O'Keefe, M., et al., *Twelve tips for supporting student learning in multidisciplinary clinical placements.* Medical Teacher, 2012. **34**(11): p. 883-7

Prepublication version.

Twelve tips for supporting student learning in multidisciplinary clinical placements

Short title: Supporting learning in clinical placements

Authors: Maree O'Keefe
Teresa Burgess
Sue McAllister
Ieva Stupans

Institution at which the research was conducted: The University of Adelaide Faculty of Health Sciences

Correspondence: Professor Maree O'Keefe
Associate Dean Learning and Teaching
Faculty of Health Sciences
University of Adelaide
South Australia 5005
Tel. +61 8 8303 3864
Fax +61 8 8303 3788
E-mail: maree.okeefe@adelaide.edu.au

Abstract

Healthcare profession students participate in a range of clinical placements within multidisciplinary health care settings. Often these placements offer students opportunities to participate in activities with staff and/or students from other healthcare disciplines. Although health service staff generally recognise the importance of clinical placements for student learning, they sometimes feel overwhelmed by workload and resource constraints. As a consequence, the potential of the clinical team to contribute to student learning may not be fully realised.

A key element of successful clinical placement programs across all healthcare disciplines is a coordinated approach to the development and management of complex university/health service partnerships. Explicit mechanisms to support clinical team members in their teaching roles can also contribute to developing and sustaining staff capacity for student supervision, as can appropriate recognition of clinical staff contributions to student learning. Twelve tips are offered for consideration by universities, health services and clinical staff when planning and implementing student clinical placements in multidisciplinary healthcare settings.

Introduction

Clinical placements are a key part of healthcare profession education providing students with opportunities to participate in a range of experiential learning activities. As many clinical settings provide health care delivery that is multi-disciplinary, students can often participate in activities with staff and/or students from other healthcare disciplines who are also members of the clinical care team. Access to this range of experience offers students a rich learning environment with opportunities to learn more about patients' needs and their general health care as well as inter-professional practice skills (Carlisle et al., 2004; Ho et al., 2008; Zwarenstein et al., 2009).

It should always be remembered however, that for any healthcare discipline, for example medicine or nursing, students are naturally focused on learning how to practice their own discipline. As a consequence students are less likely to recognise opportunities to learn from other health care professionals or to identify learning opportunities that may be available through participating in tasks/activities that are not discipline specific (Reeves et al., 2002; Carlisle et al., 2004; Nadolski et al., 2006; Rodger et al., 2008; Anderson et al., 2009; Forte & Fowler, 2009). Such opportunities often need to be planned, explicitly identified for students, and actively encouraged. University staff in setting expectations for student learning, should also be mindful that for healthcare staff in multi-disciplinary teams, simultaneously supervising and teaching students while ensuring quality healthcare delivery requires skilful management of multiple roles and responsibilities (McCormack & Slater, 2006).

The tips presented in this paper for supporting student learning in clinical placements have been developed drawing on the multi-disciplinary clinical teaching experiences of the authors and their recent research on effective approaches to developing clinical team capacity for supporting student learning (O'Keefe et al., 2011). In focusing on all key stakeholders, these tips complement more specific recommendations for effective clinical supervision. (Kilminster et al., 2007). While some of the tips that follow maybe more relevant to

universities, health care services more broadly, clinical team members or students, the underlying themes are relevant to each of these groups who collectively share responsibility for developing future health care professionals.

1. Encourage students to learn from other healthcare professionals

As with any healthcare discipline, the university staff who organise and coordinate student clinical placements liaise predominantly with staff within health services who are of the same discipline. This approach is based on the quite reasonable assumption by universities in general that health profession students will predominantly work with, and be the responsibility of, those member(s) of the clinical team who are of the same discipline as the student. Although there are obvious efficiencies with such a discipline-focused process, most clinical teams are multi-disciplinary and it is therefore inevitable that students will interact with a number of different healthcare professionals in addition to their discipline specific clinical supervisor/s.

During orientation and preparation for clinical placements, students should be encouraged to make the most of every opportunity to learn in the workplace. It should be explained to students that, in addition to furthering their understanding of the roles and clinical skills of other healthcare professionals, working alongside clinical staff and students from other disciplines could then assist students as they develop skills in collaborative clinical practice. Student learning objectives, assessments and/or reflective activities during clinical placements should include interprofessional aspects to reinforce the importance of these learning opportunities for both students and clinicians.

