions which made them reflect on their own practice and clinical reasoning ([Martin, et al., 2004](#_ENREF_16)). A number of studies have identified potential problems with the 2:1 model. Dawes and Lambert’s ([2009](#_ENREF_6)) study with clinical educators found that the use of the 2:1 model was generally unplanned and placements were not specifically designed to improve student learning but to increase placement capacity. This study also found that practice educators who used the other staff in the department as support for the supervision considered the 2:1 model as an effective supervisory model while supervisors who took a more didactic approach reported having greater difficulty and expressed concerns about the quality of the learning experience. The clinical educators reported that while the presence of two students enabled the provision of extra services to patients which would not otherwise be offered, the time they spent supervising students limited their own capacity to see patients. While the potential for incompatibility or harmful competition between students was reported by Baldry-Currens and Bithell ([2003](#_ENREF_3)), they presented no actual evidence of this . In both the 2:1 and 3:1 models some students have reported that it takes longer to develop a relationship with their educator.

Studies investigating the 3:1 model have highlighted more disadvantages than advantages. The 3:1 model has been reported to make integration into the department more difficult for occupational therapy students as other staff approached the group of students less frequently ([Moore, et al., 2003](#_ENREF_17)). The draw backs of the 3:1 model reported by Martin ([2004](#_ENREF_16)) included difficulty keeping an eye on three students and getting to know them individually. Students were concerned that they would not be assessed accurately. Educators were also concerned that it took longer to build the student/ supervisor relationships. Other issues were insufficient space and not having enough clients for all the students.

##### Evaluation of IPE supervision

Interprofessional education has been shown to be beneficial for AH students in their development of an understanding of the importance of inter-professional communication and the roles of other disciplines ([Lidskog, 2009](#_ENREF_13); [Lumague et al., 2006](#_ENREF_14)).

Allied health student reports of experience with inter-professional education are largely positive. Reeves and Freeth ([2002](#_ENREF_19)) evaluated a pilot inter-professional training ward which ran for a four week placement. Students felt that their teamwork skills were enhanced; they were provided with a beneficial autonomous learning experience and a greater understanding of inter-professional teamwork. However there was no comparative student data from a more traditionally structured placement. In a discussion of student perspectives of an IPE experience on a stroke unit at a rehabilitation institute Lumague et al. ([2006](#_ENREF_14)) found that students reported learning about the ways in which the expertise of other disciplines could benefit their patients. In another analysis of students’ experience on an inter-professional training ward Lidskog, Lofmark, and Ahlstrom ([2009](#_ENREF_13)) reported that the program improved awareness of the use of collaborative practice and its benefits for patient care. Students also reported that they had an increased confidence in their own professional identity. Mackenzie et al. ([2007](#_ENREF_15)) conducted a study with occupational therapy students in an inter-professional training ward on a rehabilitation ward for older people. Students reported appreciating the lack of hierarchy present in working in a student team which enabled more questioning, sharing of knowledge and mutual learning.

Davidson et al. ([2008](#_ENREF_5)) identified some difficulties with IPE including role uncertainty, having unequal numbers of students from each discipline, having students at different stages of their courses, and having students at different academic levels.

### **Evaluation of clinical placement (CP) models used in aged care settings**

Evidence surrounding the implementation of CP models in aged care settings is very limited. Most of this literature focuses on CPs for nursing students, some examines inter-professional placements and only one study that specifically examined AH CPs in aged care was located in aged care. Abbey et al. ([2006](#_ENREF_1)) conducted a systematic review of literature (2000-2005) to examine studies which detail the experience of students, teachers, site staff and patients during undergraduate CPs in aged care settings. The authors found no documented attempt to create a best practice model for addressing the recognised problems surrounding existing models.

Flood et al. ([2010](#_ENREF_7)) presents a case study of collaborative student supervision in occupational therapy in an aged care facility over one year. The clinical educator supervised three student placement blocks with four, two and three students respectively. The model was reported to be beneficial for the student as well as the clinical educator and the organisation. The reported benefits of the collaborative model for students included more autonomy, enhanced learning and increased skills and confidence.

