Orientation Process for Newly Credentialed Athletic Trainers in the Transition to Practice

Ashley B. Thrasher, EdD, ATC, CSCS*; Stacy E. Walker, PhD, ATC, FNATA†

*School of Health Sciences, Western Carolina University, Cullowhee, NC; †School of Kinesiology, Ball State University, Muncie, IN

Context: Orientation is an important part of socialization and transition to practice, yet the orientation process for newly credentialed athletic trainers (ATs) is unknown.

Objective: To determine how newly credentialed ATs are oriented to their roles.

Design: Cross-sectional study.

Setting: Online survey.

Patients or Other Participants: Three hundred thirty-two of 1835 newly credentialed ATs (18%) certified and employed between January and September of 2013 completed the survey (129 men, 203 women; age = 23.58 ± 2.54 years).

Data Collection and Analysis: The survey consisted of demographic information (eg, employment setting, job title) and 2 sections: (1) orientation tactics and (2) usefulness of orientation tactics. For the first section, participants identified if various orientation tactics were included in their orientations (eg, policies and procedures review). For the second section, participants identified how useful each orientation tactic was on a Likert scale (1 = not useful, 4 = very useful). Descriptive statistics were calculated for each survey item. Mann-Whitney U and Kruskal-Wallis tests were used to determine differences between demographic characteristics and orientation tactics. A Bonferroni correction accounted for multiple comparisons. A panel of experts established the content validity of the survey. The Cronbach α was used to establish internal consistency (α = 0.802).

Results: The most common orientation tactics were meeting with supervisors (n = 276, 82.9%) and staff members (eg, coaches; n = 266, 79.9%) and learning responsibilities (n = 254, 76.2%). The least common orientation tactics were simulation of the emergency action plan (n = 66, 19.8%) and preceptor development (n = 71, 21.3%); however, preceptor development was not applicable to many participants. The most useful orientation tactics were simulating the emergency action plan (3.45/4.0) and meeting with staff members (3.44/4.0). Participants who felt their orientation prepared them for their roles were exposed to more tactics during orientation (Mann-Whitney U = 17212, P < .001).

Conclusions: Many tactics were used to orient newly credentialed ATs to their roles, but orientations varied based on the practice setting.

Key Words: onboarding, professional socialization, role inductance

Key Points

- The orientation process for newly credentialed athletic trainers (ATs) varied by setting and job title, with many new ATs receiving little formal orientation.
- Employers should provide structured orientations for newly credentialed ATs to ease stress during the transition to practice.
- Processes used to orient newly credentialed ATs to their roles should include addressing policies and procedures, explaining the organizational mission and goals, reviewing the emergency action plan, and meeting with staff members, such as ATs, coaches, athletic directors, team physicians, and other individuals with whom the new AT will interact.

As newly credentialed athletic trainers (ATs) begin their employment, many employers expect them to “hit the ground running” and immediately provide autonomous patient care.1 Newly credentialed ATs often feel nervous and stressed as they transition from supervised students to independent practitioners.2 For newly credentialed health care providers such as nurses, the transition is often referred to as a “reality shock”3 or a “transition shock”4 and can lead to increased stress.5,6 Similar to new ATs, research on new nurses has found that increased stress can often result in errors in patient care7,8 and new nurses feeling as though they did not provide safe patient care.9 Newly credentialed ATs also reported role ambiguity, or being uncertain about many aspects of their roles, such as administrative policies and procedures.10 One way to decrease stress and enhance the transition to practice is through onboarding, which is a multifaceted process for integrating new employees into an organization.11,12 Onboarding is a formalized process of supporting new employees as they are integrated into their new organization that provides them a means by which they can understand the expectations of the position, organizational processes, and beliefs and values of the organization.13,14 An ongoing process, onboarding begins at the interview or time of hire14 and progresses through the first 12 to 18 months of employment.16–19 Part of the onboarding process is orientation, which includes formal meetings to provide
individuals with institutional information, such as policies and procedures, tours, and introductions. Often the terms onboarding and orientation are used interchangeably in the literature, but they are different. Onboarding is an ongoing process, whereas orientation is an event that occurs at the beginning of the onboarding process to formally familiarize new employees with organizational policies and procedures. Onboarding is multifaceted and regularly consists of an orientation period; educational modules; assigned mentor, preceptor, or designated point person; support; precepted clinical experience; evaluation and feedback; integration into the organization; and a period of time for new employees to be immersed in their roles without the responsibilities of independent patient care as they become acclimated to their new environment.

Orientation and onboarding are important in the transition to practice and socialization of new employees and can be formal or informal. Formal orientation includes information dissemination with structured activities and specific outcomes, such as reviewing policies and procedures or practicing the emergency action plan (EAP). Informal orientation activities are unstructured and individualized, such as new employees shadowing their supervisors as they learn about their roles. Orientation has immediate and long-term influences on clinical practice as it affects the integration of new clinicians into their settings, quality patient care indicators, and retention. In nursing, inconsistent or insufficient orientations can lead to difficulty assimilating into their roles, dissatisfaction with jobs, and feelings of discontent, frustration, role conflict, and reality shock, which often affect retention. When new nurses did not have orientations or had inadequate orientations, they often questioned their skills, desire to remain in the profession, and ability to practice safely. Additionally, many new nurses cited poor training and lack of support as reasons they left their jobs within the first year. An effective orientation can increase confidence, enhance the transition to practice, increase job satisfaction, and decrease attrition.

For newly credentialed ATs, the orientation process varies greatly, ranging from no formalized orientation to orientations lasting longer than 1 month. Despite the importance of orientation in the transition to practice of newly credentialed ATs, few researchers have specifically examined the types and contents of orientations and determined if orientation practices sufficiently prepared the ATs to fulfill their roles. The purpose of our study was to explore the orientation tactics used to socialize newly credentialed ATs into their new roles as clinicians. Additionally, we aimed to determine if the number of orientation tactics differed based on various demographic characteristics, including setting, job title, supervisor, and length of orientation, and if newly credentialed ATs felt orientation was effective in preparing them for their new roles. Understanding the details of the orientation process provided to newly credentialed ATs can serve as a foundational step to support them as they transition to practice. Employers can use the results from this study to develop programs and determine which tactics are most helpful in orienting new employees to their roles, which could positively affect patient care and the transition to practice.

METHODS

Study Design

This study used a cross-sectional design with an online survey to explore the orientation process for newly credentialed ATs. The university institutional review board approved the investigation.