2. Ensure everyone on the clinical team understands the purpose of the student placement

If student placements are organised through liaison between university coordinators and key health service medical staff, information flow maybe incomplete to the full range of clinical

team members who will be interacting with the students on a day to day basis (Kilminster et al., 2007; Wray & McCall, 2009). Further compounding these communication difficulties, in many clinical settings, shift work, staff turnover and high workloads mean that staff have little time to actively seek out information on individual students' learning objectives.

When organising student clinical placements, university staff should, wherever possible, not only liaise with their respective disciplinary counterparts, but also seek to develop additional communication mechanisms with other clinical staff who may be interacting with their students. These communication mechanisms should be underpinned by a firm understanding of the nature of leadership and teamwork within individual health services, together with the full scope of opportunities available for students to participate in clinical practice (Souba, 2004). A range of tailored strategies that are appropriate to the clinical environment can then be put in place to ensure all clinical staff have a good understanding of the educational purpose of the student placement. Strategies may include engaging with clinical health service staff directly through regular newsletters or teaching workshops to provide up to date information on university expectations in relation to teaching, supervision, assessment and/or reporting for each student on the placement. Importantly, the more 'in tune' such strategies are with local team culture the greater the likelihood of success.

3. Consider clinical staff workload and preferences for supporting student learning

The clinical environment into which the student is placed is busy and complex. Juggling workload requirements and teaching responsibilities is a constant challenge for clinical staff. Although many clinical staff are committed to ensuring students are supported appropriately through their placements, during busy or stressful periods it is very difficult to provide the same level of support and learning opportunities as would be the case in less demanding work contexts. In such instances it can be helpful to have pre-planned 'back-up' activities for students such as self-directed learning tasks or being paired up with more senior students (Kilminster et al., 2007).

Clinical team members are usually clear about their own work roles although they may differ in their understandings of the roles of team members from different disciplines (Weller et al., 2008; Manser et al., 2009). In the same way, the understandings of clinical team members of the range of possible teaching roles they could play with students for disicplines other than their own can differ greatly. Clinical team members are also likely to be more confident in their discipline-specific roles in supporting student learning than in their ability to support the more generic aspects of student learning. This is probably not surprising given the imperatives of healthcare delivery where greater quality is associated with greater role clarification within work teams and less distribution of roles among team members (Manser et al., 2009).

In response to these daily challenges with clinical health services, university staff should be prepared to consult with clinical staff when clinical placements are planned and, wherever possible, be prepared to be flexible/creative in timetabling. Attempting at least some alignment between individual clinical team member preferences for working with students and the actual roles and responsibilities for student supervision that are expected would seem a sensible approach to enhancing learning experiences for students.

4. Be prepared for differences in student skills and experience

Each student has a unique profile of experience and skills and therefore there will be some unpredictability in the time and level of supervision any one student will require (Lyon, 2004; Smith et al., 2006). The more clinical staff know about a student before the placement commences, the better they can plan for that placement. Knowing this information in advance is particularly helpful as clinical staff can give some consideration as to how they will manage student learning in relation to likely staff workload and clinical responsibilities. The more complex and busy the health service, the more this information is vital to ensuring a positive learning experience for each student (Bardgett & Dent, 2011).

Universities should, wherever possible, provide information to the clinical team on the year level of each student prior to a clinical placement. Some indication of the likely previous experience each student might have had, including the clinical terms that have been completed, should ideally be available. This information should be in addition to information on expected learning outcomes mentioned above. Where this is not provided, health services should request it. Students should also be encouraged to make contact with clinical placement staff ahead of their actual placement commencement to discuss their learning goals.

5. Keep information about students clear and concise

As has been noted already, health services are busy places. Within a single clinical setting such as a hospital ward, there may also be a number of healthcare profession students from multiple institutions and disciplines undertaking clinical placements simultaneously. In many instances, even within single disciplines different amounts and types of information are provided regarding university expectations of the health service. Without specific, cohesive and readily available information on university expectations for student learning, busy clinical staff have little option other than to respond in an ad hoc manner to students' learning needs.

Information about any individual student needs to be clear and concise to minimise confusion and avoid overwhelming clinical staff. Specific health service staff responsibilities regarding feedback or assessment to the university should be similarly explicit and succinct. In health services that have students from a variety of disciplines and/or more than one university, photos of students with their university, discipline and year level could also be provided.