The interdisciplinary approach to education and training of professionals in aged care has been advocated for over a decade (Clark, 1997; Gariola, 1997). A recent Australian study identified three IPE placement programs in residential aged care settings which aim to provide good quality placement experiences for students, to increase students’ awareness of the contributions of other disciplines, and encourage graduates to work in the aged care sector ([Ginevra, 2011](#_ENREF_10)), however, no evidence on the effectiveness of these programs was presented. These programs are:

1. Interdisciplinary education program developed by the Bendigo Health Care Group which uses team teaching, journaling and workshops.
2. ‘Inter-professional clinics’ developed in South Australia through collaboration between Helping Hand Aged Care and the Division of Health Sciences at the University of South Australia.
3. ‘Teaching nursing homes’ developed through partnerships between aged care providers and education providers.

Further reports on the development of Teaching Nursing Homes in Australia are available on the Department of Health and Ageing website. A number of community-based AH clinical placement programs have been described in the literature. Wheeler, Powelson, and Kim ([2007](#_ENREF_28)) evaluated an IPE program which involved students from various health disciplines conducting four home visits in interdisciplinary groups to elderly patients in senior housing complexes over a period of 18 months. Preliminary results suggest that supervisors thought that nursing students displayed an improved attitude towards interdisciplinary practice. In addition, students reported that they felt the program was good preparation for working in healthcare ([Wheeler, et al., 2007](#_ENREF_28)). Hayward, Kochniuk, Powell, and Peterson ([2005](#_ENREF_11)) described a program in which medical and AH students and university supervisors provide an interdisciplinary outreach program to rural older adults. At the time the article was written the program had been running for 3 years, provided intervention to more than 750 older adults with the participation of 156 students. More than 60% of the participating students reported a desire to work in aged care having completed the program.

The main barriers and difficulties associated with inter-professional placements are associated with administration and supervision. The logistical complications of this model limits its ability to be readily implemented ([Davidson et al., 2008](#_ENREF_5); [Reeves & Freeth, 2002](#_ENREF_19)). A 2008 systematic review ([Davidson et al.](#_ENREF_5), 2008) revealed that the most commonly noted barrier to IPE in general was the logistical demands of coordinating students from a variety of courses to engage in an IPE exercise at the same time. Issues included timetabling/scheduling issues, student recruitment and finding suitable sites for placements which would meet students’ learning needs. Reeves and Freeth ([2002](#_ENREF_19)) reported that CP facilitators often found it stressful and had difficulty coping with the demands of their usual roles.

Planning an inter-professional training ward can take up to two years and studies suggest that it requires the committed and energetic managers, administrators, coordinators and facilitators in order to be successful. Wheeler et al. ([2007](#_ENREF_28)) considered coordinating the visits the biggest challenge given that students came from a variety of courses with different timetables. This author suggested that one way to facilitate IPE would be to bring professionals from each of the represented disciplines together during orientation and debriefing sessions to model appropriate inter-professional communication ([Wheeler et al., 2007](#_ENREF_28)).

### **Conclusion**

Overall, this review highlights the lack of literature on innovative models for AH placements in aged care. In aged care settings there have been several interdisciplinary outreach programs internationally ([Hayward, 2005](#_ENREF_11); [Wheeler, et al., 2007](#_ENREF_28)) which have had some success and there are a number of innovative clinical teaching strategies which have been developed in Australia recently such as teaching nursing homes and interprofessional clinics ([Ginevra, 2011](#_ENREF_10)). However at this stage there remains very little evidence to suggest that any one model of supervision has been effective in aged care settings ([Abbey, et al., 2006](#_ENREF_1)). There has been some investigation into barriers and opportunities for CPs in residential aged care ([Ginevra, 2011](#_ENREF_10)) but there has not yet been a focus on AH in aged care. Furthermore, the use of IPE and collaborative supervision models in residential and community aged care settings have to date not been thoroughly evaluated. Despite this gap in the literature, relevant information about CP models which may be applicable to aged care can be gleaned from evaluations of CP programs in other settings particularly from those which highlight the barriers and enablers for successful placements.

