Clinical education

The student experience of clinical supervision across health disciplines – Perspectives and remedies to enhance clinical placement

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ABSTRACT

Effective clinical practice supervision for health students is essential prior to commencing their respective professions. Students require adequate preparation before their clinical practice event with an experienced clinical supervisor able to impart professional 'know how' and skills to students. The purpose of this study was to describe final year health students' perspectives and experiences of clinical supervision, and to develop an interprofessional model of clinical supervision. Focus groups and semi-structured interviews were conducted with undergraduate health students across a range of disciplines. Some students provided email comments. Qualitative data was analysed thematically using NVivo (V11). Six key themes and their various sub-themes (refer Table 1) were identified: (1) undergraduate learning valued by the CP provider; (2) effective connections (communications) between student, CS, CP provider and university; (3) undergraduate student learning not being valued; (4) ineffective connections; (5) mitigating factors for students; and (6) the impact of increasing student numbers. Undergraduate health student clinical placement requires careful educational preparation, structuring and adequate support for both the student undergoing the practice event and for the clinical supervisor stewarding the undergraduate health professional. A prospective plan to ensure an excellent experience is required (Fig. 1).

1. Introduction

Internationally, clinical placements are recognised as a vital component of undergraduate learning across all health disciplines (Brown et al., 2011; Liljedahl et al., 2015). Workplace-based placements afford students the opportunity to apply the knowledge learned in the classroom in a relevant clinical context, and in doing so enable them to bridge the theory-clinical practice gap (Ralph et al., 2009), develop practical wisdom (Myrick et al., 2010), and to be socialised into their profession (Cope et al., 2000). There is a wealth of literature examining issues around the quality of clinical education and supervision for undergraduate nursing students (Sweet and Broadbent, 2017), with a comparatively smaller body of literature addressing similar questions relevant to medical and allied health students (Fenton, 2005; Pront et al., 2016). With a few exceptions (for example, Brown et al., 2011; Liljedahl et al., 2015; Siggins Miller Consultants, 2012), such studies have typically focussed on clinical placements and supervision within discipline silos. To our knowledge, what is less addressed, is that the challenges encountered in managing clinical placements for students are not discipline-specific, and that there is an opportunity for university health schools to engage in interprofessional collaboration and learning to address common goals and systemic deficiencies in clinical placement programs. In this paper, we address this gap in the literature by exploring the student experience of clinical supervision across a range of health disciplines located within one university, with the aim of developing an interprofessional approach to this challenge.

Despite the recognised importance of clinical placements for undergraduate student learning in the health sciences, there continue to be significant impediments in Australian universities being able to secure adequate places for the increasing numbers of students. This situation has resulted in competition between universities and health schools to access the limited number of placements available for students, potentially compromising the quality of the learning environment (Brown et al., 2011; Taylor et al., 2017). For health providers, managing student learning is an added burden in a climate of resource constraints, staff shortages and increased patient acuity and complexity (Courtney-Pratt et al., 2012; Rodger et al., 2008).

The clinician who oversees student learning in the health services

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setting is commonly referred to as a clinical supervisor, although this role is variously known as preceptor, facilitator, educator, mentor or buddy, depending upon the country, context and discipline (Health Workforce Australia (HWA), 2010). The model of clinical supervision operating within the Australian context typically involves students being placed in public, or private hospitals, aged care, mental health, or community health settings, or in private practice assigned to a clinician, or a team of clinicians employed by the health provider (Health Education and Training Institute (HETI), 2013; Taylor et al., 2017; van der Riet et al., 2018). Nursing students may also receive support from a university-employed facilitator whilst they are on placement (van der Riet et al., 2018). Clinical supervision models are organised within discipline silos and vary in form according to the health service context (public, private, community or rural). For this reason, we do not intend to describe these in detail, but to highlight what factors contribute to, or detract from an effective clinical learning environment, and to draw attention to the potential for shared learning and problem solving across university schools of health.