6. Students and clinical staff should have the same information

As has already been described, the management of student learning becomes more difficult for clinical staff as the number of educational institutions placing students, the number of different programs, and/or the range of different skill levels of students all increase. Just as

alignment of learning objectives, learning activities and assessment is at the heart of good curriculum for students, consistency in the content of information provided to students and their clinical supervisors on university expectations is vital. Clinical staff supervising a student and the student themselves should all have exactly the same information. This is particularly relevant to discipline specific learning objectives and assessment so that there is no confusion at any point regarding the learning requirements (or expectations) for any student (Russell et al., 2006).

7. Have a clearly identified university contact person for clinical supervisors

A range of 'university' factors can create difficulties for clinical staff as they try to balance student learning needs with the imperatives of clinical care provision. There can be, for example, considerable variability even within a single discipline such as medicine or nursing in clinical placement length and timing across student year levels and different universities. The nature of learning objectives, assessment tasks, supervision and reporting requirements can also vary according to the year level and institution of the student concerned. In light of this complexity, clinical staff can experience real difficulty in understanding who in the university they should be speaking with when the need arises in relation to a particular student. This is extremely important when there are concerns regarding patient safety or student welfare. Health service staff need easy and effective mechanisms to rapidly communicate concerns and should, at all times, have a clearly identified university contact person for every student on their clinical unit.

8. Support active learning in students

It is important that students are engaged in active learning to maximise their learning outcomes in clinical placements. In effective workplace learning environments clinical staff both challenge and simultaneously support students so that they can develop competence and build a positive sense of themselves as developing practitioners (Dornan et al., 2007). Each student will bring their own disposition to learning activities and the quality of their learning

will rely not only on the degree of their engagement in the workplace but also on the general supportiveness of the health team environment (Billet and Somerville 2004). Indeed when students are not viewed as legitimate participants in clinical environments, they are more likely to disengage from active learning (Boor et al., 2008). In addition, expecting students to seek out learning opportunities without support is a stressful and inefficient strategy for student learning (Dornan et al., 2007).

It is important therefore to encourage students to see themselves as valued and authentic members of the clinical team during their placement and to create clear student roles in healthcare delivery. For clinical staff, clarifying and discussing the student's learning goals early in the placement and identifying and planning learning opportunities to meet these goals also creates opportunities for students to be active learners.

9. Acknowledge the contribution of health services and their staff to student learning

Clinical staff value their connection with universities and, for the reasons described previously, it is important to foster close relationships between health services and universities. It is important also to acknowledge and support the vital contribution made to student learning through health service clinical placements. Appropriate acknowledgement can take a number of forms including supporting workplace based staff professional development opportunities to enhance teaching and supervision skills (Steinert, 2005). In addition more formal recognition of clinical staff contributions to student learning can include: a certificate of appreciation to the units where students are placed, a letter of thanks or appreciation from the appropriate dean or university vice chancellor to individual health service clinical units, personalised communication with clinicians and regular visits to health services by university teaching staff.

10. Give feedback

Feedback is a central component of quality assurance and improvement activities. The multidisciplinary clinical environment offers a range of feedback opportunities for students, universities and health services. These include multidisciplinary, 360-degree type evaluations of student performance from the perspective of the entire clinical team. Student evaluations of clinical placement experiences, in addition to providing information for universities to feedback to health services, also provide important post-placement debriefing and learning opportunities for the students themselves.

Providing feedback to clinical staff is just as important as ensuring feedback is provided to students. Formal mechanisms should be developed to ensure that evaluations of student learning experiences in clinical placements are collected, analysed and reported back to all clinical teams that host clinical placements. In addition it is important to develop knowledge and understanding among clinical staff of the different types of feedback that may be used and how to adapt these approaches to particular contexts. University staff can provide workshops and other activities for clinical team members including peer support programs to develop skills in giving feedback. Evaluation strategies should always aim to promote a positive approach to feedback. To assist in achieving this outcome, the importance of identifying strengths and providing suggestions for improvement should underpin all feedback activities. (O'Keefe 2009).