The literature indicates a trend away from the 1:1 model of supervision for AH CPs, as it fits with an older didactic style of learning which is not particularly helpful for providing students with the independence, creativity and critical thinking skills now expected of graduates. In addition, limited access to clinical supervisors in aged care services is a major barrier to providing 1:1 supervision.

The evidence suggests that the use of a collaborative model, particularly a 2:1 model, can be beneficial for both AH students and supervisors. This is potentially appropriate for aged care settings provided that the service has the resources and preparation required to provide a good quality placement to two students simultaneously ([Dawes & Lambert, 2009](#_ENREF_6); [Moore et al., 2003](#_ENREF_17)).

Despite the logistical requirements of inter-professional programs, the documented benefits of this model suggest that it is worth considering and integrating elements of this style of learning into placements in aged care settings.

The development of a framework for expanding CP settings to aged care presents an opportunity to use a model of supervision which is consistent with current trends in clinical practice education. Developing this framework will also require establishing a process for education and training partnerships between aged care providers and education providers.

Table A2: Summary of literature review articles

| Article | Discipline | Participants | Methods | Key findings | Critical appraisal |
| --- | --- | --- | --- | --- | --- |
| **Baldry Currens,** **2003**  United Kingdom  Review of evidence surrounding the 2:1 model including theoretical concepts which ground the model and the issues in its application. | Physiotherapy |  | A database search which identified five comparative studies and five descriptive studies. | Author was unable to conclude that the 2:1 model was better than any other; however, the author suggested that the 2:1 approach can enable the teamwork and peer assisted learning as well as broader patient experience. Risks include a potential for incompatibility or harmful competition between students. | Search methods clearly outlined and summaries including limitations of papers provided in addition to a combined analysis of the literature. |
| **Baldry Currens & Bithell, 2003**  United Kingdom  Qualitative study focused on clinical educators and undergraduate physiotherapy students using the 2:1 model. | Physiotherapy | 37 clinical educator and 61 physiotherapy students from six universities | Semi structured interviews and post-interview questionnaires were used to explore perceptions of use of the 2:1 model | Many of the clinical educators initially expected difficulties in managing 2 students but 35 out of 37 clinical supervisors were willing to use the model again. 98.3% of the students appreciated the peer discussion and 81.4% found the peer support to be beneficial. | Restricted to hospital settings  Inadequate descriptions of the student years, single and repeated placements and the level of patient delegation to students |
| **Moore, Morris, Crouch & Martin, 2003**  United Kingdom  Evaluation of the impact of the 1:1, 2:1 and 3:1 models on quality of education and the experience for clinical educators. | Physiotherapy | 48 third year physiotherapy students and 8 physiotherapy clinical educators | Face to face interviews with students and educators at the completion of each placement. Four department managers and four visiting tutors were also interview when all of the placements were completed | 2:1 and 3:1 models provided benefits through enabling peer support and peer learning opportunities  In both the 2:1 and 3:1 models some student s felt that it took longer to develop a relationship with their educator  3:1 model provided made integration into the department more difficult.  Adequate preparation for 2:1 and 3:1 placements required | Data collection and analysis processes clearly outlined. |
| **Martin, Morris, Moore, Sadlo et al. 2004**  Qualitative study comparing the 1:1, 2:1 and 3:1 models of clinical placements in occupational therapy | Occupational therapy |  |  | 2:1 model was found to be the most successful.  Collaborative models provided opportunity for peer support and peer learning and student were more likely to ask challenging questions.  3:1 students spent significantly less time with their supervisor potentially reducing supervisors’ capacity to assess students and meet their needs. |  |
| **Dawes and Lambert, 2010**  Qualitative study looking at practice educator’s experiences of supervising two students. | Allied health | 13 practice educators | Interpretive, phenomenological approach.  Interviews and focus groups | Success is dependent upon the approach and attitude of the educator.  The model was frequently used without adequate planning which impacted on the supervisors’ view of the effectiveness of the model | Multiple methods of data collection however only a small sample |
