

A new model of clinical education to increase student placement availability: The capacity development facilitator model

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This paper reports on a trial of a new model of clinical education designed to increase student clinical placement availability and address workforce constraints on supervision. The University of Sydney deployed the Capacity Development Facilitators (CDF) in selected Sydney hospitals to work with staff to expand student clinical placement opportunities by identifying enablers, barriers and stressors of clinical placements and collaboratively developing solutions, provide organizational and learning support and foster opportunities for interprofessional learning. A mixed methods study was undertaken collecting data from physiotherapy students and their clinical educators (CE). At completion of placement students and CEs completed a survey. This was analyzed for themes about placement structure, productivity, barriers, enablers, stressors and support. Preliminary findings suggest the CDF model increases capacity, provides robust learning experiences and satisfaction with placements from the hospital, university staff and students' perspectives. (*Asia-Pacific Journal of Cooperative Education, 2016, 17(1), 45-59*)

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Clinical education is a major component of pre-entry allied health curricula. It refers to the supervised acquisition of work readiness skills and provision of clinical opportunities for students to attain competence at a level of a beginning practitioner by applying theoretical and evidence based knowledge, skills and attributes developed in academic study, and building on these through interaction with clients and professionals. Workplace based education provides students with situations in which to practice interpersonal skills and develop characteristics essential to producing productive professional graduates (Higgs, 2010). The interaction between clinical educator and student has been stated as the strongest element in developing expertise and forming professional identity (Laitinen-Vannamen, Talvitie, & Luukka, 2007). Clinical education is the arena in which students learn norms, values, rules and loyalties within the profession as well as theoretical and practical skills (Laitinen-Vannamen et al., 2007). The responsibilities and roles in clinical education are shared between educators and students (Higgs, 2010).

Physiotherapy is provided within many contexts and the practice is shaped by these contexts. Hence, students must complete placements in these varied contexts for registration as a practitioner (Kell, 2013). Students are required to demonstrate core skill competencies in order to be deemed practice/work ready (Brown, 2013).

Physiotherapists work in a healthcare environment of increasing complexity and rapid change, of fiscal restraints and demands for accountability that require the establishment of collaborative partnerships with clients, caregivers, peers, colleagues, universities and other health professionals (Ajjawai & Patton, 2009). A deeper understanding and awareness of the

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unique and complex multi-dimensional clinical learning environment as a workplace is required to contribute to the development of effective, efficient and sustainable clinical education models to address the needs and challenges facing students seeking to develop professional practice capabilities while undertaking clinical placement.

CEs are perceived by students as being professionals who are willing to share their knowledge, experience and skills whilst the students are on placement (Bennett & Hartberg, 2007) and assist with the application of skills and knowledge that they have been exposed to in the academic setting in real life professional contexts (Caballero, Walker, & Fuller-Tyszkiewicz, 2012). A strong historical adherence to the one student to one CE (1:1) placement model (Moore, Morris, Crouch, & Martin, 2003), as well as an increase in the number of physiotherapy programs in recent years (Dean, Stark, Gates, Czerniec, & Hobbs, 2009), has led to a shortage of available placements. The 1:1 model does not assist in increasing productivity (Baldry Currens, & Bithell, 2003) and the student lacks the benefits of peer learning such as discussion and practice of techniques (Ladyshewsky, 2004). The CE has to maintain a high caseload (Casares, Bradley, Jaffe, & Lee, 2003) and can only delegate part of this to one student and not share it across students. This often results in the student in a 1:1 placement spending less time with their educator. High caseload may be due to patient acuity or volume and there is the expectation that this is met, even if it means that student time is reduced. There is a growing body of support for the use of collaborative or multiple placement models as they embrace sound educational principles of adult learning and peer learning (Moore et al., 2003).

Universities are challenged to provide leadership and foster collegial relationships (McMeekan, 2008), to find a way forward that will ensure ongoing placement capacity. As well, they are also expected to provide quality of clinical education experiences for their students (Hegge et al., 2010). Currently there is no gold standard model of physiotherapy clinical education (Lekkas et al., 2007) and proposing that one model could address the needs of every situation is contestable. There is a need to develop and evaluate clinical placement models that increase placement capacity, are cost-effective, efficient, instill a positive learning culture ensuring sound student learning outcomes, provide appropriate facilities and resources, and ensure quality patient care (Lincoln & McCabe 2005; Wright, Robinson, Kolbe, Wilding, & Davidson, 2013).