Participants

A total of 332 newly credentialed ATs (129 men, 203 women; age = 23.58 ± 2.54 years) participated in this study. Inclusion criteria were having passed the Board of Certification (BOC) examination between January and September 2013 and being employed as ATs full or part time (including graduate assistants and interns) at the time of the survey. That timeframe was chosen to capture individuals who had 3 to 6 months of work experience. Participants who were not employed as ATs were excluded from the study. We recruited participants via e-mail sent from the BOC to all 1835 ATs who were certified between January and September 2013. A total of 424 ATs consented to participate in the study, for a response rate of 23%. After removing the surveys of those recruits who did not fit the inclusion criteria of being employed as an AT and those recruits who did not complete the entire survey, a total of 332 newly credentialed ATs (18%) participated in this study. Table 1 provides participant demographic information. Participants gave consent before completing the survey.

Instrumentation

The Orientation Tactics Survey was developed using results from interviews with the supervisors of newly credentialed ATs and graduate assistant ATs and from the literature. The listed orientation tactics were aggregated to form the survey. In the survey, we included orientation tactics cited in previous research as ways that new ATs and new health care providers were oriented to their roles. The survey was created to identify tactics that were used in orientation for new ATs and determine which tactics they perceived as helpful during orientation. The survey consisted of 4 sections: (1) demographics, (2) orientation tactics, (3) usefulness of orientation tactics, and (4) open-ended questions related to orientation and transition to practice. The demographics section consisted of questions related to age, sex, type of professional program, and employment setting. In the orientation tactics section were questions regarding which tactics were included in the orientation session answered as yes/no (eg, review of policies and procedures, tour of facilities, meeting with staff members). The usefulness section contained questions regarding the perceived usefulness of orientation tactics answered on a 4-point Likert scale (1 = not useful, 2 = minimally useful, 3 = useful, 4 = very useful).

Tactics that were not included in the orientation tactics section (ie, those questions answered with no) did not
Table 1. Participants’ Demographic Information

| Age, y, mean ± SD | 23.58 ± 2.54 |
|-------------------|--------------|
| n (%)             |              |
| Sex               |              |
| Male              | 129 (39)     |
| Female            | 203 (61)     |
| Professional preparation |              |
| Bachelor’s degree | 286 (86)     |
| Master’s degree   | 46 (14)      |
| Job setting       |              |
| College           | 137 (41)     |
| Secondary school  | 107 (32)     |
| Secondary school/clinic | 41 (12) |
| Clinic/hospital   | 22 (7)       |
| Other             | 25 (8)       |
| Job title         |              |
| Graduate assistant| 110 (33)     |
| Intern            | 31 (9)       |
| Staff athletic trainer | 191 (58) |
| Received policies and procedures manual? | |
| Yes               | 222 (66.7)   |
| No                | 109 (32.3)   |
| Assigned a mentor?|              |
| Yes               | 95 (29)      |
| No                | 233 (71)     |
| Supervised by an athletic trainer? | |
| Yes               | 214 (64.3)   |
| No                | 118 (35.7)   |
| Duration of orientation |         |
| No formal orientation | 76 (23.9)  |
| Less than 1 d     | 80 (25.2)    |
| 1–2 d             | 91 (28.6)    |
| 3–6 d             | 35 (11)      |
| 1–2 wk            | 20 (6.3)     |
| 2 wk to 1 mo      | 8 (2.5)      |
| 2–4 mo            | 3 (0.9)      |
| Ongoing           | 5 (1.6)      |
| Orientation prepared for role? |    |
| Yes               | 184 (57.9)   |
| No                | 134 (42.1)   |
| Considered leaving profession? |        |
| Yes               | 104 (31.2)   |
| No                | 196 (58.9)   |

The instrument was reviewed by a statistician and 5 athletic training educators with experience in survey research for content validity, and minor modifications were made. The instrument was pilot tested with 7 newly credentialed ATs for clarity, and minor modifications were made. Internal consistency for each section of the survey was established with a Cronbach α of 0.802, which is considered good internal consistency. Reliability was established using SPSS (version 23; IBM Corp, Armonk, NY).

RESULTS

In mid-October of 2013, an e-mail was sent out by the BOC to all 1835 ATs certified between January and September. The e-mail contained information regarding our purpose, inclusion criteria, an invitation to participate, and a link to the survey. Participants were given 4 weeks to complete the survey. Reminder e-mails were sent 1 week and 2 weeks later to increase response rates. Athletic trainers who qualified for the study and were willing to participate completed the survey on the online platform Qualtrics (Qualtrics LLC, Provo, UT) from the Web link located in the recruitment e-mail.

Data Analysis

Data from the survey were analyzed using SPSS. We calculated descriptive statistics (mean ± standard deviation) for each survey item. Mann-Whitney U (U), Kruskal-Wallis (KW), and χ² tests were used to determine if there were differences in characteristics (eg, supervisor, work setting, job title, policies and procedures manual provided) that affected how newly credentialed ATs were oriented to their roles. Our data were nominal (yes/no response) and ordinal (Likert scale); therefore, we used nonparametric statistics. The level of significance was set a priori at α < .05. A Bonferroni correction was applied to account for multiple comparisons. Independent variables were assigned supervisor, work setting, job title, received policy and procedures manual, duration of orientation, and perceived level of role preparation as a result of orientation. The dependent variables were the tactics included in the orientation process.

Although this study was quantitative, the open-ended questions yielded sufficient comments for qualitative analysis. The survey items included in the qualitative analysis were (1) “Please provide specific examples of knowledge needed and/or activities which would have better prepared you for your role as an AT in this job setting.” (2) “Please share additional ways in which you were oriented to your new role.” (3) “What processes do you wish were in place to help you transition to your role?” (4) “Please explain why you have considered leaving the athletic training profession” (follow up to “Have you ever considered leaving the athletic training profession?”). Qualitative data were analyzed via interpretive coding. This process involved reading individual comments and developing codes. The codes were then organized into themes that expressed the participants’ experiences with the orientation process. Trustworthiness was established via multianalyst triangulation.
The number of orientation tactics used differed based on the setting in which the new AT was employed (KW value = 31.46; \( P < .001 \)) and his or her job title (KW value = 34.89; \( P < .001 \)). The orientations of participants employed in the collegiate setting included more tactics than those in the secondary school (KW value = 34.81; \( P = .045 \)), clinic/hospital (KW value = 61.14; \( P = .044 \)), and other (eg, part time, per diem; KW value = 91.10; \( P < .001 \)) settings. Participants employed in the secondary school or clinic setting were exposed to more orientation tactics than those in the other settings (KW value = 100.02; \( P < .001 \)). Orientations for graduate assistants also included more orientation tactics than those for interns (KW value = 45.88; \( P = .047 \)) and staff ATs (KW value = 55.85; \( P < .001 \)). Tables 3 and 4 list the most frequently occurring and most useful tactics, respectively, in each setting.

