

Employers' Viewpoint on Clinical Education

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ISSUE: This qualitative study gathered the opinions of healthcare employers to better understand the importance, benefits, obstacles, and evolving issues related to allied health (AH) clinical education from the employers' perspective, with the goal to identify opportunities to strengthen and improve clinical-educational partnerships.

METHOD: Member deans of the Association of Schools of Allied Health Professions (ASAHP) provided names and contact information of employers that routinely educate their students. Interviews were scheduled with employers who responded to Clinical Education Task Force (CETF) invitation. Twenty-one interviews were conducted by CETF members in early 2016 and analyzed utilizing qualitative software.

OUTCOMES: Themes included benefits of working with students and hiring trainees, and obstacles of time and effort required to host students. A trend was noted in gaps between educational preparation and clinical performance. Recent changes highlighted increased technology and regulation, while anticipated changes included more focus on learning on site, longer clinical experiences, and payment for clinical education. **CONCLUSION:** Collaboration between educators and employers is essential to ensure that curriculum and outcomes match the needs of the field and effectively prepare students as entry-level clinicians. *J Allied Health* 2017; 46(3):131-137.

THE CLINICAL EDUCATION TASK FORCE (CETF) of the Association of Schools of Allied Health Professions (ASAHP) was formed in 2011 to address challenges faced in providing clinical education to students across allied health (AH) professions. Previous CETF investigations examined accreditation agencies' standards on clinical education and simulation and trends toward paying clinical sites (employers) to host students.¹ From 2014 to 2015, the CETF designed and tested the current interview tool to use with employers

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who educate AH students, and we then conducted 21 interviews in early 2016.

The purpose of this research was to broadly examine perspectives about clinical education across a range of allied health (AH) professions, specifically from the perspective of organizations that provide clinical education, in order to add to current knowledge regarding the employers' perceived opinions that affect decisions to offer clinical education. This information should help to focus efforts of both the organizations and the AH professions educational institutions to strengthen effective partnerships between them by examining clinical education through the viewpoints of the employers, with the goals to ultimately increase the effectiveness of clinical education and improve patient care.

Literature Review

The emphasis on clinical education in AH curricula is a long-standing tradition. It is considered the “gold standard” of education, providing students appropriate settings in which to develop their professional skills.² Clinical education offers experience in clinical, moral, and ethical decision-making and bridges higher education and the workplace.^{3,4}

Clinical education, as implemented by many AH fields, imparts to students skills necessary for future professional practice. Both supervisors and students report benefits to learners, including the opportunity to practice in a realistic setting, the application of skills to learning in an active way, self-reflection to visualize themselves in the professional roles of their discipline, and increased confidence regarding their skills.^{2,5–9} Clinical education in nursing has been described as “the defining experience of nursing school. Classroom, laboratory, and simulation experiences provide the needed preparation, but exposure to an authentic nursing experience is of the most value to students and, ultimately, to employers.”¹⁰ This is true for many AH professions.

While undeniably essential in establishing AH practitioners' competencies, clinical education has drawn attention to its challenges. The workforce demand in

healthcare has spawned significant growth in existing and new educational programs, but the number of available clinical placements has not matched the demand, resulting in increased competition for clinical education among programs and students. Considerations among academic programs in some disciplines now encompass payment to clinical sites or preceptors as a stipulation for providing clinical education opportunities,¹¹ but this is unsustainable to educational institutions that provide affordable healthcare education. According to a recent physician assistant study, 65% of program directors reported feeling pressure to provide financial compensation to clinical sites. In the same study, 47% reported that financial requirements to clinical sites have a negative impact on their ability to increase program enrollment.¹²

Representatives of clinical placement sites describe a range of monetary and non-monetary costs associated with hosting student clinicians. Staff members report increased time working and decreased productivity due to supervisory responsibility.¹³ Increased costs for materials and supplies used by student clinicians have also been reported.¹⁴ Literature from occupational therapy and dietetics education notes additional stress due to supervisory responsibility, a complaint echoed by other disciplines along with frustration working with difficult students.^{8,15,16}

