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Does an Online Clinical Educator Preparation and Support Program Change Practice?

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Abstract

Preparation of clinicians to act as student placement supervisors is important to ensure quality student placements for the development of the skills needed for competent performance in the workplace. Clinical educator preparation programs are offered in many formats, but these programs are rarely evaluated for impact on practice. In this article, we describe the results of the evaluation of an online clinical educator preparation and support (CEPS) program. Thirty allied health professionals, across a range of professions, responded to a survey regarding their experience of the program, usage patterns and their application of learning to practice. As a result of participation in the program, there was a significant increase in confidence levels in a number of topic areas covered in the program, and a quarter of respondents had changed their student supervision practices as a result of participation. Due to a low response rate at the three month follow-up survey, planned interviews to explore the impact of change in practice on the student placement experience could not be completed. While the study was not able to measure the impact of the CEPS program on placement quality, it did show that the CEPS program is able to significantly increase supervisor confidence in a number of areas, and is able to effect change in practice.

Keywords: clinical educators; clinical placements; placement supervisors; preparation and support programs; student placements

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Introduction

Clinical placements are a critical component of allied health degree programs, essential for ensuring students develop clinical and professional skills needed for competent performance in the workplace (Rodger *et al.* 2008). Preparation of clinicians to act as student supervisors on placement is important in ensuring development of skilled clinical educators (Higgs and McAllister 2007), efficient supervision (Hall *et al*. 2015), quality of student learning outcomes (Hall, McFarlane, and Mulholland 2012) and maintenance of patient care (Recker-Hughes *et al.* 2014). Supervisor skill has also been shown to impact on students' perception of placement quality (Kanno and Koeske 2010).

Clinical educator preparation and support programs can be offered in many ways, including face-to-face workshops (O'Brien, Phillips, and Hubbard 2010, Tai *et al.* 2015), coaching and mentoring by more experienced educators in the workplace (McBride *et al.* 2015), peer mentoring groups (Nisbet and McAllister 2015), and online learning packages (Dalton *et al.* 2007, Tai *et al.* 2015). However, programs are rarely evaluated for impact on change in practice.

This short article describes data from the evaluation of an online learning program for clinical educators and supervisors of allied health students. Results showed improved confidence in a range of clinical education skills and self-reported changes to practice arising from participation in the program.

Background

Since 2008, significant resources have been invested to build allied health pre-entry clinical placement capacity within Queensland public health services and to increase the supervisory skills of allied health professionals within these services. Resources include training programs and dedicated clinical educator positions (clinical educators) that provide coordination of placement logistics in consultation with university programs, and support development of confidence, skill, knowledge, and capacity in allied health professionals providing student supervision (student supervisors).

The Clinical Educator Preparation and Support (CEPS) program is an introductory-level online training program freely available to all health service staff. The program was developed by staff at the University of Queensland, for Queensland Health in 2011. The University of Queensland staff worked with a multi-professional project steering group to develop a package that best prepared doctors, nurses and allied health professionals for the clinical teaching aspects of their role within Queensland Health. The development of a generic introductory-level clinical education program was in line with the principles set out by Health Workforce Australia's clinical supervisor support project initiative (Health Workforce Australia 2011). The training package was trialled in six health facilities, and the modules were refined based on feedback. The finalised version was released in 2013. The CEPS program is one professional development option available to student supervisors and is regularly promoted through Queensland Health internal e-news updates. Completion is not compulsory before undertaking student supervision, but student supervisors are encouraged to undertake the training where development in this area is identified in their annual performance and development plan.

There are ten modules in the program: introduction to clinical teaching; planning for placement; preparation with your students; teaching in a clinical setting; self-directed and collaborative learning; learning in small groups; assessment; giving feedback; helping students facing challenges in the clinical setting; and review of the teaching and learning experience. Each module comprises a number of related topics, and presents key concepts associated with each topic area, provides information on skills (for example, 'delivering effective feedback to students' in the module on feedback), poses reflection questions, and links to relevant journal articles and additional reading material. There are 53 topics in total which were grouped into 25 key areas

for this evaluation. Each module takes approximately two hours to complete. The program is designed to be self-paced and self-directed, offering flexible access with participants able to complete the entire program sequentially or choose specific modules and topics for review. Staff can undertake the program in their own time or during work time as negotiated with their employer. The learning platform is accessible on both work and home computers. At the time of the study, there was no statement of completion awarded due to the limitations of the learning management system.