11. Support quality improvement activities

Clinical teams are continually engaged in quality improvement activities to ensure the delivery of high quality patient care. Quality improvement cycles allow clinical staff to examine, plan and implement changes to their clinical practice to improve healthcare delivery and outcomes. Active engagement by staff in quality improvement planning and implementation around student learning can also be associated with improved healthcare delivery (Bohmer & Edmonson, 2001; O'Keefe at al. 2011). While it seems very difficult for clinical team members to take time from the daily demands of delivering healthcare to meet,

discuss and plan clinical education, such a simple activity has the potential to increase staff satisfaction with their teaching roles and to assist the effective management of service delivery and teaching roles (Steinert, 2005).

Clinical team members from all disciplines should be encouraged and supported to take time out occasionally to meet as a team to discuss their learning and teaching activities. Quarantined time for team meetings may need to be specifically allocated for this purpose. Establishing a teaching team identity with regular teaching team meetings can help clinical team members to reflect on their roles as teachers, and to recognise their collective ability to plan and implement teaching improvements. Less formal collaborative engagement by clinical staff with work colleagues around student learning challenges should also be encouraged (O'Keefe et al., 2009; Eraut 2011).

12. The more complex the health service, the more organisation and support is needed

Health service organisation is an important factor in determining the extent to which students can be legitimate participants in the provision of health care, both in the extent to which the workplace was supportive of student learning (Dornan et al., 2007) and in the relationships between team members and students (Lyon, 2004; Boor et al., 2008). Health service organisation is important also in determining the ways in which clinical team members can come together to plan and support student learning as described above. Clinical team members may be supportive of, and committed to, high quality student learning experiences. However organisational factors beyond the team's control may result in an inability to realize this aspiration.

The more complex the health service organisation, in terms of variability in clinical team composition, patient care responsibilities and the overall size of the organisation, the fewer opportunities staff have to meet as a team to discuss student learning. Planning and delivering

student learning also becomes more difficult the greater the number of universities placing students and the greater the number of different programs and levels of study represented.

Clinical teams should be supported to identify opportunities to work within these constraints to create and maintain positive learning environments for students. Innovative approaches to supporting student learning should be encouraged. Universities should also tailor student learning objectives and outcomes to the specific clinical environment and be prepared to be flexible when difficulties or unforeseen circumstances arise.

Conclusions

The twelve tips above constitute key points to consider when planning and implementing student clinical placements in multi-disciplinary clinical settings. Whilst education is the major focus of university programs, it is not the major priority for many staff in clinical settings. It is therefore up to the educational institution to facilitate clinical placements as much as possible. Clear and concise communication processes are vital to support clinical supervisors and enable information and feedback to be provided in a timely and comprehensive manner. Recognising that students will interact with various members of a multidisciplinary team at different times, rather than one single discipline specific person, means different communication strategies may be required to ensure relevant information is distributed. Students should be prepared for this 'team supervision' experience.

Clinical team members generally recognise the importance of clinical placements for student learning, but sometimes feel overwhelmed by workload and resource constraints. Peer and management support for clinical supervision activities can contribute to staff support for student supervision, as can appropriate recognition from the educational institutions sending students on placements.

Declaration of interests

Support for the project was provided by an Australian Learning and Teaching Council project grant.

Notes on contributors

Maree O'Keefe is the Associate Dean Learning and Teaching, Faculty of Health Sciences University of Adelaide.

Teresa Burgess is a Senior Lecturer in the Discipline of Public Health, University of Adelaide

Sue McAllister is a Senior Lecturer in Speech Pathology, Faculty of Health Sciences, Flinders University

Ieva Stupans is Professor of Pharmacy, School of Science and Technology, University of New England

References

Anderson, E., Thorpe, L., Heney, D., & Petersen, S. (2009). Medical students benefit from learning about patient safety in an interprofessional team. *Medical Education 43,* 542-552.

Bardgett, R. & Dent, J.A. (2001). Teaching and learning in outpatients and beyond: how ambulatory care teaching can contribute to student learning in child health. *Archives of Diseases in Children Practice Education 96,* 148-152.

Billett, S., & Somerville, M. (2004), Transformations at work: identity and learning. *Studies in Continuing Education 26,* 309 - 326

Bohmer, R. M. I., & Edmonson, A. C. (2001), Organisational learning in health care. *Health Forum Journal 44 (2),* 32-35,

Boor, K., Scheele, F., van der Vleuten, C. P. M., Teunissen, P. W., den Breejen, E. M. E., & Scherpbier, A. J. J. A. (2008). How undergraduate clinical learning climates differ: A multi-method case study. *Medical Education, 42,* 1029-1036.

