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Future Strategies to Enhance Patient Care Documentation Among Athletic Trainers: A Report From the Athletic Training Practice-Based Research Network

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Context: High-quality patient care documentation is an essential component of any health care professional's daily practice. Whereas athletic trainers (ATs) recognize the importance of patient care documentation, several barriers may prevent them from producing high-quality patient care documentation.

Objective: To explore beneficial strategies and techniques that ATs perceived would enhance the quality of patient care documentation in the secondary school setting.

Design: Qualitative study.

Setting: Individual telephone interviews.

Patients or Other Participants: Ten ATs who were members of the Athletic Training Practice-Based Research Network and employed in the secondary school setting were interviewed (4 men, 6 women with 7.1 ± 7.8 years of athletic training experience).

Data Collection and Analysis: An individual telephone interview was conducted with each participant. Once transcribed, data were analyzed into common themes and categories per the consensual qualitative research tradition. Trustworthiness of the data was achieved through triangulation strategies: (1) the inclusion of multiple researchers to ensure accuracy and representativeness of the data and (2) participant member checking.

Results: Participants identified several documentation strategies they perceived would be helpful to improve the quality of patient care documentation, including mode and consistency of documentation and the need for a standardized process as well as the need for system standardization. In addition, participants discussed the need for more education on patient care documentation. Specifically, they identified ways of learning and strategies for future education to enhance patient care documentation across the profession.

Conclusions: As athletic training continues to evolve, it is crucial that ATs are well educated on how to produce high-quality patient care documentation as a part of routine practice. Continuing professional development opportunities are needed to promote lifelong learning in the area of patient care documentation.

Key Words: medical records, continuing education, professional responsibility, qualitative research

Key Points

- Athletic trainers agreed that setting aside time and developing a standardized process for patient care documentation was important.
- With the large array of choices for documentation, participants commented that having a standardized documentation system would be beneficial.
- In addition to identifying ways to educate students about high-quality patient care documentation, strategies should be developed to address the knowledge-to-practice gap among practicing athletic trainers.
- Providing clinically meaningful examples of good documentation may help to diminish some of the uncertainty regarding what should be included in high-quality patient care documentation.

As the athletic training profession continues to evolve, the ability to characterize the services provided by athletic trainers (ATs) and establish high-quality patient outcomes is becoming increasingly important. The best way to demonstrate value as health care providers is to generate detailed documentation of the services provided at the point of care.[1,2] Detailed patient care documentation benefits the patient and clinician by ensuring continuity of care.[3] However, by examining patient records on a larger scale, ATs can not only characterize the services they provide, but they can also compare the effectiveness of these services to enhance the quality of patient care.[1,4,5] Therefore, it is essential for ATs to produce high-quality patient care documentation that captures patient encounters on a daily basis.

Although ATs are required to document their patient care,[6] several perceptions and barriers may prevent them from producing quality patient care documentation. In particular, ATs perceived an overall lack of quality in patient care documentation across the profession, and they identified a lack of expectations and accountability from employers as factors that affected the quality of their

documentation.[7] Due to the lack of expectations and accountability, ATs perceived that patient care documentation was considered a lesser priority than other athletic training services.[7]

Unsurprisingly, time has been reported as the primary barrier preventing ATs from completing high-quality patient care documentation.[7] This finding echoes findings in other health care professions. Penoyer et al[8] reported that physicians spent 25% of their time documenting patient encounters, which impeded the quality of care provided to patients. Though it is unclear how much time ATs spend on patient care documentation, we must develop strategies to address the barriers ATs face and focus on efficient patient care documentation that does not affect the quality of patient care.

In addition to a perceived lack of time, ATs have also expressed uncertainty about what to include in high-quality patient care documentation.[7] Although it is unclear why ATs feel uncertain about patient care documentation, their uncertainty may stem from minimal hands-on experiences with documentation during their professional preparation. In fact, whereas final-term athletic training students have reported receiving instruction on the essential elements of patient care documentation, only 8.8% were able to correctly identify the *Current Procedural Terminology* code for athletic training evaluation.[9] However, it is also possible that despite being adequately prepared to produce high-quality patient care documentation, the vast number of documentation mechanisms may make ATs feel uncertain about what to document. Regardless, to minimize the barriers to high-quality patient care documentation, it is important to explore the need for focused experiences and continuing education opportunities for ATs to improve their patient care documentation. Therefore, the purposes of our study were to explore ATs' experiences with patient care documentation and identify strategies to promote high-quality patient care documentation.