Routine data collection, and targeted evaluations since 2010, showed there had been a 23% increase in allied health placement capacity within Queensland public health services between 2010 and 2013 (McBride *et al*. 2015). Similarly, evaluations reported high levels of confidence in student supervision by allied health clinical educators (89%) and student supervisors (69%) (Young *et al*. 2011: 31). However, no data had been collected on improvements in placement supervision practice.

A study was undertaken to explore the impact of the CEPS program on the placement supervision practices of allied health professionals in the Queensland public health system. This study aimed to find out if, and how, new knowledge and skills from the program were translated into practice. Measuring the impact on quality of placements was beyond the scope of this study. Proxy measures of quality proposed for this study were: self-efficacy in relation to a number of supervisor competencies, and perceived impact of change in practice.

Methods

The study was conducted with allied health professionals who had enrolled in the CEPS program between December 2013 and March 2015. A contact list for participants was accessed from the program enrolment data. Approval to disseminate surveys was obtained from the Directors of Allied Health for each of the health services. Ethics approval was obtained from The Prince Charles Hospital Human Research Ethics Committee.

Initially, all allied health professionals who had enrolled in the CEPS program between December 2013 and January 2015 were invited via email to complete an anonymous online survey. The survey was repeated monthly for cohorts who enrolled in February and March 2015. A follow-up survey was sent to participants three months after the initial survey. The surveys contained a combination of multiple choice and comment-optional questions around engagement with the program, the impact of the program on confidence as a supervisor, and the application of learning in the workplace. The surveys asked respondents to create a unique respondent code to allow for matched responses in subsequent surveys. A copy of the survey questions is appended to this article. Each survey was peer-reviewed and refined before distribution. The follow-up survey contained an additional question asking respondents if they would be willing to be contacted for a telephone interview to explore implementation of changes to practice undertaken as a result of the program, and the impact of these implemented changes on the student placement experience. Respondent anonymity was protected using the survey logic design to separate the responses from the contact details. Changes in confidence levels before and after the program were analysed using a 2-tailed Wilcoxon signed-ranks test using SPSS.

Findings

From December 2013 to March 2015, 139 allied health professionals had enrolled in the program. The proportion of enrolments across the allied health professions was similar to the proportion of student placement hours provided by those professions, with the exception of physiotherapy which had a relatively lower enrolment rate. Thirty responses were received for the first survey, a 22% response rate. Compared with the enrolment rates across the professions, physiotherapy, and nutrition and dietetics had a higher rate of response, and

occupational therapy had a lower rate of response. The proportion of respondents across the allied health professions matched the proportion of student placement hours provided for most professions, except for respondents being over-represented in nutrition and dietetics and under-represented in occupational therapy. The proportion of respondents across health services also matched the proportion of student placement hours provided by those services with only one of the smaller health services being over-represented and one larger health service under-represented.

Forty-three percent of respondents (*N* = 30) engaged with the program for their own professional development, and a further 47% undertook the program both for their own professional development and to support others in clinical supervision skill development. Only 10% of respondents had completed all ten modules, with the majority of respondents reporting they were either still working through the program sequentially or intending only to access selected modules.

Table 1: Statistics[a] for the change in confidence scores (post-pre) rated by participants for the 25 key topic areas of the CEPS program.

Key topic area	*z* statistic[b]	*p* value
Identifying learning styles of students	-2.332	0.020
Recognising own teaching style	-1.964	0.050
Teaching clinical reasoning	-1.667	0.096
Planning for incoming students	-2.818	0.005
Identifying teaching and learning activities in your clinical environment	-1.414	0.157
Enhancing the learning experience of students by ensuring a suitable learning environment	-2.810	0.005
Providing suitable orientation	-2.165	0.030
Writing learning objectives	-2.226	0.026
Using questioning techniques to assess students' understanding	-1.410	0.158
Conducting a 'two-minute observation' of students to ascertain their skill level	-2.714	0.007
Preparing self, student and client prior to teaching session	-2.360	0.018
Integrating teaching into day to day routine	-2.588	0.010
Preparing an observation guide	-2.530	0.011
Preparing a resource box for teaching at a moment's notice	-2.460	0.014
Promoting reflective learning	-1.994	0.046
Analysing a significant event	-2.070	0.038
Facilitating peer and collaborative learning	-2.111	0.035
Facilitating small group learning	-2.121	0.034
Leading students through problem based learning	-2.530	0.011
Creating a positive assessment environment for your students	-1.890	0.059
Delivering effective feedback	-2.460	0.014
Identifying a student in difficulty	-1.890	0.059
Managing a student with marginal performance using a learning strategy worksheet	-2.126	0.033
Implementing strategies for students educated overseas to develop communication skills for the Australian clinical setting	-1.826	0.068
Reflecting on your effectiveness as a supervisor	-2.495	0.013

Notes: a) From a 2-tailed Wilcoxon signed-ranks test. b) Based on negative ranks.

