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Athletic Trainers' Perceptions of and Barriers to Patient Care Documentation: A Report From the Athletic Training Practice-Based Research Network

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Context: For the practice characteristics of the services athletic trainers (ATs) provide to be identified, all ATs must complete high-quality patient care documentation. However, little is known about ATs' perceptions of patient care documentation or the potential barriers they may encounter while trying to ensure high-quality documentation.

Objective: To explore ATs' perceptions of and barriers to patient care documentation via the Clinical Outcomes Research Education for Athletic Trainers (CORE-AT) electronic medical record system in the secondary school setting.

Design: Qualitative study.

Setting: Individual telephone interviews.

Patients or Other Participants: We interviewed 10 ATs (4 men, 6 women; age = 32.6 ± 11.4 years, athletic training experience = 7.1 ± 7.8 years) who were members of the Athletic Training Practice-Based Research Network (AT-PBRN) and employed in the secondary school setting.

Data Collection and Analysis: We conducted an individual interview with each participant. After transcription of the interviews, the data were analyzed into common themes and categories following the consensual qualitative research tradition. Data triangulation occurred through member checking and multiple researchers to ensure accuracy during data analysis.

Results: Participants revealed several perceptions of patient care documentation, consisting of quality, expectations and accountability, priority, incentive, and culture of the secondary school setting. In addition, we identified barriers to quality patient care documentation: lack of time, lack of accountability for documenting patient care, inadequate facility resources, and lack of personnel. Participants discussed the volume of patients as a unique challenge in the secondary school setting.

Conclusions: Whereas ATs perceived patient care documentation as important, several practical barriers may inhibit their ability to complete high-quality documentation of the services they provide. Effective strategies to improve the quality of patient care documentation among ATs are needed to ensure that their value, particularly in the secondary school setting, is accurately characterized.

Key Words: health care services, practice characteristics, electronic medical record, CORE-AT EMR, secondary school setting

Key Points

- Athletic trainers (ATs) perceived that the quality of patient care documentation was low in the secondary school setting, which could be attributed to barriers of time, uncertainty about what to document, and limited facility and personnel resources.
- Athletic trainers perceived that clear expectations and accountability to document were lacking, the priority of documentation and incentive to document were low, and the culture of the secondary school setting exacerbated other challenges to documenting.
- Clear professional standards and guidelines may help ATs better understand the expectations for documentation.
- High-quality documentation will help ensure that ATs' value as health care providers is accurately characterized.

Patient care documentation is an official and legal record of the care provided to a patient and should occur any time a health care provider has a patient encounter. Patient records should capture the course and nature of a disease, illness, or condition and may include, but are not limited to, any and all relevant details about the patient's overall status, observations that were made, treatments that were provided, and tests that were required.[1–4] In short, each patient record chronicles a patient's health history[1] and provides a definitive account of what occurred between the patient and clinician.

As health care providers, athletic trainers (ATs) are required to document their patient care.[3] At the national level, the National Athletic Trainers' Association's *Documentation and Coding Guidelines for Athletic Trainers* stated that patient care documentation "is necessary and required for each episode of physical medicine and rehabilitative care and treatment."[2(p2)] Furthermore, several state regulatory agencies specifically identify patient care

documentation as a practice standard.[2,4] Whereas health care providers are often professionally (eg, American Medical Association, Board of Certification) and legally (eg, national and state statutes) obligated to record their patient care, thorough and complete documentation can also offer practical benefits for the patient and clinician. For patients, systematic documentation can facilitate the continuity of care among multiple health care providers, ensuring that they receive comprehensive and consistent care.[5] From a clinical perspective, quality patient care documentation can enhance communication among different providers and offer the AT a frame of reference for developing treatment plans and making informed clinical decisions based on the patient's progress. In addition, by evaluating a collection of patient records, health care providers can use patient data to characterize clinical practice, evaluate the effectiveness of treatment interventions, and demonstrate overall worth and value, which are essential components of high-quality patient care.[6]

Whereas patient care documentation is required for athletic training clinical practice, researchers[7–9] have recently reported that ATs may not be documenting all aspects of the care provided to their patients. The incomplete documentation of patient care can be professionally and legally problematic for ATs. For example, mediocre or insufficient patient care documentation can diminish the practical benefits of quality documentation (eg, enhanced communications, facilitated practice characterization, demonstrated worth and value) and offers limited legal protection for the AT.