METHODS

Design

We designed this study based on the consensual qualitative research (CQR) tradition. The CQR method is an established process for investigating participants' perspectives on a topic[10,11] and has been previously used in athletic training research.[7,12–15] The CQR tradition includes a research team that works together to thoroughly analyze data in order to reduce individual bias in the research process.[10,11,14] Our research team consisted of 6 ATs with various levels of experience using the CQR design.

Participants

After obtaining institutional review board approval from 2 institutions, we recruited participants using a criterion-based sampling technique.[16] Criterion-based sampling is used to obtain meaningful, generalizable data from a specific group of participants. In our study, we sought to gain the perspectives on patient care documentation of ATs who were members of the Athletic Training Practice-Based Research Network (AT-PBRN) and who were employed by secondary schools at the time of this study. The CQR tradition typically calls for 10 to 15 participants to reach data saturation.[10,11] We invited 43 potential recruits to take part in this study, and 10 ATs provided written e-mail consent to participate. Our participants were 6 women and 4 men with an average age of 32.6 ± 11.4 years and 7.1 ± 7.8 years of athletic training experience. Participant demographics for this sample have been published previously.[12]

Instrumentation

Following the CQR tradition, the research team developed an open-ended, semistructured interview protocol to ensure that data were collected consistently for each participant.[10,11] The protocol consisted of 15 open-ended questions with follow-up probes to be used by the principal investigator (C.E.W.B.) when needed. The interview protocol was piloted with 3 ATs who met most of the inclusion criteria and then finalized for use with the study participants. The interview protocol was provided in an earlier study.[12]

Procedures

The principal investigator contacted all potential recruits by e-mail to describe the study and request their participation. Once participants agreed to take part in the study, the principal investigator completed individual 30- to 40-minute telephone interviews with each participant. Telephone interviews were used to facilitate participation by ATs located in a variety of geographic areas. Participants also completed a demographic questionnaire and returned it by e-mail. After all interviews were conducted, 1 research team member transcribed the audio files for each interview, redacting all identifying information (ie, names, schools, locations) to maintain the confidentiality of participants.[10,11] After transcription was completed, a copy of each participant's transcript was sent to him or her for member checking. Member checking allows participants to validate their interview responses and provide additions or clarifications. Participants were not allowed to change or redact any information in their responses.

Data Analysis and Management

A key component of the CQR tradition is the assembly of a research team that is active throughout the data-analysis process. The research team acts to minimize research bias and provides multiple perspectives throughout data analysis.[10,11] The primary research team consisted of 4 ATs (C.E.W.B., T.M.K., S.L.N., 1 non-author), and 2 additional ATs served as an internal auditor (K.C.L.) and external auditor (non-author). The primary research team conducted the majority of the data analysis following a systematic method; the auditors checked the completed work and ensured that the participants' responses were presented accurately.[10,11] The principal investigator, who has experience in CQR methods, conducted a training session for the research team before data collection began. The training session included suggestions provided by Hill et al[11] and familiarized the research team with the CQR data-analysis and -management process. A detailed description of the data analysis has been published.[12]

Table 1. Documentation Strategies Theme, Participant Cases by Category (N = 14)

Category	Frequency[7,12]	No. of Participant Cases
Mode of documentation	General	10
Consistency	Typical	6
Standardization process	General	10
System standardization	Typical	7

RESULTS

Six themes related to the patient care documentation behaviors of ATs within the AT-PRBN emerged from data analysis. Four themes have been previously published[7,12]: reasons for documenting, mechanics of documentation, perceptions of patient care documentation, and perceived barriers to patient care documentation. The focus of this manuscript is the remaining 2 themes: documentation strategies and education on patient care documentation. Multiple categories for each theme were identified, and participant responses were supplied to represent each category.