Formal cost-benefit and cost-effectiveness analyses to identify the economics of clinical education have met with limited success.^{6,7} Numerous methods for calculating these analyses have been used, making comparisons across studies difficult.¹⁷ Dizon, Grimmer-Somers, and Kumar¹⁸ did a systematic review of the AH clinical education, using the Briggs format, and found limited research on the topic. Cost analysis may include the cost of supervision, number of patients seen, staff time devoted to student education, and student use of equipment and supplies. While findings are inconclusive, anecdotal evidence continues to perpetuate the notion of clinical education as a costly endeavor.¹⁹

One response to the perceived burden of clinical education is a collaborative learning model.^{9,19-21} Collaborative learning brings added flexibility and the opportunity to train more students by assigning two or more students from the same program to one supervisor, as reported by physical therapy, occupational therapy, speech-language pathology, and nursing literature, among others. Importantly, the model encourages reciprocal peer learning and stronger development of critical thinking. As reported by the Army in a Baylor University physical therapy program and at the Mayo Clinic within the Department of Physical Medicine and Rehabilitation, a collaborative model had positive implications for productivity and student satisfaction.^{19,22}

Even when accounting for all the cost factors of clinical education, fieldwork sites may still benefit.^{23,24} A review of literature in physical therapy clinical education noted that some costs are offset by decreased recruitment

needs when student clinicians are employed at the clinical site following placement. At the ASAHP 2012 Spring meeting, the Mayo Schools of Health Science reported a 90% retention rate of their AH students as employees.²² While findings related to staff productivity are inconsistent, some studies, such as those reported in the athletic training and occupational therapy literature, conclude that a supervising clinician's productivity can be increased when their student clinicians interact with the clinician's patients or clients as appropriate under state practice act and program accreditation guidelines.^{6,15,24}

Clinical supervisors experience additional non-monetary benefits, including the ability to give back to their profession, the opportunity to teach and participate in research, and in some professions earning continuing education units. The chance to stay current with the latest developments in the field is exemplified in the attitudes of clinical educators in the laboratory sciences, among others.^{5,16,25-30} In some instances, reciprocal learning was observed between the supervisor and the student, as the student was able to provide information of current trends.

The pressures facing clinical sites and academic programs may continue to intensify amidst growing productivity demands and increasing numbers of academic programs in pursuit of high-quality placements. Understanding the clinical education perceptions of employers in the current healthcare environment is critical to being able to provide quality, effective clinical education to AH students while integrating into employers' healthcare environments.

Methods

Study Design

This project employed a basic interpretative study design to generate descriptive data about beliefs, issues, and trends in clinical education from the perspective of large healthcare employers.³¹ The researchers secured IRB approval from their respective institutions prior to conducting this research. All IRBs treated this study as either "non-human subjects research" or as an "exempt review"; if exempt review, a consent form was used.

Participants and Sampling

A purposeful sampling procedure was employed to access large healthcare employer groups across the United States that routinely provide clinical education to AH professions students. Potential participants were recommended by 21 ASAHP-affiliated deans; 55 names were submitted, and 21 respondents (38%) ultimately joined the study between January and April, 2016. A variety of organizations were purposefully interviewed to achieve a broad range of viewpoints in clinical education. Seven participants were employed by hospitals, 6 by health systems, and 1 by a non-profit community

organization. The remaining 7 participants came from a variety of other organizations. After receiving the interview questions in advance, the employers self-identified within their organizations who was the most knowledgeable person to participate in the interview.

Instrumentation and Procedures

The semi-structured telephone survey instrument was a 20-item questionnaire that invited responses to a myriad of issues related to clinical education (Table 1). Six demographic and 14 open- and close-ended questions were employed to ensure clarity and richness of response.