| **Flood, Haslam & Hocking, 2010**  New Zealand  Case example of the implementation of a collaborative model of student supervision in an inpatient aged care facility over one year. | Occupational Therapy | One occupational therapist, occupational therapy students (number not reported) | One of the authors describes her experiences of being a clinical educator for occupational therapy students using a collaborative model. | This model can be beneficial for the student as well as the clinical educator and the organisation. It can enable students to be more autonomous, enhance their learning and increase their skills and confidence. Thorough preparation and planning is imperative for a successful placement. | Low level of evidence - difficult for the authors to draw conclusions from the reports of one occupational therapist in one setting |
| **Reeves & Freeth, 2002**  United Kingdom  Evaluation of a pilot interprofessional training ward which ran for a four week placement. | medicine, nursing, occupational therapy and physiotherapy | 36 students, 10 facilitators, 34 training ward patients, 34 non-training ward patients | Group interviews, with the 6 student teams, pre and post individual interviews with 10 facilitators, questionnaires with the training ward and non-training ward patients, 50 hours of ward-based observations. | Students felt that their teamwork skills were enhanced; they were provided with a beneficial autonomous learning experience and a greater understanding of interprofessional teamwork  Facilitators: found it often stressful and had difficulty coping with the demands of their usual roles. | No comparative student data |
| **Lumague et al, 2006**  Canada  Discussion of student perspectives of an IPE experience on a stroke unit at a rehabilitation institute. | medicine, nursing, occupational therapy, pharmacy, physiotherapy social work and speech pathology | Nine students across seven health disciplines | Unclear how data for case studies from students of physiotherapy, social work, pharmacy, occupational therapy and nursing was obtained. | Students reported learning about the ways in which the expertise of other disciplines could benefit their patients. | Methodology not clearly outlined  Medicine and speech pathology student did not contribute to the paper (can they still be recorded as participants??) |
| **Lidskog, Lofmark & Ahlstrom, 2009**  Sweden  Description and analysis of students’ experience on an interprofessional training ward | nursing, occupational therapy and social work | 39 student nurses, 22 student occupational therapists and seven student social workers plus 5 supervisors and 9 health care assistants. | Individual interviews, group interview, participant observation, students' written descriptions of collaboration on the ward. | The program was found to improve awareness of the use of collaborative practice and its benefits for patient care. Students reported that they had an increased confidence in their own professional identity. | Multiple sources of data and data collection methods were used |
| **Smith & Seeley, 2010**  Canada  Systematic review of the literature on the use of interprofessional approaches to clinical placements | Primarily nursing | 28 interviewees comprising academic deans and Executive Directors from across Canada | Systematic review of published and grey literature 1996-2006 plus interviews with deans and their representatives from nursing schools and representatives from health sciences placement networks. | Search did not reveal published literature on the use of interprofessional approaches to clinical placements | Out dated article. More recent literature on this subject reveals some evidence for interprofessional approaches to clinical placements |
| **Davidson et al., 2008**  Systematic review of interprofessional pre-qualification clinical education | Various disciplines |  |  | No single preferred model of interprofessional education was identified.  Most frequently reported barriers were logistical issues resulting from coordinating students from different disciplines.  Planning, clear and open communication, enthusiasm and commitment to the project were key enablers of effective interprofessional education. |  |
| **Mackenzie et al., 2007**  Qualitative study looking at the experiences of occupational therapy students participating in an interprofessional training ward. | Occupational Therapy | 3 occupational therapy students | Focus group | Students reported having positive experiences.  Students gained insights into the importance of interpersonal and intrapersonal skills and an awareness of the roles of other team members. | Focus only on short term impact of interprofessional education on a very small sample. |
| **Sheepway, Lincoln, & Togher, 2011**  Australia  A comparison of a variety of clinical education practices in speech pathology | Speech Pathology | 25 clinical coordinators, 11 heads of program or department, four clinic managers/directors, 3 lecturers, 2 clinical educators | Online survey completed by university staff to gather opinions of different models in improving student competency, and the reasons for utilising different models of supervision | A student to supervisor ratio of 1:1 was rated as the most effective for the improvement of student competency closely followed by a ratio of 2:1. Ratios of more than 2:1 were rated the least effective.  Choice of placement models was most influenced by student learning outcomes, availability of placements, factors relating to clinical educators and the standards of professional associations. | Online survey with the open and closed questions. Responses to open ended questions were 1-2 sentences on average limiting the level of detail available to the authors. |