A positive relationship between the clinical supervisor and student has been identified as the most important factor in determining the success of a clinical placement, across a range of health disciplines (Fenton, 2005; Kilminster and Jolly, 2000; Kim et al., 2014; Vågstøl and Skøien, 2011). Some of the key elements that contribute to this positive relationship include a supervisor's open, enthusiastic, supportive and welcoming approach (Levett-Jones et al., 2007; Sheehan et al., 2005; Sweet and Broadbent, 2017; Vågstøl and Skøien, 2011), students having regular, uninterrupted access to their supervisor (Kim et al., 2014; Young et al., 2009) and the provision of regular, timely and constructive feedback (Bonello, 2001; Rodger et al., 2011; Sweet and Broadbent, 2017). Also critical, is the provision of a learning environment that enables students to be active, 'hands-on' learners rather than passive observers (Liljedahl et al., 2015; Morris, 2007; Rolfe and Sanson-Fisher, 2002), includes the setting of challenging goals that facilitate the advancement of the student's professional development in their discipline area (Cole and Wessel, 2008; Henderson et al., 2012) and that achieves a balance between autonomy and direction, appropriate to the student's skill level (Courtney-Pratt et al., 2015; Lew et al., 2007).

However, given the workforce and resource pressures described earlier, such a positive learning environment is not always the reality. For example, there have been instances where medical students on clinical rotations have faced "teaching by humiliation", mistreatment, a lack of empathy, friendliness and trust from their clinical supervisors (Gan and Snell, 2014; Henning et al., 2011; Scott et al., 2015). Some nursing students have met horizontal violence and incivility from registered nurses whilst on placement, potentially eroding their confidence and long-term interest in pursuing a nursing career (Anthony and Yastik, 2011; Levett-Jones et al., 2007). In other cases, clinical supervisors have engaged in unprofessional behaviour, violating professional codes of conduct (Gan and Snell, 2014; Lew et al., 2007; O'Donovan et al., 2011). Workforce pressures can also increase the likelihood that students are assigned to multiple clinicians during their placement, which can be a source of stress for both the student and their supervisors (Courtney-Pratt et al., 2012; Yonge et al., 2002). Moreover, Australian evidence points to some clinical supervisors feeling ill-prepared for their role due to communication gaps between the health service and the university, lack of training, and difficulties in accessing support during the student's placement (Broadbent et al., 2014; Browning and Pront, 2015).

Interprofessional education occurs when two or more health disciplines learn together, from and about each other, in an effort to enhance collaboration and improve the quality of care (Barr et al., 2017). In the same vein, there is potential for interprofessional collaboration and education to occur between disciplines within the university to enhance clinical placements across the various health settings, and indirectly contribute to improved patient outcomes. As we have outlined earlier in this paper, the literature suggests that students in all health disciplines have similar needs and challenges whilst on clinical placement. Accordingly, a team of researchers from the one university identified the need to explore the perspectives of senior undergraduate students from a range of disciplines to establish common themes that will facilitate improved collaboration and enhance the quality of the experience for student, clinical supervisor and clinical placement provider. The aim of this study was to develop an integrated interprofessional model of clinical supervision.

2. Method

2.1. Overview

This funded mixed-method, interprofessional study investigating the role of the clinical supervisor in pre-registration health student clinical education comprised two components which were conducted concurrently. The quantitative study involved surveying clinical supervisors from the disciplines of medicine, physiotherapy, nutrition and dietetics, medical radiation science and occupational therapy from two large health districts in New South Wales, Australia, using a previously validated and reliable opinion tool (O'Brien et al., 2014). Clinical supervisors in nursing were surveyed using the same tool in 2012. The survey included questions about the value and challenges of the clinical supervisor role, incumbents' preparedness, and their overall satisfaction with the role. The qualitative study (reported here) involved final year health students being interviewed in focus groups and individually, about their experience of clinical supervision during their clinical placement. Ethical approval was granted by the two health districts' and university's human research ethics committees to conduct both studies.

Preliminary results from the overall study have been included in a report to the funding organisation (Anonymous 1, 2015). The qualitative findings of this mixed method study shed light on student perceptions regarding the enablers and challenges for effective clinical supervision across interprofessional health disciplines, thereby providing an important insight as to the quality of their clinical placement experience.

Invitations to participate in discipline-specific focus groups were distributed to all final year undergraduate nursing, medical radiation science, occupational therapy (OT), physiotherapy, and medical students and posted on online and on physical noticeboards. In total, 935 students were emailed invitations to participate in the study. All students expressing an interest in participating were emailed a consent form and brief biographical questionnaire. Those students indicating their interest in participating but unable to attend focus groups were given the option of being interviewed individually by telephone; in one instance, a student did not have sufficient time to participate in an interview and therefore provided brief answers to the focus group questions via email.