The questionnaire was developed by CETF members following review of relevant literature and discussion among subject matter experts from ASAHIP institutions. Revisions to the draft survey occurred following testing by seven CETF members, each interviewing one employer across diverse settings. The revised tool and protocol were approved by the IRBs at the interviewing CETF members' institutions.

To ensure interview integrity and data collection accuracy, each telephone interview (20 to 30 minutes in length) was conducted by one member of the CETF with a second person as a recorder. Eight CETF researchers administered the 21 interviews. Respondents received interview questions ahead of time. Before each interview, CETF researchers oriented participants to the survey process with written and oral instructions. A post-data-collection "member-checking" technique with respondents assured credibility of the findings and interpretations.³²

Analysis

Following the initial collection and validation of the data, survey findings were entered into NVivo 11, a qualitative data analysis computer software package, to enable researchers to identify, organize, and analyze insights in the data.³³

Results

Organization and analysis of the data yielded four categories of responses: Benefits, Obstacles, Educational Gaps, and Improvement Ideas. Within each category, the identified NVivo nodes were coded into trends with variations evident within each category (Figure 1).

Benefits

Several trends within the category of benefits of hosting clinical education centered on the students. Students often brought a fresh perspective to the clinical site. New energy, new information, and new knowledge of professional curricula were variations that emerged from the data. One participant stated, "Students keep our current staff on their toes. It is stimulating for staff to interact with stu-

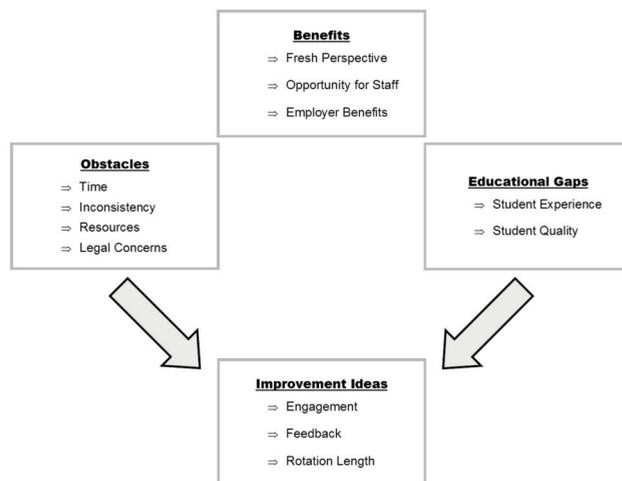


FIGURE 1. NVivo nodes derived from healthcare employers' responses, coded into trends, with variations within each category.

dents, and they learn and are exposed to things they would not be without the students present." Novel approaches allowed supervisors opportunities to meet treatment goals and incorporate current best practice models.

A second trend identified benefits of clinical education to current staff. Students provided leadership opportunities for employees to hone their skills as potential supervisors within their organizations. A specific variation of staff benefits was the opportunity to work with students on special projects and/or grant opportunities.

The third trend to emerge from the data was the direct benefit to the employer. Specifically, accepting clinical students gave the employer opportunities to develop students into potential employees. The clinical education model provided organizations with extended time to interact with students compared to that which occurs during pre-employment interviews. Specifically noted by one participant: "Students are our organization's future hires; it is helpful that they've experienced 'our way' of doing things. They understand us. This shortens their learning curve when hired as employees. Students are great candidates, even better than seasoned employees coming from other hospitals. This is the return on investment."

An additional direct benefit was the variation that, in some cases, organizations received compensation for accepting clinical students.

Obstacles

Staff time emerged as a trend in regard to obstacles of training clinical students. Concerns with on-boarding students, time to train employees to supervise, and employees' productivity demands were dimensions of time as a deterrent. One employer felt: "Time commitment from preceptors and physicians is the biggest challenge, and that equates directly to financials. There is a lot of paperwork for on-boarding and having students is a lot like overseeing more employees."