In response to the survey question regarding how useful five potential enhancements to the program would be to the learning experience (on a scale of one to five, with zero being of no use, and five being of very high use), workshops rated more highly than peer group online discussion forums. Average scores for each potential enhancement were: 3.6 for a face-to-face workshop; 3.5 for a workshop via videoconference; 3.0 for a workshop via WebEx™; 2.8 for a peer group online discussion forum during the program; and 2.8 for a peer group online discussion forum continuing after the program.

In the initial survey, respondents were asked to rate their confidence in 25 key topic areas before the program and at the time of the survey. Table 1 shows the z statistic and p value generated by a Wilcoxon signed-ranks test for each of the topic areas. The CEPS program produced a statistically significant increase in confidence levels for four of the topic areas: planning for incoming students (z = -2.818, p =0.005); enhancing the learning experience of students by ensuring a suitable learning environment (z = -2.810, p =0.005); conducting a 'two-minute observation' of students to ascertain their skill level (z = -2.714, p = 0.007); and integrating teaching into day to day routine (z = -2.588, p = 0.01). For each of the remaining 21 topics, respondents showed an increase in confidence, but not at a statistically significant level of $p \leq 0.01$.

Additionally, respondents were asked to indicate if their practice had changed in the key topic areas.

Eight from the eleven respondents to this question indicated that they had changed practice in at least one area. The most often nominated areas where practice had changed were: promoting reflective learning (7 responses); providing suitable orientation (6 responses); and analysing a significant event (6 responses).

Only ten responses were received for the three-month follow-up survey, with only two responses able to be matched to the initial survey responses. Comparison of responses from the first to the second survey for the two matched responses showed one respondent had moved from 'I intend to change my practice' to 'I have changed my practice' in 17 of the 25 areas. This respondent was still engaged in the program at the time of the second survey. The other respondent showed a shift from intention to change to changed practice in three areas. This respondent had stopped engagement with the program at the time of the second survey. Both respondents were relatively new supervisors, having provided pre-entry clinical education for the first time in the previous two years.

A further three respondents from the follow-up survey (non-matched) indicated that they had changed practice, at that point in time, in at least one area. In addition to the areas most often nominated above, recognising own teaching style was, overall, a commonly nominated area of practice change. Only one respondent in the follow-up survey indicated willingness to be contacted for a telephone survey. Therefore, the intended telephone interviews which were to examine the impact of change in practice on the student placement experience could not be completed.

Discussion

The low response rate was likely to have resulted from a combination of survey fatigue, and a relatively long lag time between the initial enrolment and the first survey for some participants who were therefore not engaged with the program at the time of the survey. The nature of engagement with the program may also have been a factor in that some participants had used the program as a resource rather than as an educational experience.

The flexible access provided by the CEPS program has allowed for dual usage of the program: meeting the needs of novice supervisors who can progress sequentially through the program, and of more experienced supervisors and clinical educators who can access specific topics and

resources for their own learning, and/or to provide support to less experienced supervisors. Tai *et al* (2015) found low rates of module completion with an online clinical supervision program compared with face-to-face training. It is possible that the design of the online program affected the completion rate, and this may also have been a factor in the variable engagement rates found in our study.

Survey respondents nominated a workshop as a valued potential enhancement to the CEPS program. Tai *et al*. (2015) suggested that protected time for face-to-face workshops increased participation rates compared with online learning. However, the Health Education and Training Institute (2015) found the inability to release staff to attend face-to-face training was a significant barrier to participation in supervisor training. As well as flexible access, there may be another advantage to self-paced and individualised learning compared with an intensive training session. One study found that, although supervisors reported increased competence and confidence immediately following a two-day training session, they were less satisfied with their own performance, and were perceived by students to have a worse performance, compared with supervisors who had not received the training (Breckwoldt *et al*. 2014). The authors concluded that this may have been due to the effect of trialling new methods and confusion from information overload.