An urgent need to create a new approach to clinical education that increases capacity highlights the potential contribution of situated and workplace learning theories to the development of a new clinical education practice (Patton, Higgs, & Smith, 2013). Situated learning theory focuses on understanding learning contexts rather than individual learning styles and is based on the belief that knowledge and skills are learned in authentic contexts (i.e., the clinical environment). Applying situated and workplace learning theories to the clinical education context, the Capacity Development Facilitator (CDF) Model was developed by The University of Sydney Work Integrated Learning (WIL) Team as an alternative model to address the need for extra sustainable placements and ensure sustainability. An understanding of the economic, social, cultural and political milieu in which an organization operates, as well as knowing their policies and procedures, are essential to success of building capacity (Brinkerhoff & Morgan, 2010) and may necessitate monetary assistance, training, and resources (Brinkerhoff & Morgan, 2010). For the project to be successful individuals and the organization must be open to change.

Perceived barriers to increasing placement capacity to date have included staff stress due to being time poor, decreased productivity and a sense that clinical education is not valued (Davies, Hanna, & Cott, 2011). Workload, staffing, lack of access to peers, inadequate funding and workplace culture all contribute to this perception. The CDF model addresses these perceived barriers by providing a facilitator onsite who works collaboratively with the staff ensuring open lines of communication with all stakeholders. While facilitators are common in nursing education, they are not common in allied health education.

The CDF model aims to find the balance between enhancing student critical thinking, reflective practice and self directedness as well as practical and clinical skills to bridge the gap between theory and practice through a collaborative approach to clinical education. The multidimensional nature that is clinical education is not left to one person but a team approach is adopted so that learning outcomes can be planned to meet educator, student and university needs.

The CDF model can incorporate a number of current models in practice (e.g., peer learning, groups with a 4:1, 6:1 ratio of students to professional, interprofessional learning and team teaching) and is flexible to meet the needs of the CEs, the hospitals and the recipients of health care. The essential difference of this model in comparison to others is the provision of a facilitator who works onsite with all the CEs and students to ensure promotion of teamwork and professional socialization, mutual support, increased knowledge about appropriate learning strategies and improved organizational skills. For the students this new model provides further learning activities that are innovative and performed in an environment that is safe and non-judgmental. The students also have a 'real' connection with a staff member from the university to discuss placement issues rather than faceless communication via email or phone call. The combination of CE and CDF learning experiences made the experience more cohesive because there is consistency and continuity of expectations. The CDF model strengthens the bond between stakeholders (Davies & Bennett, 2008) and helps address stressors identified in student placements (Siggins Miller Consultants 2012). This includes: lack of adequate preparation; poor supervision and conflict with their CE; the amount of knowledge to be acquired and the speed at which to do so, fear of making mistakes; lack of support from the university; a feeling of not belonging; difficult or critical patients; fear of failing and being intimidated by staff.

The Health Workforce Australia (2012) report several perceived barriers to student clinical education. This includes the dual workload demands of patient care and student education, decreased productivity (i.e., patient services when students are present on placement), time constraints at commencement of placement, challenging students and low levels of recognition and reward. The fear of reprisal, inability to change processes due to power play and a fear of being creative in the workplace causes angst and a culture that undervalues clinical education. CEs engaged in clinical education want access to their peers and experts in the field of clinical education to provide strategies of how to tap into the skills the students bring to the workplace students, support from the management and the organization, funding and the ability to be able to engage in part-time work. This scaffolding needs to be provided to alleviate the perceived barriers (HWA, 2012).

Davies, Hanna, and Cott (2011), report that the perceived benefits of student education include increased patient quality of care, increased productivity and CEs keeping up to date with current research. Davies et al. (2011) state that CEs perceive the benefits of student education to be intrinsic rather than extrinsic (e.g., gratification, reflection and knowledge).