### Table 3. Most Frequently Used Tactic in Each Setting

| Activity                                      | Included in Orientation? | No (%) | Usefulness |
|-----------------------------------------------|--------------------------|--------|------------|
| Tour of facilities                            | Yes                      | 283 (85) | 29 (8.7) | 11 (3.3) | 3.37 ± 0.71 |
| Meeting with supervisor(s)                    | Yes                      | 276 (82.9) | 35 (10.5) | 12 (3.6) | 3.32 ± 0.66 |
| Meeting with other staff members (eg, coaches, physicians) | Yes                      | 266 (79.9) | 48 (14.4) | 9 (2.7) | 3.43 ± 0.65 |
| Duties and responsibilities of being an athletic trainer | Yes                      | 254 (76.3) | 62 (18.5) | 7 (2.1) | 3.22 ± 0.75 |
| Job performance expectations                  | Yes                      | 250 (75.1) | 69 (20.7) | 4 (1.2) | 3.25 ± 0.65 |
| Meeting with athletic training staff members  | Yes                      | 232 (69.7) | 41 (12.3) | 50 (15) | 3.44 ± 0.66 |
| Independent overview of policies and procedures by yourself | Yes                      | 229 (68.8) | 85 (25.5) | 9 (2.7) | 3.01 ± 0.66 |
| Documentation/electronic medical record instruction | Yes                      | 218 (65.5) | 86 (25.8) | 19 (5.7) | 3.25 ± 0.74 |
| In-person overview of policies and procedures with supervisor(s) | Yes                      | 194 (58.3) | 122 (36.6) | 7 (2.1) | 3.17 ± 0.61 |
| Overview of specific protocols (eg, referrals) | Yes                      | 170 (51.1) | 119 (35.7) | 34 (10.2) | 3.25 ± 0.74 |
| Health Insurance Portability and Accountability Act training | Yes                      | 160 (48) | 154 (46.2) | 9 (2.7) | 2.96 ± 0.73 |
| Emergency action plan training (lecture/discussion) | Yes                      | 158 (49) | 151 (47) | 14 (4) | 3.23 ± 0.74 |
| Occupational Safety and Health Administration training (or equivalent) | Yes                      | 153 (45.9) | 157 (47.1) | 13 (3.9) | 2.84 ± 0.78 |
| Preparticipation physical examination overview | Yes                      | 149 (44.7) | 131 (39.3) | 43 (12.9) | 3.14 ± 0.74 |
| Human resource training (eg, retirement, insurance coverage, vacation) | Yes                      | 136 (40.8) | 135 (40.5) | 52 (15.6) | 3.02 ± 0.79 |
| Cardiopulmonary resuscitation/automated external defibrillator certification or recertification | Yes                      | 134 (40.2) | 178 (53.5) | 11 (3.3) | 3.31 ± 0.76 |
| First-aid training                            | Yes                      | 94 (28.2) | 214 (64.3) | 15 (4.5) | 3.12 ± 0.85 |
| Meeting with academic advisor (if in graduate assistant role) | Yes                      | 74 (22.2) | 69 (20.7) | 180 (54.1) | 3.18 ± 0.81 |
| Preceptor development                         | Yes                      | 71 (21.3) | 187 (56.2) | 65 (19.5) | 3.04 ± 0.82 |
| Emergency action plan practice (simulated)     | Yes                      | 66 (19.8) | 242 (72.7) | 15 (4.5) | 3.45 ± 0.69 |

### Table 4. Most Useful Tactic in Each Setting Reported on a Likert Scale

| Tactic                                      | Mean ± SD |
|---------------------------------------------|-----------|
| College/university                          |           |
| 1. Meeting with supervisor                  | 3.48 ± 0.6 |
| 2. Tour of facilities                       | 3.47 ± 0.6 |
| 3. Meeting with athletic training staff members | 3.45 ± 0.6 |
| Secondary school                            |           |
| 1. EAP training (simulation)                | 3.56 ± 0.6 |
| 2. Meeting with other staff members (eg, coaches, therapists, physicians) | 3.51 ± 0.6 |
| 3. EAP training (discussion)                | 3.47 ± 0.6 |
| Secondary school/clinic                     |           |
| 1. Meeting with athletic training staff members | 3.45 ± 0.6 |
| 2. Job performance expectations             | 3.24 ± 0.6 |
| 3. In-person overview of policies and procedures with supervisor | 3.24 ± 0.6 |
| Hospital/clinic                             |           |
| 1. EAP training (simulated)                 | 3.67 ± 0.5 |
| 2. Meeting with athletic training staff members | 3.47 ± 0.5 |
| 3. Meeting with supervisor                  | 3.42 ± 0.5 |
| Other                                       |           |
| 1. EAP training (simulation)                | 3.67 ± 0.6 |
| 2. Pre-participation physical examination overview | 3.57 ± 0.5 |
| 3. Meeting with other staff members (eg, coaches, therapists, physicians) | 3.53 ± 0.6 |

Abbreviation: EAP, emergency action plan.

\(^{a} 1 = \text{not useful}; 4 = \text{very useful.}\)
More orientation tactics were used for those who were assigned a mentor as compared with those who were not assigned a mentor ($U = 14221.5; P < .001$). More orientation tactics were also offered to those who had ATs as supervisors ($U = 9389.5; P = .002$). More tactics were provided to those who were given policies and procedures manuals ($U = 17192; P < .001$). Additionally, participants who received a policies and procedures manual felt their orientation better prepared them for their roles than those who did not receive a manual ($Cramer V = 0.282; P < .001$). No differences in orientation tactics occurred based on the number of ATs in the setting ($KW value = 26.17; P = .126$); however, settings with more new ATs had more orientation tactics included ($KW value = 19.67; P = .033$).

More orientation tactics were used for those who had not considered leaving the profession versus those who had ($U = 8493.5; P = .017$). Of those who had considered leaving the profession, fewer experienced the following tactics in their orientations: meeting with their supervisor ($U = 8884.5; P = .002$), reviewing job performance expectations ($U = 8759.5; P = .006$), meeting with other staff members (eg, coaches, therapists, physicians; $U = 9103.5; P = .021$), and meeting with other ATs ($U = 8954; P = .029$).

Of the 20 orientation tactics included in our survey, 18 of 20 were rated as useful or higher (3.0 of 4.0 or higher). Based on the orientation tactics that were included, the tactic that received the highest mean value was simulating the EAP (3.45 of 4.0), followed closely by meeting with ATs (3.44 of 4.0) and meeting with other staff members (3.43 of 4.0). The orientation tactics with the lowest mean values were Occupational Safety and Health Administration training (2.84 of 4.0), Health Insurance Portability and Accountability Act training (2.96 of 4.0), and independent review of policies and procedures (3.01 of 4.0).