To our knowledge, no investigators have explored ATs' perceptions of patient care documentation or the potential challenges that may inhibit the quality of their documentation. Any claims that time and lack of knowledge may be barriers to patient care documentation are unsubstantiated. Without evidence to support or contradict any assumed barriers to or quality concerns about patient care documentation within athletic training, it is difficult to identify if strategies need to be developed to ensure that ATs are documenting patient care in a consistent, high-quality manner. Therefore, the purpose of our study was to explore the perceptions of and perceived barriers to patient care documentation among ATs employed in the secondary school setting.

METHODS

Design

The design of this study was modeled after the consensual qualitative research (CQR) tradition,[10,11] which has been established in athletic training research.[12–15] We selected the CQR tradition to explore ATs' perceptions of patient care documentation in the secondary school setting. The research team, which comprised 6 ATs who had various levels of experience with the CQR tradition, was described in an earlier study.[16]

Participants

We used a criterion-sampling method to recruit potential participants from a convenience sample of ATs within the Athletic Training Practice-Based Research Network (AT-PBRN; n = 43). To participate, individuals had to be active members of the AT-PBRN, had to have been practicing as ATs in the secondary school setting during the fall of 2013, and had to have been using the Web-based electronic medical record (EMR) system affiliated with the AT-PBRN for at least 6 months. Active members of the AT-PBRN use a Web-based EMR (ie, Clinical Outcomes Research Education for Athletic Trainers [CORE-AT; A.T. Still University Athletic Training, Mesa, AZ; http://www.coreat.org/electronic-medical-record.html] EMR) as the primary mode of patient care documentation. Therefore, all participants included in this study had been trained to use the CORE-AT EMR in the same manner. Training procedures for the CORE-AT EMR have been described.[16]

Data saturation was confirmed after the inclusion of 10 ATs who met the predetermined criteria. Participants were 4 men and 6 women (age = 32.6 ± 11.4 years, athletic training experience = 7.1 ± 7.8 years). The demographics of this sample were described in an earlier study.[16] All participants provided written informed consent via e-mail before scheduling an individual interview, and the study was approved by the institutional review boards of A.T. Still University and Chapman University.

Instrumentation

The research team developed an open-ended, semi-structured interview protocol to explore ATs' perceptions of patient care documentation within the secondary school setting. This protocol consisted of 15 open-ended main questions and additional follow-up questions used to probe for more in-depth information when the interviewer (C.E.W.B.) believed it was necessary. The interview protocol that was used for this investigation was provided in a previous study.[16]

Procedures

The principal investigator (C.E.W.B.) contacted all potential participants who met the inclusion criteria via e-mail. After a participant provided written informed consent, an individual telephone interview was scheduled; each interview lasted approximately 30 to 40 minutes. Detailed recruitment and transcription procedures for this study were described in an earlier study.[16] This study began in August 2013 and continued until November 2013; at that time, the research team deemed the data were saturated for all main questions in the interview protocol.

Data Analysis and Management

The data-analysis and -management procedures for this study have been described.[16] Throughout data analysis, several strategies (ie, member checks, triangulation, peer debriefing) were used to ensure trustworthiness of the data and reduce potential researcher bias. Member checks, in the form of probing questions and transcript review as described by Welch et al,[13,14] allowed the research team to confirm proper interpretation of participants' responses. For triangulation, the principal investigator and at least 1 other member of the research team were engaged in each phase of data analysis, and internal and external auditors provided additional perspectives to confirm that multiple viewpoints were deliberated.[11] The research team met at the

Table 1. Participant Cases by Category for Perceptions Theme

Category	Frequency	Participant Cases, No.
Quality	General	10
Expectations and accountability	General	10
Priority	Typical	7
Incentive	Variant	4
Culture of the secondary school setting	Typical	8

conclusion of each phase of analysis to debrief on the current status of the data that emerged from the phase.