Productivity is vital in the health arena and is a key performance indicator, measured by the number of occasions of service. Ladyshefsky (1995) reported that two students equals if not exceeds the productivity of one full time clinician. The CDF model provides the platform for students to increase productivity and therefore improve patient care. What is hoped is that students and their CE deliver more occasions of service during placement compared with those delivered by the educator when students are absent.

THE CDF MODEL AND RESEARCH QUESTIONS

The CDF model is supported by the WIL academics as a means of addressing placement shortages and building sustainable relationships with partner hospitals. This will ensure ongoing placement availability in the future. The model can be used in a variety of clinical areas that have been underutilized in the past.

This paper addresses the following research questions:

1. What are the enablers and barriers of the CDF model?
2. What are the stressors experienced by CEs and students during clinical placement?
3. Does the CDF model increase capacity for student placements?

PROJECT BACKGROUND

The project described in this paper involves The University of Sydney trialing the CDF model for physiotherapy clinical placements in several Sydney hospitals. Hospitals selected to be involved in the project had access to skilled staff, clinical and professional networks, robust clinical governance, specialty areas, endorsement by management that education is valued and open communication between stakeholders. Strategies that were implemented aimed to increase capacity, ensure quality clinical education experience for students, educators and staff through extra support, increase productivity and create sustainability in the future. This qualitative study was interested in exploring participant perceptions and experiences of the CDF model to ascertain whether the model was of benefit (Streubert & Carpenter, 2011).

Prior to the commencement of the study, the university employed 1.5 full time equivalent CDFs who were assigned to two placement hospitals each. The CDF was responsible for increasing capacity, placement opportunities and ensuring its ongoing sustainability, active engagement with staff, developing resources and evaluating the model. Their tasks involved:

- investigating underutilized areas within the hospital,
- providing organizational support (support and mentor students experiencing issues and assist CEs with strategies to deal with challenging or underperforming students),
- conducting learning activities to provide down time for CEs (e.g., generic tutorials, journal club, peer learning and presentations),
- involving junior staff in clinical education,
- conducting regular meetings to ensure key performance indicators (e.g., occasions of service) are being met,
- providing workplace workshops,
- providing customised learning resources for students and CEs,
- analyzing surveys/interviews and disseminate findings at staff meetings, monthly inservices, and
- assisting upgraded CEs to maintain the structure developed throughout the project.

The time required of the CDFs to be onsite varied due to student needs (including those who required remediation), CE workloads and needs. On average nine hours was spent face to face with students in weeks one and two and reduced to six hours in weeks three to five. The university provided funding to upgrade a clinician to become CE for twelve months in each of the participating hospitals. The upgrade was to allow the CE to focus on providing education to the students allocated to them, work closely with the CDF and liaise with other clinicians at the hospital to create new and sustainable placement opportunities. The upgraded clinicians were selected on the basis of demonstrating an interest in promoting clinical education, and their performance at interview. Graduates in the first couple of years of practice were not eligible to apply. The upgraded CE was responsible for designing placements to increase capacity that was mutually beneficial for students and hospital, promoting the value of clinical education, developing independent learning activities (ILAs), mentoring junior staff and formulating action plans for sustainability. Their tasks included:

- working with staff, manager and CDF identifying potential student placement opportunities including student led clinics;
- recruiting staff for involvement in clinical education;
- coordinate full-time placements across part-time staff;
- providing novel learning experiences to reduce active supervision time;
- promoting benefits of student education for professional development and productivity;
- ensuring a culture of positivity is maintained after departure of CDF by establishing systems (e.g., 'teaching teams' to share student education); and
- providing junior staff with support to improve their teaching skills.

The upgraded CEs and CDFs worked collaboratively to provide sound learning experiences. The model is sustainable as the CDF and the upgraded CE developed new approaches to placements by utilizing the resources developed to provide activities that require less direct supervision, foster peer learning and reflective practice.

METHODS

This study involved year 3 and 4 undergraduate, and year 2 GEM students and their CEs. The project was approved by University Human Research Ethics (Project No: 2013/1009). Undergraduate students engage in 5 clinical placements throughout their course but the major placements take place in year 3 and 4. The GEM students engage in 4 clinical placements throughout their final academic year. Placements are five weeks in duration. A minimum of six students per block undertook their clinical placement at the CDF sites.