2.2. Participants

Overall, 20 students provided feedback on their experience of clinical supervision. Fifteen students participated in focus groups (medical radiation science n = three; OT n = six; medical n = two; nursing n = four), while four participated in individual interviews (one nursing student as the only attendee at one planned focus group and 3 physiotherapy students by telephone). One OT student provided brief responses to the focus group questions via email. Nutrition and dietetics students typically undertake a year-long placement off-campus in their final year, which is the likely reason that none of this cohort responded to the invitation to participate. The majority of participating students (n = 14) were in the age range 20–30. All but three of the students were female. Details of nationality were not specifically asked for in the biographical questionnaire, however, two participants (one OT and one medical) identified themselves as international students during

discussions. Due to the number of students in the OT focus group, individual participants could not be distinguished in the reporting of our findings.

2.3. Procedure

Focus group discussions and interviews were conducted by two members of the research team, both of who are experienced in qualitative data collection. The same semi-structured questions, informed by the extant literature on clinical placements and student supervision, were used in both focus groups and interviews. In broad terms, the students were asked about their experiences during clinical placement, particularly those factors that affected the quality of their learning, and how the university could improve on current practices. In all, four focus groups, one face-to-face interview and three telephone interviews were conducted with undergraduate health students. Focus group discussions lasted between 45 and 74 min, while individual interviews lasted between 17 and 50 min. All focus groups and interviews (face-to-face and telephone) were digitally recorded and then transcribed by an external, confidential transcription service.

2.4. Analysis

The aim of our analysis was to provide a qualitative description of the data, with themes that could inform change to clinical supervision, managed by the university and health providers.

The transcripts were aggregated and then open coded by one researcher with these codes condensed into categories, then grouped into potential themes and sub-themes. Through engaging in an iterative process of reading and reflecting, these themes were further developed resulting in a qualitative description of the data (Sandelowski and Leeman, 2012). Each of the themes and sub-themes were populated with participant exemplars to ensure grounding in the data, and that all the themes were saturated. To provide assurance that the analysis was trustworthy and unbiased (Krefting, 1991), two other members of the research team then independently reviewed this preliminary analysis, and then reached consensus on the key themes and sub-themes representing students' views regarding their recent experience of clinical supervision. The qualitative data was managed and coded using NVivo 11 (QSR International).

3. Results

The analysis identified six key themes (refer Table 1). The first two themes highlighted how undergraduate learning and effective connections between the university and clinical placement provider, contributed to a positive clinical placement experience for the student. In contrast, the third and fourth themes reinforced that health providers not valuing student learning and ineffective connections between the university and the placement providers, contributed to a less than optimal student experience. The analysis also revealed that the students' flexible approach to learning and receiving support from fellow students mitigated some of the barriers to effective clinical supervision. Additionally, we identified that the impact of increasing student numbers had a flow-on effect across the clinical placement process (refer Fig. 1).

A table depicting themes and sub-themes, along with representative quotes provides a summary of the study findings (refer Table 1). This highlights the factors that lead to both a positive model of supervision, and one that is less than optimal and the variance that occurs between health discipline and student expectations. Following a discussion between the research team members, it was agreed to develop a prospective model of how these themes and sub-themes interacted, informed by our findings and the extant literature (refer Fig. 1). It was envisaged that this model could be used in discussions with university health departments and clinical placement providers as a succinct

representation of the study findings. Potentially, this model could be tested with a larger data set in future research.

3.1. Terminology

Different disciplines use various terms to describe clinical supervisors and clinical placements. Most of the medical, nursing, medical radiation science and OT students referred to clinical supervisors as being a senior clinician overseeing their placement. Physiotherapy students more often used the term educator. Nursing and medical radiation science students used the term mentor to describe those clinicians who supervised them (for example, O'Brien et al., 2014; Zilembo and Monterosso, 2014). Placements were also referred to as rotations by medical students, while medical radiation science, OT and nursing students used the term 'prac' as a shortened form.