TABLE 1. ASAHP Clinical Education Task Force: Clinical Employer Survey

Demographic Questions	Clinical Education Questions
Interviewer name: _____	1. What are the benefits to your institution for hosting clinical education?
Employer name: _____	
Coded as: _____	2. Do you measure the benefits of hosting clinical education?
Organization Type: Hospital _____	a. Yes _____
Health System _____	b. No _____
Other _____	c. Not sure _____
1. Approximately how many students do you take per year in each AH discipline that you train? (If interviewing a discipline-specific employer, just note that discipline.)	<i>If yes, how do you measure these benefits?</i>
Disciplines: _____ No. of students per year: _____	
_____	3. What are the biggest obstacles, costs, or challenges to hosting clinical education?

Are the students you educate part of or independent from your institution?	4. Do you measure these costs/challenges of hosting clinical education?
a. Part of our institution _____	a. Yes _____
b. Independent from our institution _____	b. No _____
c. A combination _____	c. Not sure _____
2. Is your organization located in a primarily urban, rural, or mixed environment?	<i>If yes, how do you measure these costs/challenges?</i>
a. Urban _____	
b. Rural _____	5. What changes to clinical education have you seen in the last 5 years?
c. Mixed _____	
3. Does your organization provide primarily acute, non-acute, or mixed clinical education?	6. What changes to clinical education do you foresee in the next 5 years?
a. Acute _____	
b. Non-acute _____	7. What ideas do you have for improving the current system of clinical education?
c. Mixed _____	
4. Is your organization free-standing or part of a system of hospitals/providers?	8. Is your organization involved in an innovative project or initiative to improve clinical education? If so, please explain.
a. Free-standing _____	
b. System _____	9. How do you determine which schools to partner with for clinical education?
5. Approximately what percent of your patients represent an underserved population? (Underserved defined as racial and ethnic minorities, the elderly, low-income people and other marginalized groups that struggle to navigate the healthcare system)	10. In the past 5 years, for what reasons have you terminated a partnership for clinical education?
a. 75–100% _____	
b. 50–75% _____	11. In the past 5 years, for what reasons have you added a partnership for clinical education?
c. 25–50% _____	
d. 0–25% _____	12. How do you prioritize student placement requests?
e. Don't know _____	
6. What is/are your title(s) / position(s) in the organization?	13. What gaps do you perceive between what educators are teaching health professions students and what providers need in new health professions graduates?
7. Are you an independent decision-maker relative to clinical education within your discipline and/or larger organization?	
Discipline:	
a. Yes _____	
b. No _____	
Larger Organization:	
a. Yes _____	
b. No _____	
<i>If no to both, what is the title of the individual who is responsible for these decisions?</i>	

A second obstacle was inconsistent student preparation in advance of the clinical experience, which necessitated that preceptors recalibrate expectations for each student and precluded standardization of clinical educational experience. The observation was not only that

students varied in abilities, but also that some sites themselves were unable to maintain a consistent balance of experiences. Employees' varied experiences and willingness to mentor students were additional variations within this trend.

Another trend was the availability of employer resources. Budget, materials and space for students and employees, differing expectations from multiple educational programs, and locations of facilities contributed to sites' attempts to balance their resources while providing worthwhile experiences to students.

Finally, legal concerns regarding student placements in the facility required the employers' careful assessment. Liability issues and concerns over regulations and reimbursement were variations creating employer apprehension.

Educational Gaps

The gap between knowledge and skills students acquired in their programs and those essential for success at the site emerged as the strongest trend in this category. Limited hands-on skills, lack of experience with diverse patients, inexperience with policy and law, inability to apply evidence, and limited clinical reasoning were variations that contributed to this employer perception. Many participants agreed with the inability of students *"being able to apply science and evidence practically to a wide range of patient populations. [Students] can be comfortable with information but have not had opportunity to develop communication skills with the client/patient."*

The quality of individual students was the other trend to emerge within this category. Underdeveloped professional behaviors, inability to cope with daily schedule demands, and insufficient well-roundedness were identified as variations that affected student capabilities.