Participant Recruitment

The CEs and the students at the selected sites were invited to participate in the research project about the model. All participants were provided with a Participant Information Statement at the beginning of placement outlining the aims and purpose of the study and highlighting how issues of confidentiality and anonymity would be addressed. The CEs and students completed an informed consent form if they were willing to be involved in the study. It was made clear in the participant information sheet that the student's assessment would not be influenced by their participation in the study. All personal details were removed from the data.

Data Collection

Data was collected from December 2013 until beginning May 2014 by the principal author of this paper who was also employed as a CDF. Individual semi-structured interviews of 20 minutes duration with each of the four CEs were conducted in the final week of placement to elicit responses about their perceptions and experiences of the CDF model. Interview questions mainly consisted of open-ended questions (e.g., "Tell me about the aspects of the model that you found satisfying"). The CEs also completed surveys which contained 11 questions (4 in the Likert Scale format). The purpose of the surveys and interviews were to explore issues relating to workload (administrative and clinical roles), structure of placement, learning programs provided, professional development needs, enablers and barriers to clinical education, satisfaction in being a CE, stressors and support provided by their department and the CDF

Twenty nine students agreed to participate and surveys were administered in the final week (week 5) of their clinical placement. Student surveys included open ended questions and Likert scale responses. Questions related to clinical load, indirect patient roles (e.g., case conferences), placement structure, resources provided, feedback from CE and patients, success of placement, peer learning experiences, educator strengths and barriers encountered. Students were asked to rank their satisfaction with their CE, stress experienced in weeks 1 and 4, and support provided by the workplace and the CDF using visual analogue scales.

Data Analysis

Braun and Clarke's (2006) phases of thematic analysis were used to guide analysis of the interviews and surveys from the CEs with the aim of identifying and reporting common themes within the data collected. Thematic analysis captured data that was felt to be important to answering the research questions posed and provided insights and understanding into the reality of the people engaged in the CFD model. Another reason for using this method was to allow the reader to understand what was done and why, and to gain an insight into a novel model of clinical education. Student survey responses to open ended questions were analyzed for frequency of response and are summarized in Table 1.

RESULTS

Analysis of the four semi-structured CE interviews and survey data revealed common themes about placement structure, productivity, barriers, enablers and support. Table 1 summarizes these. To date occasions of service, a key performance indicator (particularly in the outpatient setting) indicates that students are able to see patients more frequently and for longer periods of time. Table 2 outlines the enablers and barriers identified in interviews and surveys by CEs about the CDF model of clinical education. Direct quotes from the CE data are shown in italics. Table 3 outlines the most common responses from students who completed the CDF placement survey.

TABLE 1: Themes arising from clinical educator interviews and surveys

Theme	Summary
Workload	<ul style="list-style-type: none"> Increased week one but having the CDF onsite to provide tutorials/ILAs decreased active supervision time.
Occasions of service	<ul style="list-style-type: none"> Decreased weeks 1 and 2 but increased weeks 3, 4 & 5. .
CE experience of the CDF model	<ul style="list-style-type: none"> Worthwhile, enjoyable, challenging. Students more self directed and responsible.
Diversity of skills	<ul style="list-style-type: none"> Improved teaching skills. Changes implemented were to meet the needs of students and placement types.
Barriers/stressors	<ul style="list-style-type: none"> The CDF model provided CEs time away from the students to complete other duties, being assured the students were engaged in relevant ILAs. This reduced CE stress. Productivity increased in weeks 3-5 when the students were more independent,
Departmental support	<ul style="list-style-type: none"> Constant Management monitoring the impact of the project on staff roles to ensure no negative consequences. Management was supportive and provided valuable project input.
University support	<ul style="list-style-type: none"> CDF presence allowed CEs more time to complete other duties. Mutual respect developed establishing a good university-hospital working relationship, resulting in a more cohesive placement. It was a joint venture not just your standardized placement.
Time spent with students Week 1 vs 5	<ul style="list-style-type: none"> Time spent with students decreased by week 5 and the CEs role consisted of assigning patients to students, countersigning notes, and finalizing the Assessment of Physiotherapy Practice.