Length of orientation ranged from none (23.9%) to ongoing (1.5%). A large majority of orientations were either 1 to 2 days (28.6%) or less than 1 day (25.2%); 23.9% received no orientation. A slight majority (57.9%) of participants felt their orientations were adequate, whereas 42.1% of participants felt their orientations did not adequately prepare them to fulfill their roles. Participants who were exposed to more orientation components felt better prepared for their roles ($U = 17442; P = .001$). Those with longer orientation processes had more tactics included in their orientations than those with shorter orientations ($KW value = 59.45; P < .001$) and felt their orientations better prepared them to assume their roles ($U = 6688.5; P < .001$).

**Qualitative Responses**

Participants were asked to respond to 4 open-ended items. Two overarching themes emerged from the data...
describing orientation needs: (1) structure and (2) resources (Figure). Newly credentialed ATs wanted formal orientations instead of informal orientations or immediate role immersion. Many experienced stress during the transition because they were expected to learn on their own or through trial and error. This stress was often related to not fully understanding their job expectations and feeling as if they were making mistakes through the trial-and-error process of learning. Participants also wanted orientations that were specific to their roles as ATs. Some participants in hospital and clinic settings received orientations that were general and related to all new employees at the organization but were not specific to their roles as ATs or to their setting. A gradual orientation would also be beneficial for new ATs as they transition to practice, as participants felt that having time to adjust to their position and to either shadow or be shadowed by an AT who could provide feedback would be helpful. Other participants who had gradual orientations and gradual exposure to patient care felt more comfortable because they had enough time to adjust before providing independent patient care. Some participants who did not have a gradual orientation noted stress, as they did not feel fully prepared for the demands placed on them.

The second theme that emerged was resources, which describes various items, either personnel or documents, that would be beneficial to the orientation process. Many participants felt that a mentor would be a valuable resource during the orientation process and their transition to practice so they could ask questions and be guided through policies, procedures, and protocols. Participants also felt that access to a policies and procedures manual would be helpful. Often participants did not have a policies and procedures manual and did not know whom to approach with questions related to procedures; even if they did know, administrators or head ATs were sometimes un receptive to questions. They felt having a policies and procedures manual would give them a place to start and could answer basic questions without their needing to approach administrators or supervisors. Another resource that participants wished they had access to was the EAP. Some respondents did not receive copies of the EAP at the beginning of their employment, and most did not practice the plan. Some participants noted that their institution did not even have EAPs, so participants were required to develop them.

**DISCUSSION**

The purpose of our study was to explore the orientation tactics used to socialize newly credentialed ATs into their new roles as clinicians. A secondary purpose was to explore differences in the number of orientation tactics offered based on demographic characteristics including supervisor, setting, job title, and length of orientation and determine if newly credentialed ATs felt their orientations were effective in preparing them for their new roles. Our results provide an overview of the tactics included in orientations for newly credentialed ATs.

**Orientation Tactics**

Formal and informal orientations have been widely used in athletic training to familiarize students and new employees with the policies and procedures and the roles and responsibilities of their positions.\(^1,2,29,34–36\) Formal orientations often include a review of the policies and procedures manual, position or program requirements, expectations, staff introductions, and facility tours.\(^1\) Our results are consistent with prior work\(^1,2\) regarding the content of typical orientation sessions.

Although some aspects of orientation sessions were fairly universal, such as meeting with supervisors and touring facilities, our results showed that orientations were quite varied, depending on the setting and job title. In our study, newly credentialed ATs in the collegiate setting were exposed to more orientation tactics than those in the secondary school, clinic, or other settings. Pitney et al\(^17\) found that ATs in the National Collegiate Athletic Association Division I setting lacked formal orientations other than to administrative tasks, but we believe the collegiate setting used more orientation tactics because many employed in that setting were graduate assistants. Additionally, graduate assistants had more tactics included in their orientations than did interns or staff ATs. The ways in which graduate assistants were oriented to their roles were similar to those identified by researchers\(^1\) who examined the orientation and socialization of graduate assistants in the collegiate setting. Interestingly, the collegiate setting also provided more orientation tactics than the clinic or hospital setting. Clinics and hospitals frequently offer thorough orientations; however, these orientations are often related to human resources and hospital procedures and not necessarily related to athletic training responsibilities. We directly investigated athletic training orientations and not human resource orientations.

An important part of the orientation process is having access to a policies and procedures manual that outlines various aspects of the job, such as expectations, documentation, EAPs, and referrals.\(^29\) In nursing, many errors have been linked to inadequate knowledge of hospital procedures or patient conditions,\(^7\) which is similar to the findings of a study\(^2\) in which a new AT was reprimanded for referring a patient to the wrong physician, despite having never been provided with a list of recommended physicians. Some nurses have reported\(^38\) they were pushed out of orientation too soon because they were needed to meet hospital demands. Athletic trainers have encountered similar situations, as they were expected to provide patient care almost immediately.\(^1\) A policies and procedures manual can help alleviate some of the stress associated with learning about a new organization. Graduate assistants in the collegiate setting who were given a policies and procedures manual felt the manual helped orient them to their roles and provided them with a place to start when they had questions.\(^29\) Also, athletic training programs often use student handbooks to detail expectations for professional behaviors and performance.\(^34\) We found that new ATs who were provided with a policies and procedures manual felt their orientation prepared them for their roles better than those who were not provided a manual. In response to the open-ended items, participants thought a policies and procedures manual would have allowed them to find answers on their own, given that asking questions often irritated their administrator or supervisor. Supplying a policies and procedures manual to all new employees before they are immersed in their setting may help decrease stress and ease the transition into their roles.
Interestingly, the tactic that had the highest mean score occurred the least frequently: simulating the EAP. Although the EAP was often distributed to newly credentialed ATs and reviewed in formal orientations, simulation of the EAP is an important aspect of fully understanding emergency protocols. Additionally, in response to the open-ended items, many newly credentialed ATs, often employed in the secondary school setting, reported they did not even have an EAP and needed instruction in creating one. In institutions with EAPs, many participants lacked access at the beginning of employment or never reviewed the document. Fewer than half of our participants reviewed the EAP in the form of a lecture or discussion. Emergency action plans are important for delineating the management of emergency situations, and every institution should have a structured EAP. Furthermore, the EAP should be practiced annually by all parties. Providing and simulating the EAP during orientation gives new ATs the opportunity to learn the institution’s specific emergency procedures. Without an EAP, or without adequately practicing one, new ATs are at risk for making mistakes. Newly credentialed ATs and graduate assistant ATs have reported making procedural errors during emergency situations, such as referring a patient to the wrong physician or taking a patient to the emergency room instead of directly to the team physician. These 2 mistakes were fairly minor, yet they could have been easily avoided if specific guidelines had been outlined in an EAP. Employers should not only provide access to the EAP but should also simulate it during orientation. If no EAP exists, new ATs should develop one in coordination with the team physician, local emergency medical services staff, and school administrators. Athletic training programs can provide future ATs with instruction on developing an EAP.