| **Kell & Owen, 2009**  UK  Assessment of the effect of different supervisory models on students' learning | Physiotherapy | 51 second year and 39 third year physiotherapy students | Three questionnaires (learning approaches inventory, demographic questionnaire and placement self assessment) were completed by physiotherapy students | Increasing the ratio of student: supervisor or supervisor: student may have a negative impact on students' learning on a four week placement.  Students must be provided with a safe and supported environment when innovative placement models are used. | Only exploring models in one discipline  Innovative models are used less frequently in the UK therefore staff may be less experienced in delivering this kind of education |
| **Hayward, Kochniuk, Powell, & Peterson, 2005**  USA  An examination of the impact of a student placement in a community based aged care setting on student perceptions of interdisciplinary practice | Nursing | 102 students across physical and occupational therapy, nursing, dietetics and a small number of students from other disciplines. | The Interdisciplinary Education Perception Scale (IEPS) used as pre-test and post-test outcome measure. IEPS includes four factors: Professional competence and autonomy, Perceived need for Professional Cooperation, Perception of Actual Cooperation and Resource Sharing Within and Across Professions. Analysis conducted with the use of descriptive statistics and repeated-measures analysis. | An interdisciplinary approach to a clinical placement during which students provide mobile health services to older adults was found to improve the students' perceptions of other health disciplines when they were given support through facilitated communication and interaction by the faculty. | No control group  Nursing students far outnumbered students from other disciplines |
| **Wheeler, Powelson, & Kim, 2007**  USA  Discussion of a program which provided students from various health disciplines a chance to participate in an interdisciplinary team in conducting home visits in groups to elderly patients over a period of 18 months. | Medicine, nursing, speech pathology, and health sciences | Patient over the age of 65 living in senior housing complexes and undergraduate medical and nursing students (number of participants not reported) | Methods of data collection/analysis not reported | Coordinating the visits was the biggest challenge given that the students came from a variety of courses with different timetables.  A professional from all of the represented disciplines was required to model appropriate interprofessional communication during orientation and debriefing sessions.  Preliminary results from evaluation suggest that nursing students displayed an improved attitude towards interdisciplinary practice.  Students reported that they felt the program was good preparation for working in healthcare. | (Reporting on a program, authors not attempting to draw significant conclusions)  Number of participants not reported |
| **Hayward, 2005**  USA  Description of a program in which students and faculty supervisors provide an interdisciplinary outreach program to rural older adults. | Medical and allied health disciplines | 156 students from various health disciplines and more than 750 older adult patients participated in the program (participants not involved in formal evaluation for this article) | A description of the program is provided. Methods for collecting data are not reported. | At the time the article was written the program had been running for 3 years, provided intervention to more than 750 older adults with the participation of 156 students.  More than 60% of the participating students reported a desire to work in aged care having completed the program. | No formal evaluation of the program involving the participants in the program |
| **Abbey et al., 2006**  Australia  Systematic review of literature (2000-2005) to examine studies which detail the experience of students, teachers, site staff and patients during undergraduate clinical placements in aged care settings. | Nursing | (systematic review article) | Search of a range of databases as well as a search of selected journals and reference lists of reports and investigations. | No models were able to be identified which could be described as being evidence based or best practice based.  At this time there had been no documented attempt to create a model based on the literature which describes possibilities for new models or problems surrounding existing models. | Search methods clearly delineated  Most recent studies reviewed are from 2005 |

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1. 14 duplicated records, 1 childcare service, and 1 pathology service were excluded from the list. [↑](#footnote-ref-1)
2. The sense of community, residents having great relationships with each other and with the staff [↑](#footnote-ref-2)