TABLE 2: Clinical educator views on enablers and barriers of the Capacity Development Facilitator model

Theme	Enablers	Barriers
Workload	<p>CDF providing ILA to students. Peer learning activities. Other staff. <i>'Good to have the CDF in week one to do the generic tutorials which take up a lot of time'</i> <i>'Good to have someone from the university to talk to about struggling students.'</i></p>	<p>Time spent orientating students in week 1. Student lack of knowledge. Workload stress. <i>'The number of patients being seen in week 1 is less than I would normally see.'</i></p>
Service delivery	<p>Increased number of students provided patients with more extensive treatments. <i>'Patients like the students as they can give them more time.'</i></p>	<p>Occasionally patient numbers did not support student numbers. <i>'Had to be mindful of not overwhelming patients with lots of student.'</i></p>
Skills	<p>Different learning styles of students resulted in reflecting on teaching skills. Debriefing with peers. . Resources provided by the CDF (e.g., journal articles). Mini workshops on site. <i>'The department now has a comprehensive bank of resources' [for student learning]</i></p>	<p>Decreased confidence in ability. <i>'I am not sure that I have the skills to take multiple students as I have not read enough about the other models of clinical education that are being talked about.'</i></p>
Departmental support	<p>CDF project supported by Physiotherapy Manager. Physiotherapy department valued clinical education. <i>'The boss is supportive of the project but I still have to ensure that I complete all my normal responsibilities.'</i></p>	<p>Ensuring key performance indicators are achieved (e.g., occasions of service) and normal administrative duties completed. <i>'At times I find it difficult to combine my normal workload with the education of my students.'</i></p>

TABLE 3: Student survey feedback on Capacity Development Facilitator model based on frequency of response

Criteria	Student feedback
Clinical load	Increased as placement progressed. <i>'As the placement progressed around week 3 I was given more patients and received less supervision.'</i>
CE interaction	Supportive, positive. <i>'Patient, supportive ,encouraging''</i>
Assessment process	Supportive. <i>'It was a two way process and my placement goals could be discussed.'</i>
Satisfaction with the CDF model	Majority of respondents reported satisfaction at all times. <i>'Tutorials , journal club , presentations and peer learning activities were great'</i> <i>'Enjoyed the time with the CDF as it allowed me to interact with my peers and learn about what they were doing.'</i>
Placement stressors	Stress levels decreased as students became more familiar with the model and environs. <i>'The staff and the CDF helped decrease my anxiety.'</i>
Workplace support	Increased, positive experience. <i>'Supportive staff.'</i>
CDF support	Increased, positive and supportive. <i>'Good to have someone impartial onsite to discuss concerns with.'</i>
Resources (e.g., handouts, resource folders, papers from journal club)	Resources increased and valuable for future placements. <i>Developed a resource folder that was quite large by the end of placement.'</i>

Note: most frequent response categories are listed at top of the table.

Students frequently questioned why this model was not available for all their clinical placements. The learning resources and support were identified as being superior to other placements. The students reported that having another set of 'eyes and ears' (the CDF) onsite made them feel more comfortable.

From the interviews undertaken with CEs in this study commonly reported stressors were how to combine workload with education but ensure productivity (generally only problematic in week 1 of placement), lack of support from the head of department ("what the boss says goes"), student attitudes to learning, the struggling student, lack of understanding of appropriate clinical models and working alone. Table 4 provides exemplar quotes from CEs.

Table 5 outlines the stressors identified by students in their surveys. Stress levels were higher at the beginning of placement compared to the end and students reported the support from the workplace and CDF helped them to manage stressors. Placement allocation data at participating hospitals currently shows increases in student placement capacity ranging from 63-153%. Pre-CDF placement numbers averaged 4 and increased on average to 11 after CDF work commenced.

DISCUSSION

The CDF model allows the student to be jointly supported by the workplace and the university. One common theme emerging from the student surveys is that the model should be standard for all placements as the students feel there is an agreement between all stakeholders which makes the placement a better learning environment. They also feel that if any issues arise on placement, they have a university staff member to talk immediately. As the CDF is very visible, students also report that they feel they could contact this person for advice when they are on other placements. The model also encourages students to actively engage in learning to maximize their learning outcomes by promoting activities that challenge and support students. This enables them to develop competence and build a positive sense of themselves as professional practitioners (Dornan et al., 2007).