Documentation Strategies

Participant responses were grouped into 4 categories regarding documentation strategies: mode of documentation, consistency, standardization process, and system standardization. The frequency of participant cases per category is displayed in Table 1.

Mode of Documentation. Clinicians described using paper forms, electronic medical records (EMRs), or a combination of both techniques to document patient care. Lund preferred documenting on paper and shared:

> I just like writing everything down. For me it's a memory thing. In the EMR, it's really easy to go "click, click, click." And so from a time perspective, it's very easy to have all of that, but I am just a pen-and-paper person. I like writing everything down. It helps me remember everything when I am dealing with the patient.

Baker documented on paper before transferring the information to an EMR, saying:

> At the beginning of each day, I have a pen and notepad with me, and I write down each patient's name and condition of what they have and any small medical notes that I'll write below them. . . . At the end of the day, I take my notepad and paper of patient encounters and I'll transfer into my EMR.

Conversely, Lang preferred EMRs, explaining, "[I have used] a number of different forms as far as paper based. And then I try to put them in folders, tried it with binders, that sort of thing. The electronic is just so much more efficient." Similarly, Stalter remarked, "I really like using the EMR and since I started using that, it has made my life easier, because it's so much easier to type everything out than try to write it out."

However, Taylor was not sure which mode was preferable:

> There are certain things that I like about both. It's really convenient to be able to have all my paper copies in an accordion-style folder, and just pull them out in the middle of the game when you are doing an evaluation. But it is also nice to have things stored on the computer, especially if you know that it is secure and protected. So I guess I'm kind of torn on that one.

Consistency. In general, ATs described a lack of consistency regarding documentation practices. Lang observed differences between clinicians and stated, "There are so many out there that it seems like everybody is using their own system." Murphy echoed, "I know [documentation strategies] can't possibly be uniform all over but especially for high schools, it's varied from site to site. Some only use paper, and some are inconsistent." Blynn made a similar comment:

> We have accident report forms at the high school and they honestly were like workman's comp forms. So they really didn't even make sense. I feel like there's just no consistency on how things are getting done at the high school level.

However, Baker reflected on the consistency of personal documentation practices:

> I think just being able to be consistent with that care and not allowing myself to fall into those bad habits to begin with. . . . And by [consistent] I mean documenting the same, whether it's the beginning of the year or the end of the year, the middle of the season or whatever.

Standardization Process. Partially due to a lack of consistency in documentation systems and processes, ATs commented on how they standardized their processes for completing their patient care documentation. Setting aside time to document patient care was important. Taylor noted, "It typically works better, I think, if you can schedule your time out a little bit better. . . . So it kind of cuts down on stacking up the files that you might need to get documented." Similarly, to complete patient care documentation, Peters recommended, "Just set aside some kind of block, an hour a day, to where no one comes in, no one comes in for treatment."

To develop a standardized process for documenting, participants described creating a routine. Murphy shared the importance of "[creating] your own system that works for yourself while making sure that you do include everything that you need to." An individualized routine was also necessary for Carter:

> [When] I started, at first I was like "you've got to be kidding. This is absurd." Each year I had a new strategy on how to make it a little bit better. So now I am just finally comfortable, but it was quite a learning curve.

Similarly, Baker focused on standardizing a personal routine:

> I would say for the most part that, you know, I'm pretty standard. I don't like to vary too much between my

Table 2. Education on Patient Care Documentation Theme, Participant Cases by Category (N = 14)

Category	Frequency	No. of Participant Cases
Professional education	General	10
Continuing education	Rare	2
Learner-driven experience	Typical	5
Strategies for future education	General	9

> initial and my follow-up because I think it just makes it a little easier to track their progress. If my initial evaluation is much different from a follow-up, I feel like things can get a little confusing. So I try to keep them pretty much format wise, pretty much the same.

The behaviors of student-athletes were also integrated into the standardization process. Lang described having difficulty with student-athletes completing patient surveys:

> Once I established a policy, it became much easier with [student-athletes]. They seem to understand it now. And it has become more of a routine with myself. I don't forget about it or anything like that, and that was part of my problem. I was forgetting and then I'd have to go back and call them back in and try to do that. Now I have more of a routine set . . . I am able to stay on top of that.