Carlisle, C., Cooper, H., & Watkins, C. (2004). Do none of you talk to each other?: The challenges facing the implementation of inter-professional education. *Medical Teacher 26,* 545-552.

Dornan, T., Boshuizen, H., King, N., & Scherpbier, A. (2007). Experience-based learning: A model linking the processes and outcomes of medical students' workplace learning. *Medical Education, 41,* 84-91.

Eraut, M. (2011). Informal learning in the workplace: evidence of the real value of work-based learning (WBL). *Development and learning in organizations, 25,* 8-12 http//dx.doi.org/10.1108/14777281111159375 (accessed 24 May 2012)

Forte, A. & Fowler, P. (2009). Participation in interprofessional education: An evaluation of student and staff experiences. *Journal of Interprofessional Care, 23,* 58-66.

Ho, K., Jarvis-Selinger S., Borduas, F., Frank, B., Hall, P., Handfield-Jones, R., Hardwick, D. F., et al. (2008) Making interprofessional education work: the strategic roles of the academy. *Academic Medicine, 83,* 934-940.

Kilminster, S., Cottrell, D., Grant, J & Jolly, B. (2007). AMEE Guide No. 27: Effective educational and clinical supervision. *Medical Teacher, 29, 2–19.*

Lyon, P. (2004) A model of teaching and learning in the operating theatre. *Medical Education, 38,* 1278-1287.

Manser, T., Harrison, T. K., Gaba, D. M., & Howard, S. K. (2009). Coordination patterns related to high clinical performance in a simulated anesthetic crisis. *Anesthetic Analgesia, 108,* 1606-1615.

Nadolski, G. J., Bell, M.A., Brewer, B. B., Frankel, R. M., Cushing, H. E., & Brokaw, J. J. (2006) Evaluation the quality of interaction between medical students and nurses in a large teaching hospital. *BMC Medical Education 6(23)* doi:10.1186/1472-6920-6-23

O'Keefe, M., LeCouteur, A., Miller, J., & McGowan, U. (2009). The colleague development program: a multi-disciplinary program of peer observation partnerships. *Medical Teacher 31, 1060-1065.*

O'Keefe, M., McAllister, S., & Stupans, I. (2011) Health service organisation, clinical team composition and student learning. *Developing Learning Professionals, Professional and practice based learning.* Editors: Billett, S., & Henderson, A. DOI 10.1007/978-90-481-3937-8, Springer Science + Business Media B.V. Heidelberg

Reeves, S., Feeth, D., McCrorie, P., & Perry, D. (2002). 'It teaches you what to expect in future . . . ': interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students". *Medical Education, 36,* 337-344.

Rodger, S., Webb, G., Devitt, L., Gilbert, J., Wrightson, P., & McMeekin, J. (2008). Clinical education and practice placements in the allied health professions: An international perspective. *Journal of Allied Health, 37,* 53-62.

Russell, L., Nyhof-Young, J., Abosh, B., & Robinson, S. (2006). An exploratory analysis of an interprofessional learning environment in two hospital clinical teaching units. *Journal of Interprofessional Care, 20,* 29-39.

Smith, M., Lennon, M. A., Brook, A. H., & Robinson, P. G. (2006). Perspectives of staff on student outreach placements. *European Journal of Dental Education, 10,* 44-51.

Souba, W. (2004). New ways of understanding and accomplishing leadership in academic medicine. *The Journal of Surgical Research, 117,* 177-186.

Steinert, Y. (2005). Learning together to teach together: interprofessional education and faculty development. *Journal of Interprofessional Care, 19(supplement 1),* 60-75.

Weller, J. M., Janssen, A. L., Merry, A.F., & Robinson, B. (2008). Interdisciplinary team interactions: a qualitative study of perceptions of team function in simulated anaesthesia crises. *Medical Education 42,* 382-388.

Wray, N., & McCall, L. (2009) 'They don't know much about us': Educational reform impacts on students' learning in the clinical environment. *Advances in Health Sciences Education, 14,* (5) 665-676.

Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews* (3), Art No.: CD000072. DOI: 10.1002/14651858.CD000072pub2.