While it is acknowledged that staff are time poor, the model allows for active involvement of the staff, upgraded clinician and the CDF in quality improvement activities around student learning so that better health care delivery can be achieved. The CDF can be the lead in these projects taking the pressure off the CE which may result in the potential to increase satisfaction with the teaching role and better management of service delivery (Steinert, 2005).

As expected from the literature (Rodger et al., 2008) face to face support provided in the CDF model was valued by the CEs and students. The outcome of increased placement capacity as a result of the CDF model must be sustainable beyond the life of the project for it to be deemed successful. In other words, having received face to face support to make change in placements to allow for more students, these changes should be able to be managed by staff once the CDF withdraws and is not available face to face. Sustainability of any model of clinical education is based on transferability and being applicable to other areas of clinical education apart from physiotherapy. Money is not the sustaining feature of the model but rather the resources, changed approaches to placement structure and supervision, and networking that is made available through collaboration. Even when the CDF is removed from the site, support is available by phone, email or infrequent visits.

TABLE 4: Stressors identified by Clinical Educators in semi structured interviews

Theme	Sub themes	Exemplar quotes
Students	Student attitude	<i>Some students arrive on placement with a 'I know it' all attitude'</i> <i>'Students lack professionalism'</i> <i>'Students on their mobile phones at inappropriate is extremely annoying and wastes my time when I have to pull them up on this'</i> <i>'When I have a struggling student they take up a lot of time and the other students miss out on my attention.'</i>
	Struggling students	<i>'I have to do a lot more hand holding with students who have poor clinical reasoning'</i> <i>'For some students for whom English is not their mother tongue require extra opportunities for verbal and written communication practice which takes up valuable clinical time'</i>
	Non English Speaking Background students	<i>'Patients often refuse to be treated by students whose English is hard to understand'</i>
Staff	Willingness to be involved	<i>Colleagues state that they don't have the skills to be effective educators or they don't have the time to supervise'</i> <i>'I worry if I have a day off who will supervise my students'</i> <i>'Our staffing levels are stretched presently and this means there are less people who can be involved in the education of students'</i>
Caseload	Key Performance indicators	<i>'I have a fear that I won't get through my normal workload when I have students'</i> <i>'I know the boss wants me to still meet my key performance indicators whilst I am supervising students'</i> <i>'The number of patients that I see in week 1 is less than I would see when no students are present and it feels very hectic'</i>
Change	Models of Clinical Education.	<i>The CDF model is very different to having one or two students. Understanding the benefits of the model make take some time and convincing'</i>

TABLE 5: Stressors identified by students on clinical placements

Theme	Sub themes	Exemplar quotes
Lacking confidence	Inexperience	<i>'It is my first clinical placement and I didn't know what to expect.'</i>
	Unprepared	<i>'Due to my work commitments I didn't have time to complete all the tasks set by my educator.'</i>
	Difficulty organising thoughts	<i>I get nervous when I am put on the spot and I don't have an answer.'</i>
	Worrying about injuring a patient	<i>'Because English is not my first language I need extra time to organize my thoughts and often they come out wrong.'</i> <i>'I am afraid of pulling out a drip or drain or injuring a patient.'</i>
Time management	Pace of work	<i>'I didn't realise how many patients you are expected to see in a day. It was way more than I expected.'</i> <i>'I now understand why you have to prioritise.'</i>
Patients	Non-compliance Non English Speaking Seriously ill	<i>'I found it confronting to treat patients with dementia or a delirium as I don't know if I am making a difference.'</i>
		<i>'It is hard to take a history from someone who does not speak English and it is hard for them to understand what I want them to do.'</i>
		<i>'It really hits you when a patient you have been treating dies. It is not so bad if they are old but when it is someone your own age it is hard to take.'</i>
Hospital environment	Hierarchy	<i>'I don't know who is who.'</i>
	Documentation	<i>'The doctor's notes are really hard to read and I feel silly if I ask my educator what is written.'</i>
External factors	Difficulty completing tasks Tiredness Finances Work commitment	<i>'I find it difficult to complete the home tasks set by educator as I have to work in the evenings'</i>
		<i>'I often feel tired due to the amount of travelling I have to do to get to the hospital. It is taking me 90 minutes each way'</i>
		<i>'Having to give up my job during clinical is causing me financial stress. I am finding it difficult to pay my rent'</i>
		<i>'If I don't go to work I will lose my job and I won't have enough money to live'</i>