System Standardization. In addition to following their own protocols for documenting to improve consistency and quality, ATs discussed the potential benefits of having a standardized system for documenting patient care. Blynn remarked:

> I think, and especially with online documentation, some programs or some software you can just send a message, or you can just click on that patient note and it's in there. With bigger hospitals, you just have 1 system between several departments, and it's easy to share information. It gives them better care. You're not doing things twice.

Similarly, Baker commented:

> So I feel like that if there was a good documentation system that could have some sort of interprofessional or if there was a way that [health care professionals] could communicate easily with me through my documentation, that the consistency of care that these patients need could be achieved. So it's definitely along the lines of being able to provide consistent, thorough, and safe care for those patients.

To aid in communication and follow-up, Peters created a site-specific system and shared:

> That was something that we made to make it easier for us to communicate. I'm the type of person that . . . it's much easier for me to grasp it if I'm looking at a list. . . . This way we knew we needed to follow up, that we needed to send them to a doctor, if we could clear them, if it's been 2 weeks since they've even been in, let's follow up. So that was a way for us to go through and know we were up to date. That was our system to it.

On a broader level, Carter commented on the lack of system standardization across the profession:

> There are just so many systems. And people go "well I do it like this, I do it like this." Maybe there's no uniform system. Maybe there is. . . . If you took 10 athletic trainers and ask[ed] them all their systems, if they didn't use the EMR, you're probably going to get 10 different answers.

Education on Patient Care Documentation

Data analysis revealed 2 categories within this theme: ways of learning and strategies for future education. The frequency of participant cases in each category is displayed in Table 2.

Ways of Learning. Most ATs described their first exposure to patient care documentation during their professional education programs. Taylor stated, "I know in undergraduate [courses], we talked about documentation. It was kind of just the basics." Blynn echoed, "I think we had a little bit in undergraduate incorporated into one of our athletic training courses. And then as a clinical student, I didn't really have to do a lot of documentation." Conversely, Baker noted, "A majority of it came through graduate coursework. . . . Definitely that's where a lot of the technique and habits I gained were through the graduate school."

Clinicians also described learning about patient care documentation during clinical education. Carter explained, "Most of [the documentation] was practiced with the athletes that we took care of in college. So my clinical setting was where we practiced it and got feedback, and our work was checked." Quality documentation was particularly relevant for Heron:

> The university where I did my undergraduate, they did third-party billing and reimbursement for their college athletics. And the head athletic trainer also taught our administration class. So documentation was a very, very big part of our classroom learning, and also we learned from very early on, like once we were second-year students and were working with sports teams, we were helping with documentation. We had to make sure that everything was very comprehensive.

In contrast, Murphy had little practice documenting patient care:

> As a student, I don't feel like you get to practice at the site that you are at, because you are not the athletic trainer, you are just there observing and helping. At least that was my experience. I don't feel like I was able to document or get practice documenting like I would have wanted to.

In addition to professional education, ATs also enhanced their knowledge of patient care documentation via continuing education opportunities. Building upon professional education on patient care documentation, in rare instances ATs commented on brief discussions regarding the topic at continuing education workshops. Lang remarked:

> I know that the seminars that I go to, there always seems to be something about documentation and making sure

that you do all the documentation properly. [I learned] while I was in my field experience how other athletic trainers were doing their documentation.

However, Carter elaborated on the lack of clarity or suggestions provided at continuing education events regarding quality documentation practices:

> When you go to a conference, they will say, "You should document." And it's just always very general. . . . I would sit there and go, "Well, yeah. That's why I am here." They would just tell you how important it was, and how it helps you legally, and how it could help you to count how many people you see and it could help support your job. But it never told you really how to do that. It just told you all the things that it could do and it should do, but it didn't tell you how.

In some cases, ATs described a learning process over time regarding patient care documentation driven by their own desire to refine their practices. Baker shared, "It's been through kind of trial and error because I worked with several different documentation styles." Carter described a similar experience of personal reflection when changing documentation practices:

> I came in and said, "You know in my past, here were my weaknesses [in documentation], and I need to start off well in this job with what I want to do." So there were things that I came in with goals right away.