3.2. Themes

3.2.1. Undergraduate learning valued by the clinical placement provider

The first key theme related to clinical placement providers valuing student learning; this was reflected in the sub-themes of effective student orientation, the provision of structured learning and feedback, and in the positive attitudes of clinical supervisors. The notion of a structured orientation, learning and feedback and the perceived effort to provide this structure signalled to the student that the provider was willing to invest in the supervision process and include them as part of the healthcare team. For example, one physiotherapy student (2) recounted that the orientation manual received on their first day of placement included information about the unit, expectations of students, a personal timetable and opportunities for additional training. Examples of structured learning practices included the development of a learning contract, regular goal setting, progressive increases in challenges and responsibility, and timely and effective feedback: "*The placements were well organised … in a way that enabled me to progress and grow my confidence as the placement progressed and that really helped*" (physiotherapy student 3). The physiotherapy students also highlighted the value of having education sessions that were linked to the patients they were seeing during their placement. Effective and timely feedback was instrumental in a positive clinical supervisor-student relationship: "*The better supervisors also give you, at the end of every week they give you some feedback, they sit you down, and sometimes you even get it daily*" (physiotherapy student 1). The attitude of the supervisor and the healthcare team featured in many of the students' stories. Positive characteristics of the clinical environment included a welcoming, supportive attitude, indicating that supervisors and other clinicians wanted to invest time and effort to teach. Such attitudes were considered by students to contribute positively to their learning. In contrast, other clinical supervisors communicated their lack of interest in working with students, potentially undermining student learning: "*You can tell they don't like working with students and so it really affects the learning outcome*" (medical radiation science student 1).

3.2.2. Effective connections

The second theme underscored the importance of effective connections between the university and health providers, and how the sub-themes of communication of student skills, scopes of practice and learning needs to placement providers, the provision of training and support to clinical supervisors, and student support during clinical placement were essential to fostering a positive student experience. Effective communication was evident when students were provided with structured learning plans by their clinical placement provider that closely aligned with their learning goals, set by the university. However, there were some examples where students' scopes of practice and learning needs were communicated to the health service, but this information had not been distributed to clinical supervisors. One nursing student explained that the students' scope of practice was issued to

Table 1
Summary and examples of themes and subthemes.

Theme	Sub-theme	Examples and quotations
Undergraduate learning valued by the clinical placement provider	Student orientation	Contact prior to placement, Student orientation manual
	Structured learning and feedback.	"We had a meeting with that supervisor every week, he ran us through the different goals we wanted to achieve each of those weeks" (medical radiation science 2)
	Positive attitude of clinicians toward student learning	"Some Supervisors teach because they want to, some Supervisor teach because they have to … Supervisor[s] that want to teach students is a huge and great value to the student as compared to those who do it just because they have to" (medical student 2).
Effective connections	Advice of students' skills, scopes of practice, and learning needs	Learning plans linked to learning needs; informal supervisors not aware of students' scope of practice.
	Provision of training and support to clinical supervisors	Need for clinical supervisors to be aware of each cohort's preparedness and the University's assessment expectations.
	Provision of support services to students by the University during clinical placement	Regularly 'checking-in' with students on clinical placement plus timely support for difficulties encountered during the placement including problematic supervisors, and traumatic events.
Undergraduate student learning not valued	Lack of clinician involvement in the decision to accept students	"It was made very, very clear to me by my supervisor that taking on students was part of their contract, it was not her choice to have students, and that was why I was there, that I would just stand there and do as I was told." (OT).
	Allocation to a department or delegation of clinical supervisory responsibilities	"I just like rock up and then I look like a deer in the headlights, and then I look for someone who looks important, so someone in scrubs is always a good one, or who has gloves on, you're like, okay they're important, or who is wearing like a suit with a coffee, but they're too important" (medical student 1).
	Excessive supervision or autonomy	Only permitted to 'shadow' CSs or absence of supervision.
	Inadequate student feedback	"There's a lot of focus, I've noticed on negatives, and what you could do better, but not much focus is put into what you've done well and what you've achieved" (nursing student 5).
	Workload levels that don't account for clinical supervisor load	"When there was four of us to an educator and that educator was also … trying to do his own caseload, and you just didn't get as much out of that placement" (physiotherapy student 2).
Ineffective connections	Lack of knowledge of student skills, scope of practice and learning needs	One Supervisor had "absolutely no idea like what my role is" (medical student 1).
	Inadequate CS training and support	"I think they need to undertake some form of training so they know what the student needs to achieve on that prac and what sort of level is expected of them" (physiotherapy student 2).
	Variable or lack of support for students	Support for problems with clinical supervisors, family difficulties and encountering death or trauma on placement: "As a student, if you don't have that toolkit and being prepared and knowing how to cope with it, it can kind of send you down a spiralling path of not wanting to be an RN or not wanting to be a nurse" (nursing student 3).
	Ineffective assessment processes	"It can just be a little disappointing when you get a supervisor that says 'I don't really give 5's" as that is what I would expect from an experienced, accomplished Occupational Therapist'"(OT email).
Mitigating factors for students	A student's flexible, agentic approach to learning; support from student peers on clinical placement.	
Impact of increasing student numbers	Fewer clinical placement positions available leads to increased workload for universities, and fewer resources to support students. "I find they're worried about the clinical supervisors and losing that placement … [so] they try and please the supervisor rather than helping the student." (medical radiation science student 2). Increased power of supervisors; students reticent to raise issues about problematic clinical supervisors.	