Survey respondents were less likely to value peer interaction as a potential enhancement to the CEPS program. The inability to undertake the follow-up interviews meant that the reasons for this could not be explored. This finding contrasts with the results from other studies which have found that participants valued peer interaction in online allied health supervisor training programs (Dalton *et al*. 2007, MacEachron *et al*. 2009). Jippes *et al*. (2013) suggest that social networks may improve the adoption of educational innovations by clinical supervisors. Therefore, incorporation of peer interaction opportunities should be considered in future program reviews.

This study showed that participation in the CEPS program resulted in a significant increase in confidence in several topic areas, and change in practice in one or more areas. The areas in which practice had changed were not the same as the areas in which confidence had increased. Dettlaff (2008) found that following face-to-face supervisor training, social workers' change in behaviour resulted from new knowledge or a reminder of existing knowledge. It may be that the reported change in practice following the CEPS program resulted from participants being reminded of existing knowledge. The inability to interview participants meant that further examination of the reasons for discrepancy between confidence levels and practice was not possible.

A similar evaluation of a clinical supervision training series based on one-day workshops for a range of health professions in another Australian state showed a moderate increase in overall confidence as a clinical supervisor (Health Education and Training Institute 2015). The authors noted their use of pre- and post-training surveys to measure an increase in confidence may not have been the most appropriate method, since before training people 'don't know what they don't know'. They suggested that asking participants to retrospectively estimate confidence before and after training may be more appropriate. This was the method employed in our study.

A significant limitation of our study is that the intended interviews to explore perceived impact of change in practice on the student placement experience did not occur, due to lack of sufficient response from the follow-up survey. The interviews could have elicited further information about whether an increase in confidence in a practice area resulted in improved student supervision practice and placement experience. The literature does not provide sufficient evidence as to whether self-reported confidence can be used as a proxy measure for improved practice. As discussed above for the findings by Breckwoldt *et al*. (2014), it has been shown that following an intensive training program, confidence can increase while performance level decreases. It would have been useful to be able to compare whether the self-paced training provided by CEPS was able to increase both confidence and performance. Future evaluations will need to consider methods to increase response rates in order to collect this information.

Conclusion

While the study was not able to measure the impact of the CEPS program on placement quality, it did show that the CEPS program is able to significantly increase supervisor confidence in a number of key supervision skill areas, and is able to effect change in practice. Any enhancements to the program need to consider current usage patterns and participant preferences, and must continue to meet both novice and experienced supervisor and clinical educator needs. Further research is needed to explore the impact of clinical educator development programs such as CEPS on clinical education and supervision practices, student perceptions and experiences of placement quality, and patient care.

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Appendix 1 Survey questions for initial and follow-up surveys.

1. What is your profession?
2. Which Hospital and Health Service is your primary workplace?
3. In your current role, do you currently, or have you ever, provided pre-entry clinical education (student supervision)?

3a. How many student placement days have you supervised in the past 6 months?

3b. How many student placement days have you supervised in the past 12 months?

4. In your current role, do you provide support to allied health professionals who supervise students?
5. What was your primary reason for enrolling in CEPS?
6. Are you still actively participating in the CEPS modules?
7. Please indicate how you have engaged, or intend to engage, with CEPS.

7a. Please tell us why you did not engage with the CEPS program.

8. Did the format of CEPS meet your learning needs?
9. Please rate how useful the following enhancements of the CEPS program would be to your learning experience, or the learning experience of staff you are supporting on a scale of 0 to 5, where 0 is of no use and 5 is of very high use.
10. Think back to before you started the CEPS program. Please rate your confidence in the following aspects of clinical education from 0 to 5 where 0 is no confidence and 5 is a very high level of confidence. (This question was included in the initial survey only.)
11. At this stage of your engagement with CEPS, please rate your confidence in the following aspects of clinical education from 0 to 5 where 0 is no confidence and 5 is a very high level of confidence.
12. For the following aspects of clinical supervision, please indicate where, as a result of participating in the CEPS program, you have changed, or intend change your clinical supervision practice. Choose those which apply.
13. Would you be willing to participate in a follow-up telephone interview (approximately 20 to 30 minutes) to further explore enablers and barriers to implementing actions from your learnings from the program? If yes, please provide your email address below. This page will be filtered from your responses to this survey to maintain anonymity of your responses. (This question was included in the follow-up survey only.)