Improvement Ideas

Engagement of clinical educators by the academic programs and feedback regarding quality of the learning experience were trends identified for improvement. Strategies for academic programs to engage clinical educators included training, continuing education, and facilitating their opportunities to interact with students at the educational institutions via guest lectures and adjunct roles.

Improvements in feedback were recommended to increase the amount of feedback from students to clinical educators and increased time for educators to provide feedback to students. The data indicate employers' beliefs that longer clinical rotations would result in improved feedback. One employer echoed several participants thought that: *"By the time the student is comfortable and confident in his/her ability, it is time to change rotations. It takes [time] to acclimate. Clinical rotations are too short."*

Discussion

The following definition identifies the aims of AH education and the sites at which it occurs:

Clinical education takes place in a variety of settings including, but not limited to, the classroom, the use of simulation and standardized patients, and within clinical/community/patient care set-

tings. It provides students with the education and experiences necessary to develop and refine clinical skills, knowledge, attitudes, and values required to provide quality patient and client care.³⁴

While leaving educators to determine how to impart clinical instruction and clinical sites to determine its viability in the healthcare setting, the current study elicited considerations for these questions from employers who partner with academic professional education programs to provide clinical education.

CETF members adhered to reliable and valid qualitative methods and analysis of a complex set of interview responses. NVivo node analysis extracted categories and common trends, but the data required iterative subjective review from the researchers. The 21 interviewees (38% response rate) provided a broad range of perceptions with far-reaching implications to prompt discussion and action among healthcare educators. Although the number of interviewees for a valid and reliable study may vary, according to Mason,³⁵ Fusch and Ness,³⁶ and Guest, Bunce, and Johnson,³⁷ this study exceeded the typical and suggested number of interviews needed for valid and reliable qualitative research.

Clinical educators reported benefits and obstacles to their systems and to their staff. Their observations provided suggestions to improve pre-clinical education and optimize the clinical educational experience for the sites and preceptors, as well as for students and faculty. The discussion attempts to elucidate points that serve as future points of inquiry.

Employers identified obstacles to the viability of providing clinical education, including time and cost of training and variable competencies among trainees. While the obstacles and challenges are real, employers also recognized off-setting benefits, especially noting that hosting students serves as a primary pipeline for hiring new talent. These observations complement previous findings about offset costs resulting from retention of students as new hires.^{22,23} Recruitment of students rather than external applicants allows employers to reduce the time to on-board new employees, minimizing employee time to acclimate to the culture and learn system processes. Furthermore, recruiting trainees provides relatively risk-free screening of candidates, minimizing turnover and the need to remediate knowledge or skill deficits in external applicants; growing the talent may be both more efficient and effective than directing new hires to "unlearn" strategies from different sites or even different eras of clinical practice.

Respondents noted further benefits in that students who are effectively integrated make important contributions to the site. Students introduce enthusiasm and vitality, and their idealism can inspire seasoned clinicians to experience their own work through fresh eyes. In assuming roles as trainers, caregivers must explicitly focus on professionalism, quality of care, quality improvement, and compliance to regulatory standards.

Increased scrutiny regarding standards of care and explication of best practices encourages preceptors to model optimal practice. Further, students can introduce to the site contemporary technologies and emerging evidence of empirical support for new procedures that they encounter in their academic training. These contributions can be optimized through student rounds at the site, presentations in employee workshops, and journal clubs that include clinic staff as well as trainees.