the provider, but that the qualified nurse who was supervising her (her mentor) was unaware that the student was required to work within her scope of practice. One of the significant challenges facing clinicians from the students' perspective in this study, is that they supervise students from a range of universities, where there is a broad spectrum of preparedness and where the assessment expectations can be different. This variation can make it problematic for supervisors – and as one student suggested, there is a need for a briefing from each university about each cohort of students, their scope of practice and learning needs. University support during the placement was viewed as instrumental to an effective clinical placement. Two medical radiation science students found that the university regularly 'checked-in' with them during their placement, while the university's department of rural health was proactive in rectifying a problematic clinical placement for one OT student. A nursing student similarly found that the university promptly supported her following her involvement in a crisis within a rural mental health service (nursing student 2).

3.2.3. Undergraduate student learning _not_ valued

In contrast, the key theme related to clinical placement providers not valuing the student experience, was linked to the sub-themes of clinical supervisors not being involved in the decision to accept students, where students were not assigned a clinical supervisor, or

supervisory responsibilities were delegated, where students were excessively supervised, or had too much autonomy, where they received inadequate feedback, or where the supervisor's workload hampered their ability to supervise students effectively. For some clinicians, the arrival of students was a complete surprise. As a result, these clinical supervisors were unprepared to teach: "_If you have someone in the department that … doesn't know you're coming, doesn't know they're going to be working with you, they're much less likely to want to help you_" (medical radiation science student 2).

All students wanted a one-on-one supervisor-student relationship and some students found that they were assigned to departments, rather than to an individual supervisor. Other students were formally allocated to a clinical supervisor, but then discovered they were to be passed from one clinician to the next. In the instances where students were allocated to a department, there was a strong sense that the student was being "_passed around_" (nursing student 3) and that the manager may delegate supervision to someone ill-prepared.

Some students explained that they were only permitted to shadow, or observe their supervisors (for example, medical radiation science student 2), and therefore had little involvement in direct patient care. In contrast to the lack of involvement in patient care, some students faced the challenge of working without adequate support, with the standout example of one OT student having to manage a ward by
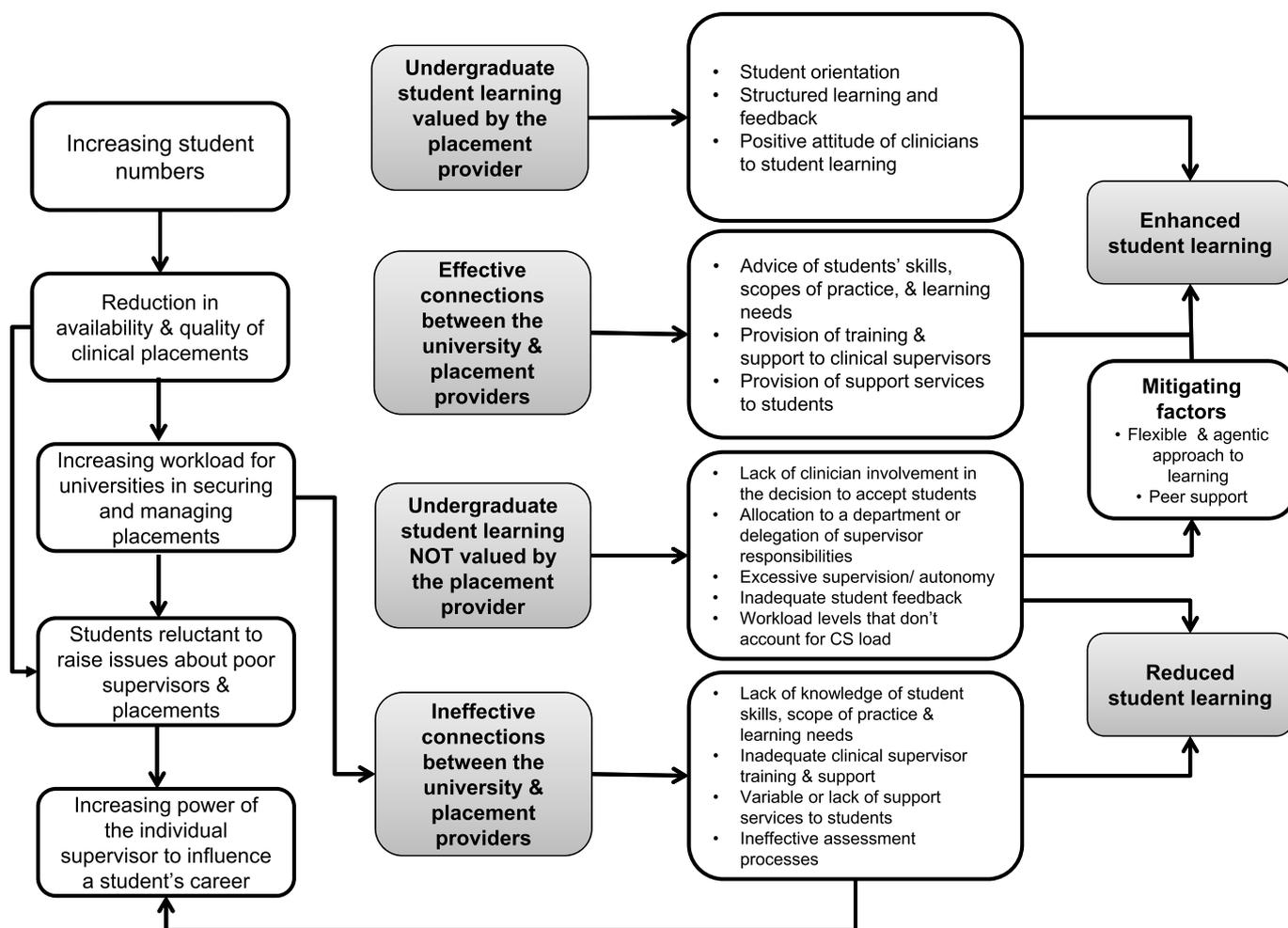
Fig. 1. A prospective model of clinical supervision.