Strategies for Future Education. In general, ATs discussed the importance of introducing students to patient care documentation at the start of their professional programs. Baker commented, "If you can ingrain that early and often, it just becomes really something that is second nature to somebody." Peters reiterated the emphasis on early integration:

> Those documentation techniques and usefulness will improve if we have the students do that from an early start. If that is all they're used to, then they will just continue in their professional careers.

Similarly, Blynn explained:

> And then you could teach your students those programs and they're getting it earlier and refining their skills, rather than learning it at clinical. And every clinical instructor has a different way of doing it or every setting has something different. So I think consistency and starting it earlier.

Clinicians also suggested providing specific strategies and opportunities for students to practice patient care documentation. Stalter expressed the need for a "stronger emphasis on [patient care documentation] in the professional and post-professional education programs . . . not only in the classroom, but the clinical education side of things." Taylor noted:

> I think maybe if the coursework went a little deeper into some more documentation techniques or strategies, or even just introducing 2 different types of software for documentation, but that could be really useful.

Similarly, Stalter said:

> I think an earlier introduction into EMRs would be nice. It made documentation seem like it was a lot less of a task and more of a thing that I could accomplish with little struggle, as opposed to before.

Heron observed:

> I think helping educate people that maybe are not aware of what should be documented and then giving them options for how to document in a relatively quick fashion in multiple ways. So showing them how to maybe make forms if a computer is not an option for them at their site. Because it still gives you the documentation that you minimally should have but isn't going to be a huge burden of time. So just giving them some ideas and showing them ways to implement it, without adding a lot of extra stress or work to them.

In addition to earlier exposure and specific strategies, ATs proposed specific formats for education or ways to contextualize the importance of patient care documentation. Heron suggested:

> I think a Webinar would be good. I think something that is interactive, where people can go through together. . . . Like show a standard lower body evaluation form that they could just use a pen and paper for, or that sort of thing. And then show them an example of an electronic medical record that they could use, and talk about minimum requirements. . . . Because I think a lot of athletic trainers don't think they really need much at all or there may be some that [are] doing overkill, and it's a big burden on them because they are spending a lot of time documenting, and perhaps maybe they are doing a little more than they need. And that could help reduce their stress.

Peters commented:

> Maybe [the] NATA [National Athletic Trainers' Association] points out some of the worst-case scenarios: maybe case studies where documentation was done poorly and hurt the AT. That might get people to say, "Yeah that might be important."

Lund also advised using case scenarios to contextualize the legal aspects of patient care documentation:

> You can tell people all day that of course it's going to help them improve their patient care, but really what it comes down to is . . . in this day and age, people are going to sue you for anything, so you want to make sure you have all of your bases covered.

DISCUSSION

This qualitative inquiry demonstrated a need for focused strategies and continuing education to help ATs enhance

the quality of their patient care documentation. Currently, consistency is lacking in regard to the modes of documentation as well as what and how to document during routine clinical practice.[7,12] With few guidelines on what to include in patient care documentation, ATs may choose to document their patient care on the basis of injury severity.[7,12] In practice, however, ATs should complete patient care documentation on the basis of clinical findings from patient encounters (ie, if an AT evaluates a patient's injury, it should be documented) as opposed to injury severity (eg, a patient with a grade I lateral ankle sprain versus a patient with a concussion).

In addition to potential legal concerns, inconsistent patient care documentation can be problematic from a clinical practice standpoint. For example, one of the benefits of thorough and routine documentation is enhanced patient care,[1,3] which cannot be achieved if documentation is inconsistent or incomplete. Furthermore, inconsistent patient care documentation between and within patients can prevent clinicians from characterizing their practices and engaging in quality improvement initiatives.[17] If this information is not collected at the point of care, demonstrating that ATs provide services that enhance patient outcomes will be a challenge. Thus, it is imperative to identify ways of improving the consistency of patient care documentation by ATs.