Other tactics that had high usefulness mean scores were meetings with supervisors and other staff members (e.g., other ATs, coaches, physicians). During these meetings, supervisors could review expectations, policies, and procedures, which were also useful during the orientation process of new ATs. Meeting supervisors and other coworkers is vital to the organizational socialization process of new employees, as these tactics can provide cultural and technical information to assist with new employee integration and forming successful relationships with colleagues. Meeting with various staff members can also assist the new AT in becoming a member of the professional culture. In addition, other staff members can be a resource to new ATs when they have organizational questions. Supervisors and other staff members can also provide support to the new ATs, which can help the latter become involved in the organizational culture and develop self-efficacy. Pitney et al observed that finding stability within an organization was related to collegiality, administrative support, and alignment of organizational values with the AT’s values. Supervisors can begin employment for new ATs by outlining the organization’s values along with role expectations to ensure congruence with their values. The supervisor can then introduce the new AT to other staff members, so that they begin to develop supportive relationships. We did not specifically examine “successful” orientations, but research showed that finding role stability denoted successful socialization. By providing information and resources at the beginning of employment and during the orientation process, employers can facilitate the socialization process for new employees. As employees begin to understand expectations and organizational values, create relationships with colleagues, and feel supported in their roles, they can develop stability and emerge as members of the professional culture.

### Length of Orientation

The length of orientation in this study ranged from no formal orientation to ongoing orientation and onboarding. Orientation for graduate assistant ATs depended on the institution and could be formal, informal, or absent, whereas no formal orientation was provided to ATs in the Division I settings. Length of orientations in nursing also depends on the organization. Research in nursing showed that longer orientations resulted in greater satisfaction and retention. Recently, new nursing graduates were examined during the orientation and transition-to-practice process. A transition score was derived from the Casey-Fink transition survey, which evaluated new nurses on transition-to-practice constructs: organizing/prioritizing, communication/leadership, support, stress, and personal satisfaction. The length of orientation had an influence on transition-to-practice scores: nurses who attended longer orientations had higher transition scores. The orientation lengths were less than 2 weeks, from 2 to 4 weeks, and longer than 4 weeks. Nurses with orientations longer than 4 weeks not only had higher transition scores but also outperformed nurses with shorter orientations on communication/leadership, support, and professional satisfaction. Only 16 (5%) of our participants had orientations lasting longer than 2 weeks.

New nurses reported being forced out of orientation too soon and feeling unready to be primary care providers, which added to their stress. New nurses are often given full patient loads from the beginning, which can increase stress and lead to burnout. As new clinicians transition into their roles, they are initially so overwhelmed that they focus on themselves and how they are adjusting. This initial adjustment includes focusing more on time management than on patient needs or developing necessary skills and worrying about performance instead of focusing on patients. However, after the first 6 months, they are able to focus on patient care and the needs of their patients, instead of their own transitional needs. New nursing graduates felt that if they had an initial period of gradual, sustained onboarding that provided support, including a thorough orientation and assigned preceptor, they could have assimilated into their settings more effectively. Almost half of our participants believed that their orientations did not adequately prepare them to assume their roles. Some were not ready for the demands placed on them, which increased their stress. However, participants who had more tactics included in their orientations felt better prepared for their roles.

The length of orientation also affected retention and attrition of new clinicians. Retention is a concern in athletic training and other health care fields such as nursing. Nursing researchers have found turnover rates of 35% and 60% in the first year of clinical practice, and many participants cited poor training, inadequate orientation, lack of support, not understanding procedures, high
stress levels, and not having a smooth transition as major contributing factors in the decision to leave during their first year.\textsuperscript{78–50} Successful onboarding programs can greatly influence retention and are essential to retaining competent employees.\textsuperscript{49,51,52} whereas inadequate orientation can lead to difficulty assimilating\textsuperscript{6} and contribute to attrition.\textsuperscript{13} Onboarding programs to assist with the transition of new nurses were associated with decreased turnover rates.\textsuperscript{7,48,53–55} Researchers have assessed the retention of students in athletic training programs,\textsuperscript{56–59} recent graduates who persisted through their athletic training programs,\textsuperscript{60} experienced ATs in various practice settings,\textsuperscript{81} and former ATs\textsuperscript{47}; the retention and attrition of newly credentialed ATs in their first year of practice have not been thoroughly addressed. We observed that nearly one-third of our participants had considered leaving the profession of athletic training, and many had been employed for only approximately 3 to 4 months. Most of those who considered leaving the profession cited low salaries, heavy workloads, and lack of respect as contributing factors, yet the next most prevalent reason participants cited was stress as they adapted to their roles. This stress was related to not fully understanding job expectations, not feeling fully prepared for the demands placed on them, or feeling as if they were making mistakes with patient care. Participants with more tactics included in their orientations were less likely to consider leaving the profession. Newly credentialed ATs who had lower comfort levels and fewer feelings of mentorship, support, and organizational transition during their transition to practice were also more likely to consider leaving the profession of athletic training.\textsuperscript{62} Although orientation could play a role, the reasons for considering departure from the profession are likely multifaceted. Some of the most useful orientation tactics, such as meeting with supervisors and other staff members and learning job expectations, occurred less often for those who had considered leaving the profession. Potentially, organizations that provide thorough, prolonged orientations and onboarding also provide resources such as introductions to staff members, discussion of job expectations, mentoring, and a gradual transition to patient care responsibilities. Such programs could have altered the stress our participants experienced, which caused them to consider leaving the profession. Future researchers should examine the attrition of newly credentialed ATs as they transition to professional practice. A plethora of articles in nursing showed the positive effects of an onboarding or transition-to-practice program on new nurse retention.\textsuperscript{7,20,48,49,41–55} and future investigators should examine the influence of onboarding and transition-to-practice programs on the retention of newly credentialed ATs.