herself. While excessively close supervision, or the absence of supervision reduces the potential for student learning, the latter case poses a significant risk to the student and to the patient.

Provision of adequate feedback featured as a strong theme in the students' stories. In some instances, students did not receive sufficient feedback as they had little interaction with their supervisor due to their location, or the supervisor's clinical demand. Additionally, supervisors did not always understand that timeliness of feedback is critical. For many students, the focus on negative feedback at the expense of positive reinforcement sometimes proved demotivating. Several students said the supervisor had a heavy workload and that there was little time for them to supervise student learning: "*He wasn't coping with his eight patients, let alone having a student*" (nursing student 4). The foregoing student excerpt likely reflects the low priority given to student placements, or that there was a lack of recognition that effective student supervision requires time and effort.

3.2.4. Ineffective connections

Ineffective connections between the university and clinicians were reflected in mismatches between university curricula and practice opportunities, lack of understanding of the student's role, inadequate support, or where assessment documents provided to supervisors were not aligned with the clinical environment. Basic information about student skills and learning needs was absent in some cases. In instances where clinicians were unaware of student skills, there was a tendency to restrict the tasks they could perform, with one student stating: "*Sometimes we get to those placements and they don't let us do the things we're even doing on a weekly basis at uni*" (medical radiation science

student 3). Lack of knowledge of student skills (where supervision had been delegated) meant that risk avoidance became the overriding factor: "*As I said they kind of restricted my workload because they didn't want to take on the responsibility of potentially me doing something wrong, or, you know being out of my scope of practice*" (medical radiation science student 2).

The two Culturally and Linguistically Diverse (CALD) students involved in the focus group said supervisors may not have had sufficient training in how to support international students, "*because some of my culturally embedded behaviours were misinterpreted by my supervisors*" (OT student). Also, some local nursing students assigned to placements with CALD students assumed additional responsibilities, with them having to act as mediators between clinicians and CALD students: "*Five of them were international students … so for some reason I just ended up being the person that all the other students kept turning to ask everything*" (nursing student 1). Having other health professionals involved in supervising and educating students was favourably appraised by a medical and two physiotherapy students. However, the medical student explained that other health professionals were not adequately supported in their informal CS role: "*the Midwives had no understanding of what we were supposed to get out of the rotation*" (medical student 1).

Some of the students felt they were ignored by the university during their clinical placement: "*They never talk to us as students but I know they talk to the clinical supervisor*" (medical radiation science student 3). A medical radiation science student (2) felt that little heed was given to any personal, or family issues occurring during her placement, and despite a number of conversations with the university, was compelled to repeat the placement. She noted, special consideration during

placement was not handled in the same way as it would have been during an on-campus course.