Standardization of Patient Care Documentation

Our participants indicated that standardized processes and systems might potentially address any inconsistencies. It has been previously reported[7] that ATs felt uncertain about what should be included in patient care documentation. Standardized strategies, such as setting aside a specific time for patient care documentation at the beginning or end of the day or using an EMR with standardized fields, may help clinicians document their patient care more thoroughly and consistently. In nursing practice, patient care documentation practices have improved and documentation errors have been reduced with the consistent use of EMRs.[18–20]

Currently, it is unclear how many documentation systems are used by ATs. In addition to several available EMRs, ATs may also use do-it-yourself systems, such as paper, Microsoft Word (Microsoft Corp, Redmond, WA), Google Docs (Google, Mountain View, CA), or other systems designed specifically for individual facilities. With a wide variety of possible documentation mechanisms available, it is unsurprising that ATs desire more standardized processes and systems to help streamline patient care documentation. It is also important to note that whereas ATs have suggested strategies to help standardize patient care documentation, these strategies appear to vary among clinicians and across athletic training facilities. Welch Bacon et al[7] reported that ATs faced different barriers and challenges during their clinical practice: time and personnel and facility resources.[7] However, our results indicate that ATs who have been successful in standardizing their documentation procedures commonly reported making the conscious decision to improve their documentation habits, and they ensured that whatever documentation routine they implemented fit into the overall workflow of their clinical practice.

Athletic trainers identified the lack of standardization and clear expectations for patient care documentation as barriers to properly documenting their athletic training services.[7] Although published articles[6,21,22] are available to help guide ATs regarding patient care documentation, these guidelines do not offer a specific or standardized method. Considering the importance of proper documentation, the athletic training profession should explore options for adopting uniform patient care documentation guidelines. These may include more specific guidelines for documentation or adopting a common system for patient care documentation, as other health care professions have done, or both.[20,23,24] In addition, clinicians should work toward making their individual documentation strategies consistent among patients and aligned with available medical documentation guidelines.[21,24]

Education on Patient Care Documentation

Professional Athletic Training Education. Participants in our study also stated that they initially developed their documentation habits as athletic training students. Most participants recalled completing only 1 formal class session within a documentation course, and by and large, learned how to document during their clinical education experiences. However, this approach was perceived as problematic and likely contributed to inconsistencies.[7] In general, participants felt that the best way to improve patient care documentation habits in the athletic training profession was to focus on teaching athletic training students the fundamentals of documentation early and then continually revisit the topic throughout their clinical education. This approach will require good habits to be modeled by preceptors routinely at the point of care. Dodge and Mazerolle[25] reported that by providing students with real-life learning experiences, preceptors can influence students' development and commitment toward athletic training. Thus, successful preceptor modeling and mentorship of patient care documentation that includes realistic learning opportunities for integrating documentation into routine patient care would highlight and reiterate the importance of patient care documentation for students, ingrain good documentation habits, and allow any poor habits to be addressed before becoming an AT.

Currently, 3 competencies related to patient care documentation are included in the fifth edition of the National Athletic Trainers' Association's *Athletic Training Education Competencies*.[26] However, our participants stated that their education on patient care documentation primarily addressed understanding why such documentation was important and provided little guidance regarding what and how to document. Based on the perceptions of our participants, the current athletic training educational competencies related to patient care documentation may need to be further detailed. Concentrating more on what should be included in patient care documentation and how to complete documentation that is considered high quality may minimize ATs' current uncertainties about documentation.

As the *Athletic Training Education Competencies*[26] transitions to the "Curricular Content Standards" under the Commission on Accreditation of Athletic Training Education, 1 standard is proposed to specifically focus on patient care documentation. This standard states that graduates of a Commission on Accreditation of Athletic Training Education–accredited professional athletic train-

ing program must "use contemporary documentation techniques to effectively communicate with patients, medical professionals, insurers, and other relevant stakeholders. These include using a comprehensive electronic medical records management system (including diagnostic and procedural codes) for appropriate chart documentation, risk management, outcomes and billing."[27] The intent of this standard is not only to educate students about the importance of patient care documentation but also to stress the importance of being competent in the use of EMRs and diagnostic and procedural coding as well as in outcomes assessment and billing as parts of patient care documentation. Thus, although students must learn an abundance of knowledge and skills during their professional athletic training programs, the significance and value of patient care documentation must not be forgotten.