The CDF model is one of flexibility. It is a model that meets the demands of the site and the university. There are several dimensions to ensuring capacity and the CDF model addresses all these aspects. These include understanding the social, cultural, political and economic milieu of the organization in which the model will be utilized, training and education including role specific activities and inservice training for CEs, utilization of skilled staff who are motivated, and establishing networks between the stakeholders.

The CE is not just part of education learning environment but largely responsible for cultivating and facilitating it and is the CDF who assists in fostering this process further. The skilled CEs in the project were able to teach effectively, provide constructive feedback, motivate students, adjust their instructional style, facilitate appropriate questions, foster a positive learning atmosphere in the clinical setting and scaffold learning tasks to meet the learning needs of the students allowing the right level of challenge to be achieved. These factors contributed to students feeling comfortable, confident, competent, capable, listened to, supported and engaged. This is mirrored in the CE comments that the model was worthwhile, enjoyable and challenging with increased productivity and cohesiveness resulting in more positive engagement with students.

Adequate preparation and communication have been recognized as fundamental to having a successful and sustainable placement (Souba, 2004). The strategies developed by the CE and CDF, provided all staff a good understanding of the educational purpose of the placement model. CEs and the CDF used organizational skills to structure activities and work within time constraints which permitted the CEs to spend equal individual time with their students. Workload was viewed in both positive and negative terms and it was perceived according to student ability, attitude, preparedness and staffing levels. Fears expressed at the beginning of the project (e.g., how to provide appropriate education to the students and perform normal daily duties) were generally unfounded and the few problems that did surface were manageable and addressed through the implementation of appropriate strategies that were developed between the CE and CDF. Students consistently reported that having the CDF onsite dampened or negated their stressors and it would be an advantage to have this model for all placements.

CEs reported that having the CDF on site resulted in stress levels being lowered as they had immediate contact with a staff member from the university. This alleviated multiple phone calls and emails particularly around the struggling student. The CDF was also seen as someone who could liaise with the head of department about clinical education to ensure the key performance indicators regarding productivity and the development of resources were being met.

CONCLUSION

Capacity development and implementation need to recognize the fallacy of one-best-way approach, to incorporate flexibility and learning and to pay attention to the specificities of the context. Capacity development increases an understanding of how parts interact by clarifying boundaries and linkages (Brinkerhoff & Morgan, 2010).

The study was designed to examine the enablers and barriers of the CDF Model and the benefits for CEs, students, the hospitals and the university. Understanding the needs of CEs and students is essential to ensure any model that is proposed as a solution to placement capacity can be translated into everyday clinical practice (Sevenhuysen & Haines, 2011). The

results provide insight into the experiences of CEs who undertake clinical education and identifies the perceived advantages and disadvantages of offering placements based on the CDF model in order to maximize quality and quantity of placements.

Preliminary findings suggest the CDF model supports increased capacity, provides robust learning experiences and is a satisfying model of delivery for student placements from the perspectives of the hospital and university staff and students. The uptake of any model involves judgment about its consistency, generalizability, applicability and impact. Careful consideration and interpretation of evidence by stakeholders is required. The limitation to the current study is the small sample size and the limited data collection timeframe. The rollout of the CDF model and its evaluation in different contexts is continuing to identify key factors to its success and sustainability. Networking and active engagement of staff established throughout the project will continue whilst placement capacity is being achieved or expanded further. Further research is required to ensure the cultivated mutually beneficial relationships, improved student learning outcomes and enhanced services for consumers are maintained.

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The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work-Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as cooperative and work-integrated education, work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

The Journal's main aim is to allow specialists working in these areas to disseminate their findings and share their knowledge for the benefit of institutions, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that will lead to the advancement of effective practices, development of further understanding of co-op/WIL, and promote further research.

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Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

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