Students criticised how assessments were conducted or interpreted by clinical supervisors, and in some instances, the assessment tool accompanying the student did not apply to the variety of clinical situations the students encountered. Across disciplines, several students expressed concern about the subjectivity of assessments (that is, it depended on the relationship that the supervisor had with the student), as well as the lack of guidance given by the university. As an example of the latter, the OT students highlighted how some supervisors had wrongly judged the students' work according to their expectations of an experienced practitioner.

3.2.5. Mitigating factors for students

The students identified two ways in which they could counteract poor clinical placements, or problematic relationships with their clinical supervisors. Firstly, several students recognised they needed to adopt a flexible approach to their learning, and to find alternative ways to avail themselves of any educational opportunities that the placement provided. One student highlighted how she sought out alternative supervisors, or opportunities when she didn't have a supervisor assigned: "*Because I was having to find my own supervisor … But the positive thing was I more proactive in finding out ways of fitting into a system that wasn't really set up or organised*" (nursing student 1). A physiotherapy student found herself in a final year placement where she was only allowed to observe, and so she "*kept a little journal of the types of injuries I saw and how we managed them*" (physiotherapy student 1).

Secondly, peer support on clinical placements helped some students to overcome challenges, although this did not apply to all discipline areas. The OT students universally agreed that having other students with them on placement was beneficial: "*It was the first time I'd been on prac with another student and I was really apprehensive before going out to be, I thought I'd be like judged against the other student, but it just turned out to be a lot more supportive. It was really brilliant*" (OT). In contrast, each of the physiotherapy students saw it as a negative factor, as the presence of other students intensified competition for clinical tasks creating an atmosphere not conducive to learning: "*When you're on a placement in a group setting it can get quite competitive between students … where the students basically put you down in front of the educator, you know, to make themselves look better*" (physiotherapy student 3).

3.2.6. Impact of increasing student numbers

The increasing numbers of students on practicum causes universities to struggle to find an adequate number of quality clinical placements. One student felt part of a production line: "*I kind of feel like, our uni, we're sort of pumped out like a production line. I feel like they take too many of us in and they struggle to find placements*" (nursing student 2). The result of the increasing demand for student placements and the intensification of workload of universities to secure and manage sufficient placements, meant students perceived a greater focus on appeasing the supervisors than the student. Accordingly, OT students felt that there were fewer quality placements available and that there was tacit discouragement to making any complaint about their clinical supervisor: "*I guess we're very aware that there's repercussions if we make any sort of complaint … because it's made very clear to us … that we're very, very lucky to have pracs at all, so you don't rock the boat*" (OT).

A physiotherapy student felt that she was disadvantaged by not being involved in direct patient care in her final placement, but she was discouraged from raising the issue (physiotherapy student 1). Within this context, students perceived that clinical supervisors have unreasonable power to determine whether they pass or fail their assessment, and that poor student-supervisor relationships can unfairly influence their grade: "*I know for a fact that there's students who have failed a rotation because their Supervisor has been a poor Supervisor and has given them a mark that didn't reflect the amount of work they put in*" (medical student 1). Additionally, one OT student highlighted that a negative

final year clinical placement could potentially erode her confidence and how she felt about her profession. In contrast, a positive experience with a supervisor on placement can influence which specialty a student chooses to pursue: "*Well I reckon the quality of Supervisors has influenced my choice of career … General practice had some absolute phenomenal Supervisors and they have invested so much time with me and it's just, oh it's, my obvious choice*" (medical student 1).

4. Discussion

The qualitative aspects of this mixed method study shed further light on the complex interaction between enablers and challenges for effective clinical supervision across the health disciplines. Our contribution to the extant literature is two-fold. Firstly, in contrast to most single-discipline studies in the literature, the present study provides an understanding of learner needs that is common across disciplines within one university. Secondly, our findings draw attention to the potential for interprofessional collaboration between the various university health schools and the range of health providers involved in the process to develop synergistic solutions to common challenges, and to strengthen lines of communication between stakeholders.