### Suggestions for Orientation

The structure of an orientation depends on the organization but is often purposeful with specific outcomes to achieve. Many onboarding models have been developed to support new clinicians through the transition to practice, and formal orientations play a key role in that process. Formal orientations assist in assimilating new employees into the organization by providing individuals with institutional information, such as policies and procedures manuals, introductions, and tours.\textsuperscript{14,20} Orientation is one of the first steps of the onboarding process and therefore plays a very important role. Orientation programs facilitate the transition to practice by providing a comforting welcome, structured support, training through classroom learning and clinical experiences, preceptorship, measurement of progress, and evaluation of clinical competence.\textsuperscript{28,49} When designing orientation programs, employers should evaluate the purposes of their orientation process and determine the outcomes they wish to achieve. For example, some orientation models in nursing included education modules outlining policies and procedures, which resulted in nurses having better comprehension of bureaucratic roles and experiencing decreased role discrepancy.\textsuperscript{63} Various orientation models implemented during the transition improved orientation by focusing on a specific aspect of orientation, such as clinical competence or learning.\textsuperscript{28}

A common model used to structure orientation and onboarding is the competency-based approach. Safe patient care should be a priority for all clinicians, and competency-based onboarding models ensure safe levels of practice by demonstrating and evaluating competence.\textsuperscript{28} Using competencies to structure orientation and onboarding can be helpful in communicating expectations and providing feedback. Competency-based models have been widely used in nursing\textsuperscript{7,64–66} and are developed to meet the needs of the organization and job roles. Some competency-based models are grounded in the theoretical framework of the Institute of Medicine’s 5 core competencies for health care professionals: patient-centered care, communication and teamwork, evidence-based practice, quality improvement, and informatics.\textsuperscript{64} Evaluation tools have been developed for other competency-based onboarding models in which the health care provider needs to demonstrate competence in each skill by the end of the onboarding process.\textsuperscript{26,67} Competency-based orientation models require demonstrating skills and ensuring quality care through evaluation and feedback.\textsuperscript{28} For competency-based onboarding, key stakeholders develop a tool to ensure that all relevant information and skills will be evaluated.\textsuperscript{57} Various activities, including learning modules, vignettes to improve critical thinking, role play, discussions, demonstrations, evaluation and feedback, precepted clinical experiences, and assessing skills on a checklist, have been incorporated in these models.\textsuperscript{7,26,64,67,68} Often, modules are organized into phases of onboarding, in which competencies become more complex as the new health care provider gains competence.\textsuperscript{26} Competency-based onboarding models ensure quality and safe patient care and can be tailored to the organization based on its needs.

Another model of onboarding used in nursing to develop orientation is a clinical or critical pathway, by which organizations develop steps new nurses must experience to stimulate critical-thinking and problem-solving skills.\textsuperscript{28} Clinical or critical pathways are widely used in health care as evidence-based care frameworks for describing an intervention.\textsuperscript{69} A patient-centered orientation clinical pathway was developed for orienting new nurses to promote critical thinking, reduce reality shock, and improve retention and job satisfaction.\textsuperscript{70} The orientation clinical pathway, grounded in problem-based learning, provides a guide for new nurses that outlines expectations and specific measurable outcomes while focusing on quality patient care. The pathway has 2 steps, with learning objectives for
The transition from student to independent AT can be a stressful experience, and the orientation process is a vital method of providing information and support as newly credentialed ATs transition to clinical practice. However, many ATs do not undergo even basic orientations, much less continuing onboarding practices. The number of orientation tactics used varied based on employment setting and job title. We found that more orientation tactics were used for graduate assistant ATs; however, with the shift to the professional master’s level, graduate assistantships will no longer be a transitional step for newly credentialed ATs. Employers in other settings should provide structured orientations for newly credentialed ATs. Orientation sessions should outline policies and procedures and organizational mission and goals as well as provide a social aspect in the orientation, which can help with developing relationships and understanding the organizational culture. Along with simply meeting staff members, the new AT should be assigned a mentor. A mentor is a valuable resource for a new AT transitioning into his or her role.2,29,43

Although some orientation tactics received higher mean values than others, nearly all of the tactics were at least minimally useful; therefore, supervisors should consider all of these tactics when designing the orientation process. Supervisors should also provide resources, such as an EAP, policies and procedures manual, and outline of various protocols. Supplying new ATs with these resources could give new ATs a starting point to understanding organizational policies.

LIMITATIONS AND FUTURE RESEARCH

This study had a few limitations. Although we aimed to explore tactics included in orientations and how useful each tactic was for newly credentialed ATs, we did not explore the structure or setting of orientations (eg, classroom, online modules, face to face, laboratory, real world). Future researchers should examine how orientations for newly credentialed ATs are structured and how the structure affects their perceptions of the orientation. Additionally, we only evaluated orientation, not onboarding. Orientations are important in the transition to practice of newly credentialed ATs; however, orientation alone is not enough to meet the needs of new clinicians. New clinicians, such as nurses and ATs, need ongoing, continued support.19 Onboarding typically lasts through the first 12 to 18 months of employment.16,17,19 Future investigators should examine onboarding needs and the onboarding provided to newly credentialed ATs throughout their first year of employment. In light of educational evolution, we need to understand if orientation and onboarding needs differ for newly credentialed ATs matriculating through a professional master’s program. Lastly, our final response rate (after eliminating survey responses not meeting the inclusion criteria) was only 18%. Potentially, this low response rate could be due to the fact that many new ATs pursue graduate school in other areas and are not yet practicing ATs. Furthermore, many participants were eliminated because they were not employed as ATs, reducing the response rate.

CONCLUSIONS

The first step involves a structured hospital orientation; the second step begins when the new nurse is given a unit assignment. Preceptors guide the new nurses through the pathway to observe patient care, review documentation, and assess patient outcomes to evaluate and provide feedback to the new nurses. New nurses demonstrate competence in nursing skills while enhancing critical-thinking skills. Using a patient-centered clinical pathway for orientation supplies measurable outcomes that can objectively evaluate new nurses’ performance. New nurses demonstrated increased confidence, advanced assessment skills, and advanced critical-thinking skills after implementation of the orientation clinical pathways.70

When designing an orientation program, employers should identify their goals and desired outcomes while considering the skills, knowledge, and abilities they want their new employees to embody. For example, if employers want to ensure that new employees understand policies and procedures and bureaucratic roles, providing a policies and procedures manual along with learning modules could be part of the orientation process. If the employer wants to ensure that new employees are competent to perform each aspect of their roles, a competency-based approach and list of skills to evaluate the employee and provide feedback would be useful. Regardless of the structure used, successful orientation programs provide a warm welcome, structured support, and learning experiences to new employees.28,49 Respondents to a nursing orientation intervention felt it was beneficial to have a designated individual responsible for orientation.8 Additionally, individualized orientations supplemented by a policies and procedures manual facilitated the orientation process.