As professional athletic training programs continue to integrate the "Curricular Content Standards," educators and clinical preceptors should not only emphasize the logistics of patient care documentation, but they should also encourage students to consider the value of high-quality patient care documentation for continuous quality improvement. Clinical and classroom educators should teach consistent and thorough mechanisms for patient care documentation. In addition, the use of a standardized evaluation form to assess the thoroughness of students' patient care documentation, such as the History and Physical Assessment form,[28,29] should be considered to help instill good patient care documentation habits among students. A formal evaluation form for patient care documentation may also offer a mechanism for preceptors to provide consistent, standardized feedback to students, which has been shown to improve students' performance of patient care documentation.[29] Finally, students should learn how their patient care documentation can be used to demonstrate value, improve patient outcomes, and contribute to practice-based evidence.

Continuing Education. In addition to enhancing the focus on patient care documentation in professional athletic training programs, it is also necessary to address the current knowledge-to-practice gap regarding the uncertainties associated with patient care documentation among practicing ATs. The participants in our study felt that specific continuing education efforts focused on patient care documentation would be helpful for practicing clinicians. Furthermore, they emphasized that although it is beneficial to continue to discuss the importance of patient care documentation to be able to characterize the value of the athletic training services we provide, we must focus on the specifics of what and how to efficiently and effectively document patient care in the various and unique athletic training clinical practice settings. Whereas the NATA *Documentation and Coding Guidelines for Athletic Trainers*[21] provides a starting point for which variables should be documented from each patient encounter, some uncertainty remains regarding what type of patient encounters and patient injuries should be documented.

Athletic training practice has expanded from the traditional athletic environment to emerging practice locations such as rehabilitation clinic, industrial, performing arts, military, and other diverse settings. As different athletic training skill sets are applied in different settings, documentation mechanisms may also vary among settings and patient populations. In addition, an increasing number of ATs are also able to bill for services,[30] which often require additional documentation, such as *Current Procedural Terminology* codes. These components of documentation were not included in the professional education of many clinicians who are currently practicing. Thus, continuing education opportunities specific to these emerging practice settings and increased documentation requirements are needed to support practicing clinicians.

Along with identifying what should be included in high-quality patient care documentation, continuing education efforts should provide clinically meaningful examples of good documentation (ie, real-life examples of quality improvement) compared with examples of poor documentation (ie, real-life scenarios of patient care documentation that would not hold up in a court of law). These real-world examples may motivate individuals to reflect on their current patient care documentation habits and consider how they might incorporate strategies to enhance their current routines. In fact, continuing education opportunities that were interactive and focused on outcomes that were important to clinicians were more effective.[31] In our study, many of the ATs who were successful in documenting patient care made a direct and conscious decision to do so and reprioritized patient care documentation as part of their daily clinical practice.

Limitations

The participants in this study were from a small, nonrandomized sample of ATs. In particular, they were recruited only from a list of AT-PBRN members practicing within the secondary school setting. As members of the AT-PBRN, all participants used the same customized, Web-based documentation system (ie, the CORE-AT EMR) in their clinical practice setting. Future researchers should explore the patient care documentation patterns and behaviors of ATs who use different methods (eg, other EMRs, paper-and-pen methods). In addition, we assumed that participants were truthful in their responses to the interview questions. However, the self-report nature of this qualitative inquiry could be considered a limitation. Future authors should determine whether educational efforts based on these findings could help enhance patient care documentation habits. Within this line of inquiry, investigators should also consider which approach is most effective for developing good patient care documentation habits and whether these habits are sustained long term.

CONCLUSIONS

High-quality patient care documentation is an essential skill for ATs as allied health care providers. Athletic trainers in our investigation described multiple strategies that supported (ie, standardizing a personal routine) or complicated (ie, use of paper versus EMRs, inconsistency among various EMRs) their documentation practices. Whereas most ATs were initially introduced to patient care documentation during their clinical education, targeted education on the mechanics and practical application of quality patient care documentation is recommended within professional programs. Furthermore, professional development on patient care documentation strategies, including application to emerging settings, is necessary to promote

routine implementation and quality improvement across the athletic training profession.

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