The student experience described in our findings provides an important insight as to the quality of their clinical placement. As other authors have identified, students highly valued a learner-focussed approach where they are actively involved in clinical duties (Bonello, 2001; Courtney-Pratt et al., 2015; Vågstøl and Skøien, 2011), but yet feel safe, supported and valued, as a part of the team (Health Education and Training Institute (HETI), 2013; Lamont et al., 2015). Other common enabling themes included the quality of the orientation (Rodger et al., 2011), feedback and the consistency of the learning framework between the clinical supervisor, clinical placement provider and the university (Broadbent et al., 2014; Fenton, 2005). Moreover, both CALD and local students reinforced that international students face particular challenges, and require supplementary support during supervision, an issue which has been discussed elsewhere (O'Reilly and Milner, 2015). Importantly, participants in our study noted how the inadequate support given to international students created an additional workload for local students, who acted as mediators between international students and clinical staff.

Standout examples of successfully managed placements included the detailed orientation and learning plan provided to physiotherapy students, the university's department of rural health proactive approach in managing problematic student placements, the regular 'checking in' with medical radiation science students over the course of the placement, and the support given to the nursing student who was involved in a crisis at a mental health unit. Overall, highlighting these shared challenges, and the common attributes of successful clinical placements will hopefully prompt joint learning and problem solving between the various health disciplines within universities, and draw attention to the need for deeper collaboration between clinical supervisors, placement providers and the university.

Whilst one hesitates to generalise with only a relatively small sample of participants, it is clear on the basis of these viewpoints that challenges arise when there is inadequate and inconsistent provision of clinical supervision during some student placements. Such tentative findings coming from the direct experience of students however, are worthy of deeper consideration when providing a clinically based educational experience. Adequate communication between the health providers, clinical supervisor and university enables a smooth transition for the student, a transition where everyone is informed of the student's scope of practice and assessment expectations (Broadbent et al., 2014). Such collaboration ensures a safe environment for the student and promotes quality of care for the patient, culminating in a rewarding placement, where everyone is aware of the expectations. Students and supervisors need to be provided with similar information and support for clinical supervisors and students on placement is an essential

priority.

As has been found in other studies (Ford et al., 2016), students were challenged and disappointed when their clinical supervisors were, disinterested or poorly prepared. Because the supervision challenges are complex a clinical supervisor needs to be a 'super' supervisor to juggle the different demands of both clinical service provision and student safety. Student supervision is probably not appropriate when a clinical supervisor is stretched beyond capacity, particularly when they must provide direct care for multiple patients. The latter point is an ever-increasing issue as university student numbers across disciplines wanting placements continues to climb internationally (Taylor et al., 2017). Our study reinforces the need to review university and health provider policy to facilitate a consistent experience on clinical placement for all health students. Key to the development of a successful interprofessional model of clinical supervision are a number of strategies. Firstly, health services and university departments need to closely collaborate to clarify their expectations (Fenton, 2005). Additionally, there needs to be an interprofessional approach to the education and training of clinical supervisors as has been successfully implemented elsewhere (Tai et al., 2016), and the development of a blueprint for excellence in interprofessional clinical supervision, with provision for additional support for CALD students. Furthermore, it is recommended that university curricula incorporate how students can get the most from a clinical placement and provide a student orientation to all clinical placements. Finally, the health disciplines should be encouraged to collaborate to develop common guidelines for students and supervisors, ensuring that processes are in place to support students who experience adverse, or confronting events.

The emphasis however, should be on enabling a more robust quality match of appropriate placements for required student skill sets. This is especially the case where the context of the placement must match the student scope of practice. Careful blueprinting of student experiences and clinical supervisor/placement expectations together with robust communication channels are vital to support learners in all health disciplines.

5. Conclusion

A complex balance exists between various barriers and enablers for students of all health disciplines achieving their learning objectives on clinical placement. The value of this educational experience is determined by the intersection of the clinical supervisor, placement provider and university. The themes are very common to all students and clinical environments irrespective of discipline, and so there is considerable scope for the university various departments of health to share best practice and to jointly develop solutions to common challenges.

Provision of supervised clinical placements is vital, however there has been a paradigmatic shift between the traditional apprentice style approach, to an innovative and collaborative interprofessional model. Embracing interprofessional education promotes cooperation and teamwork and streamlines provision of a scarce teaching resource more efficiently. This process produces a graduate health professional who is ready to work in an interprofessional health environment providing a team of clinical supervisors who are well trained and supported to achieve this goal.

Conflicts of interest

None.

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Ethical approval

Approval to undertake this study was granted by the Hunter New England Human Ethics Committee (HNEHREC Reference No: 15/08/19/5.03) on 20 August 2015. The study was also registered and approved by the University of Newcastle's Human Research Ethics Committee (HREC Reference No:H-2015-0336) on 16 September 2015.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.nepr.2018.11.006.

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