Based on the results of our study, supervisors should consider structures, tactics, and resources when developing orientations for new ATs. Formal orientations can assist with learning policies, procedures, and organizational values while alleviating the stress associated with the transition into a new role.1 Furthermore, supervisors of new ATs who provided formal orientations reported fewer instances in which new ATs needed to be remediated or released from their positions. Supervisors should consider implementing formal orientations that include many of the tactics discussed in this study. Employers should also determine which orientation tactics employees felt were more useful and include them in future orientations. Overall, simulating the EAP was the most useful orientation tactic. Employers should include training on the EAP, both through discussion and simulation, in the orientation process.

Participants cited meeting staff members, including supervisors, athletic training staff members, coaches, therapists, and physicians, as beneficial, whereas those who had considered leaving the profession did not have these meetings and introductions. Supervisors should set aside time during the orientation process to get to know the new employee, relay expectations, answer any questions, provide a tour of the facilities, and supply and discuss the policies and procedures manual. This assists the new employee in understanding the organization’s values and mission. Additionally, supervisors should introduce the new AT to other staff members, including ATs, coaches, athletic directors, physicians, and other stakeholders. When a new AT is joining a staff of ATs, the existing staff could include
opportunities for new ATs to ask questions and review and practice the EAP. Employers should also assign a mentor or preceptor to assist with orientation and potentially prolonged onboarding, allowing new ATs to gradually transition into their roles.

REFERENCES

1. Thrasher AB, Walker SE, Hankemeier DA, Pitney WA. Supervising athletic trainers’ perceptions of professional socialization of graduate assistant athletic trainers in the collegiate setting. J Athl Train. 2015;50(3):321–333.

2. Walker SE, Thrasher AB, Mazerolle SM. Exploring the perceptions of newly credentialed athletic trainers’ as they transition to practice. J Athl Train. 2016;51(8):601–612.

3. Kramer M. Reality Shock: Why Nurses Leave Nursing. St Louis, MO: C.V. Mosby; 1974.

4. Duchscher JE. Transition shock: the initial stage of role adaptation for newly graduated registered nurses. J Adv Nurs. 2009;65(5):1103–1113.

5. Mellor P, Greenhill J. A patient safety focused registered nurse transition to practice program. Contemp Nurs. 2014;47(1–2):51–60.

6. Goldschmidt K, Rust D, Torowicz D, Kolb S. Onboarding advanced practice nurses: development of an orientation program in a cardiac center. J Nurs Adm. 2011;41(1):36–40.

7. Spector N, Echternacht M. A regulatory model for transitioning athletic training students. Prof Nurs. 2004;17(1):73–79.

8. Elfering A, Semmer NK. Exploring the transition to practice for the newly credentialed athletic trainer: a programmatic view. J Athl Train. 2015;50(10):1042–1053.

9. Elfering A, Semmer NK, Grebner S. Work stress and patient safety: observer-rated work stressors as predictors of characteristics of safety-related events reported by young nurses. Ergonomics. 2006;49(5–6):457–469.

10. Barkan T, Erdogan B. Organizational socialization: its content and consequences. In: Zedeck S, ed. APA Handbook of Industrial and Organizational Psychology. Vol 3. Washington, DC: American Psychological Association; 2011:51–64.

11. Mazerolle SM, Walker SE, Thrasher AB. Exploring the transition to practice for the newly credentialed athletic trainer: a programmatic view. J Athl Train. 2015;50(10):1042–1053.

12. Gavlak S. Centralized orientation: retaining graduate nurses. J Nurs Staff Dev. 2007;23(1):26–30.

13. Walker SE, Mazerolle SM, Thrasher AB. Orientation tactics utilized in postprofessional athletic training programs. Athl Train Educ J. 2016;11(3):138–145.

14. Fin K, Krugman M, Casey K, Goode C. The graduate nurse experience: qualitative residency program outcomes. J Nurs Adm. 2008;38(7–8):341–348.

15. Johnstone MJ, Kanitsaki O, Currie T. The nature and implications of support in graduate nurse transition programs: an Australian study. J Prof Nurs. 2008;24(1):46–53.

16. Schoessler M, Waldo M. The first 18 months in practice: a developmental transition model for the newly graduated nurse. J Nurs Staff Dev. 2006;22(2):47–52.

17. Benner P. From novice to expert. Am J Nurs. 1982;82(3):402–407.

18. Wayman LM. Staff development story. Tiered orientation: easing the transition from being a novice to competent nurse. J Nurs Staff Dev. 2009;25(6):304–314.

19. Rush KL, Adamack M, Gordon J, Janke R, Ghement IR. Orientation and transition programme component predictors of new graduate workplace integration. J Nurs Manag. 2015;23(2):143–155.

20. D’Aurizio P. Onboarding: delivering on the promise. Nurs Econ. 2007;25(4):228–229.

21. Schaar GL, Titzer JL, Beckham R. Onboarding new adjunct clinical nursing faculty using a quality and safety education for nurses-based orientation model. J Nurs Educ. 2015;54(2):111–115.

22. Adlam KA, Dotchin M, Hayward S. Nursing first year of practice, past, present and future: documenting the journey in New Zealand. J Nurs Manag. 2009;17(5):570–575.

23. Ulrich B, Krozek C, Early S, Ashlock CH, Africa LM, Carman ML. Improving retention, confidence, and competence of new graduate nurses: results from a 10-year longitudinal database. Nurs Econ. 2010;28(6):363–376.

24. Delaney C. Walking a fine line: graduate nurses’ transition experiences during orientation. J Nurs Educ. 2003;42(10):437–443.

25. Kozub E, Hibanada-Lasema M, Harget G, Ecolf L. Redesigning orientation in an intensive care unit using 2 theoretical models. AACN Adv Crit Care. 2015;26(3):204–214.

26. Young ME, Stuenkel DL, Bawel-Brinkley K. Strategies for easing the role transformation of graduate nurses. J Nurs Staff Dev. 2008;24(3):105–110.

27. Baxter PE. Providing orientation programs to new graduate nurses: points to consider. J Nurs Staff Dev. 2010;26(4):E12–E17.

28. Thrasher AB, Walker SE, Hankemeier DA, Mulvihill T. Graduate-associate athletic trainers’ perceptions of professional socialization in the collegiate setting: part I. J Athl Train. 2016;51(10):758–770.

29. Prince K, Boshuizen H, van der Vleuten C, Scherpier A. Students’ opinions about their preparation for clinical practice. Med Educ. 2005;39(7):704–712.

30. Cohen J, Cohen P, West SG, Aiken LS. Applied Multiple Regression/Correlation Analysis for the Behavioral Science. 3rd ed. Mahwah, NJ: Lawrence Erlbaum Associates Inc; 2003.

31. Miles MB, Huberman AM. Qualitative Data Analysis: An Expanded Sourcebook. 2nd ed. Thousand Oaks, CA: SAGE Publications; 1994.