On-site clinical education can increase patient and provider satisfaction, matters of particular importance and attention to clinical employers nationwide. Patients report greater satisfaction when a clinician educator and student are both present, than when a clinician works alone; they may observe the expert clinical educator sensitively and confidently demonstrate best practices when articulating them to students.⁸ Further, productive clinicians who are supervisors have been shown to increase their output when mentoring students.^{20,26} Engaged supervisors benefit from students' energy and enthusiasm and from opportunities to teach and to sharpen clinical skills.^{16,29}

Respondents noted inconsistent competencies among students, which occur even among students from the same program. This suggests that preceptors are compelled to tailor their observations and supervisory focus to the unique strengths and deficits of each student. Educational programs are challenged to implement methods that assure similar skill sets for students from their programs, especially when more than one student is paired with the same supervisor. Academic programs need clinical partners to help identify the skill sets that define successful students and employees. Leveraging collaboration with clinical sites to determine metrics for skill development would assure that both pre-clinical and clinical educators are targeting criteria that are relevant for clinical learning and clinical competence.

Inconsistent competencies also highlight the importance of innovating educational strategies that efficiently target and remediate deficits in the academic setting and imparting these strategies to preceptors in clinical settings. Academic programs that assist preceptors to utilize a developmental approach to clinical education benefit all elements of the partnership by helping preceptors tailor their training of particular skills needed at the site, building supervisors' assessment and supervision skills, and introducing them to emerging clinical skills and technologies to which access may be limited in the workplace. Some respondents advocated longer rotations to enable students to achieve greater productivity while learning more advanced skills and attaining greater autonomy. Longer rotations will require even greater attention to define expected competencies and require greater supervisory competence as sites develop students over extended trajectories.

The goals of AH clinical education have been identified as:

1. Applying theory and didactic learning, coupled with practicing clinical skills and professionalism, into evidence-based, applied clinical practice.
2. Orienting students to professional behaviors and attitudes within the clinical workplace.
3. Developing professional, interpersonal communication skills and functioning within a team to provide patient/client care.
4. Developing critical thinking, problem-solving, and time management skills in the clinical setting.³⁴

Parts of each of these goals were identified as educational gaps in students by the employers. Collaboration among academic and clinical educators to clearly delineate expectations of pre-clinical attainment of these skills and attributes prior to refining these goals in clinical education could reduce the perceived educational gap. If the employers and colleges collaborate more clearly on expectations from pre-clinical to clinical education, students should enter clinical rotations at a more constant level, and preceptors may be more engaged in assessing and supervising students. Working together to test different models should help employers develop better productivity when students are present, and ultimately improve client/patient outcomes and employer satisfaction. These responsibilities can be met with adoption of best practices to engage preceptors and clinical sites in the activities of the academic curriculum and to expand on available evidence regarding collaborative clinical education models.^{19,20} Best practices may include academic programs working with employers to identify and fill the needs for continuing education of the clinical supervisors.

Conclusion

This study identified themes on the benefits, obstacles, educational gaps, and improvement ideas that impact clinical education across AH professions. The employers interviewed were major clinical sites for some of our ASAHP member institutions; therefore, their opinions may not reflect employers who educate a significantly lesser number of students. These interviewed employers were highly interested in stronger partnerships with their academic partners, including having preceptors serve as guest lectures or observers of pre-clinical skills-training labs and reciprocal learning opportunities such as improved preceptor training and learning more models of clinical education. The educational gaps identified suggest the need for pre-clinical assessment of communication skills and professionalism. The employers were directly asked about benefits and challenges of educating students, and the themes were similar but almost none of the employers directly measure benefits or challenges. To the degree that measurement is the first step

to improvement, education of healthcare providers, and healthcare itself, will gain as academic programs and clinical employers across professions partner to develop comprehensive competency assessments and align them to effective clinical education strategies. By understanding employers' broad, overreaching perceptions of the benefits, obstacles, and educational gaps, and by listening to their ideas for improving clinical education, a collaborative culture of engagement between educational institutions and employers can develop, ultimately leading towards a curricula that will fulfill the needs of the workforce while elevating the level of patient care.

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