32. Walker SE, Weidner TG, Armstrong KJ. Evaluation of athletic training students’ clinical proficiencies. J Athl Train. 2008;43(4):386–395.

33. Mazerolle SM, Bowman TG, Dodge TM. Athletic training student socialization part I: socializing students in undergraduate athletic training programs. Athl Train Educ J. 2014;9(2):72–79.

34. Mazerolle SM, Bowman TG, Dodge TM. Athletic training student socialization part II: socializing the professional masters’ athletic training student. Athl Train Educ J. 2014;9(2):80–86.

35. Mazerolle SM, Eason CM, Clines S, Pitney WA. The professional socialization of the graduate assistant athletic trainer. J Athl Train. 2015;50(5):532–541.

36. Pitney WA, Isley P, Rintala J. The professional socialization of certified athletic trainers in the National Collegiate Athletic Association Division I context. J Athl Train. 2002;37(1):63–70.

37. Casey K, Fink R, Krugman M, Propst J. The graduate nurse experience. J Nurs Adm. 2004;34(6):303–311.

38. Casa DJ, Guskiewicz KM, Anderson SA, et al. National Athletic Trainers’ Association position statement: preventing sudden death in sports. J Athl Train. 2012;47(1):96–118.

39. Courson R, Goldenberg M, Adams KG, et al. Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges. J Athl Train. 2014;49(1):128–137.

40. Settoon RP, Adkins CL. Newcomer socialization: the role of supervisors, coworkers, friends and family members. J Bus Psychol. 1997;11(4):507–516.

41. Chao GT, O’Leary-Kelly AM, Wolf S, Klein HJ, Gardner PD. Organizational socialization: its content and consequences. J Appl Psychol. 1994;79(5):730–743.

42. Thrasher AB, Walker SE, Hankemeier DA, Mulvihill T. Graduate-assistant athletic trainers’ perceptions of the supervisor’s role in
professional socialization: part II. J Athl Train. 2016;51(10):771–779.
44. Scott ES, Engelke MK, Swanson M. New graduate nurse transitioning: necessary or nice? Appl Nurs Res. 2008;21(2):75–83.
45. Pellico LH, Brewer CS, Kovner CT. What newly licensed registered nurses have to say about their first experiences. Nurs Outlook. 2009;57(4):194–203.
46. McKenna LG, Green C. Experiences and learning during a graduate nurse program: an examination using a focus group approach. Nurse Educ Pract. 2004;4(4):258–263.
47. Kahanov L, Eberman LE, Juzeszyn L. Factors that contribute to failed retention in former athletic trainers. Int J Allied Health Sci Pract. 2013;11(4):Article 5.
48. Kiel JM. An analysis of restructuring orientation to enhance nurse retention. Health Care Manag (Frederick). 2012;31(4):302–307.
49. Park M, Jones CB. A retention strategy for newly graduated nurses: an integrative review of orientation programs. J Nurses Staff Dev. 2010;26(4):142–149.
50. Marcum EH, West RD. Structured orientation for new graduates: a retention strategy. J Nurses Staff Dev. 2004;20(3):118–124, quiz 125–126.
51. Peltokoski J, Vehviläinen-Julkunen K, Miettinen M. Newly hired nurses’ and physicians’ perceptions of the comprehensive health care orientation process: a pilot study. J Nurs Manag. 2015;23(5):613–622.
52. Rush KL, Adamack M, Gordon J, Lilly M, Janke R. Best practices of formal new graduate nurse transition programs: an integrative review. Int J Nurs Stud. 2013;50(3):345–356.
53. Halber D, Graf E. Graduate nurse perceptions of the work experience. Nurs Econ. 2006;24(3):150–155.
54. Beecroft PC, Kunzman L, Krozek C. RN internship: outcomes of a one-year pilot program. J Nurs Adm. 2001;31(12):575–582.
55. Pine R, Tart K. Return on investment: benefits and challenges of baccalaureate nurse residency program. Nurs Econ. 2007;25(1):13–18.
56. Dodge TM, Mitchell MF, Mensch JM. Student retention in athletic training education programs. J Athl Train. 2009;44(2):197–207.
57. Bowman TG, Hertel J, Wathington HD. Programmatic factors associated with undergraduate athletic training student retention and attrition decisions. Athl Train Educ J. 2015;10(1):5–17.
58. Mazerolle SM, Gavin K. Female athletic training students’ perceptions of motherhood and retention in athletic training. J Athl Train. 2013;48(5):678–684.
59. Bowman TG, Pitney WA, Mazerolle SM, Dodge TM. Program directors’ perceptions of reasons professional master’s athletic training students persist and depart. Athl Train Educ J. 2015;10(1):57–64.
60. Bowman TG, Dodge TM. Factors of persistence among graduates of athletic training education programs. J Athl Train. 2011;46(6):665–671.
61. Goodman A, Mensch JM, Jay M, French KE, Mitchell MF, Fritz SL. Retention and attrition factors for female certified athletic trainers in the National Collegiate Athletic Association Division I Football Bowl Subdivision setting. J Athl Train. 2010;45(3):287–298.
62. Thrasher AB, Walker SE. Examining the transition to practice of newly credentialed athletic trainers [abstract]. J Athl Train. 2015;50(suppl 6):S24.
63. Weiss SJ. The effect of transition modules on new graduate adaptation. Res Nurs Health. 1984;7(1):51–59.
64. Schaar GL, Titzer JL, Beckham R. Onboarding new adjunct clinical nursing faculty using a quality and safety education for nurses-based orientation model. J Nurs Educ. 2015;54(2):111–115.
65. Fey MK, Miltner RS. A competency-based orientation program for new graduate nurses. J Nurs Adm. 2000;30(3):126–132.
66. Penprase B. Perceptions, orientation, and transition into nursing practice of accelerated second-degree nursing program graduates. J Contin Educ Nurs. 2012;43(1):29–36.
67. Jeffery AD, Werthman J. Successful orientation strategies for radiology nurses. J Radiol Nurs. 2015;34(2):94–99.
68. Bullock LM, Groff Paris L, Terhaar M. Designing an outcome-focused model for orienting new graduate nurses. J Nurses Staff Dev. 2011;27(6):252–258.
69. Kinsman L, Rotter T, James E, Snow P, Willis J. What is a clinical pathway? Development of a definition to inform the debate. BMC Med. 2010;8:31.
70. Bumgarner SD, Biggerstaff GH. A patient-centered approach to nurse orientation. J Nurses Staff Dev. 2000;16(6):249–254.

Address correspondence to Ashley B. Thrasher, EdD, ATC, CSCS, School of Health Sciences, Western Carolina University, 364 Health and Human Science Building, Cullowhee, NC 28723. Address e-mail to ashleybthrasher@gmail.com.