RESULTS

Data analysis via the CQR design revealed 6 themes related to the patient care documentation behaviors of AT-PBRN ATs employed in the secondary school setting. However, in this article, we focused only on ATs' perceptions of and perceived barriers to patient care documentation.

Perceptions of Patient Care Documentation

During data analysis, 5 categories emerged about participants' perceptions of patient care documentation: quality, expectations and accountability, priority, incentive, and culture of the secondary school setting. The frequency of participant cases per category is displayed in Table 1.

Quality. In general, ATs described a perceived lack of quality regarding patient care documentation in athletic training. Lang stated, "I just don't think that a lot of [ATs] are doing it properly or doing it at all quite frankly." Similarly, Stalter described:

> [Patient care documentation] is not done nearly enough or as well as it should be, and that comes both from personal experience with struggling with it initially in my own practice and talking with other [ATs] in the area about their experience with it.

Heron commented:

> I think that most [ATs] do not do a sufficient job of documenting what they do. I think a lot of [ATs] don't maybe have the education that is necessary in order to properly document. . . but in working with [ATs] from other backgrounds, especially the high school setting, I think that some of them just have like a sign-up sheet at the door, and that's the extent of what they do. So I'd say that, globally as a profession, we do not do a very good job of documenting the things that we should be.

Taylor compared the perceived lack of patient care documentation with previous experiences with and knowledge of other health care professionals' documentation practices:

> The documentation that [ATs] as a whole are using is probably subpar to what is being used in other professions. Especially now in the position that I'm in, I've seen huge changes from what I've been used to seeing other [ATs] in undergrad[uate settings] use compared to [the] documentation system that is required at my job.

Peters echoed the importance of quality patient care documentation:

> I think that it's vital to our profession if we want to be taken more seriously. As a health care profession, we need to be able to document and to have good documentation. With that being said, I think that there are good documenters and there are poor documenters across the board, and I think you find that in medicine all over the place.

Expectations and Accountability. Athletic trainers considered a lack of professional or employer expectations and accountability to be factors influencing their patient care documentation. Murphy noted, "Yeah, right now, it's only myself at my high school, so I basically choose how I want to document." Lund observed:

> Athletic trainers are, in a lot of situations, on their own. . . So they are not interacting the same way they are with [physical therapists] in the clinic, or there's the other factor that there's not insurance. So they don't have to show their documentation to anybody. So I don't think in a lot of places they're being held accountable.

Stalter remarked:

> If there is an injury that requires either hospital transfer or is a potential schedule altering, as far as a school schedule-altering injury, I have to submit an incident report form to the school district, such as concussions, broken bones, or major injuries to knees/elbows like a ligament tear or anything that's going to require a doctor visit or potential surgery. I have to report that as an incident report, but for any minor injuries, I don't have to do that though.

In addition, personal expectations and accountability about patient care documentation practices were described. Baker stated:

> It needs to be a habit that we do every day… Documentation honestly is not only a professional choice, but it's a personal choice. I think the strategy of taking pride and taking your own initiative and your own work and wanting to be able to provide that information to your patients and provide that information to whoever should be of the utmost importance to every clinician. So I think there needs to be a sense of initiative, a sense of pride that those people who find themselves not documenting very well need to kind of find.

Priority. Along with expectations and accountability, participants described patient care documentation as a lesser priority than other athletic training services. Baker explained:

> Within the realm of athletic training, I think sometimes [patient care documentation] is kind of put on the back

burner. Whereas it needs to be one of the things that we do every day. . . I definitely think it's almost looked at as not as important as some of the other things that [ATs] do.

Similarly, Blynn mentioned:

> So I think [patient care documentation] is kind of. . . I don't want to say overlooked, but I don't think it's the primary task on the [AT's] list. It's something I do at the end of the day or the next day, and sometimes even then you fall behind. So it's almost like an afterthought, "Oh, I need to go make sure I write this down or somehow document it."

In some instances, ATs described a limited understanding of the importance of patient care documentation. Lang remarked, "I don't think it's intentional. I think it's a misunderstanding of the purpose of [documentation], how it can help them, how it can help anybody really." Lund agreed: "[Athletic trainers] don't take [patient care documentation] seriously because they don't understand the consequences of not doing it."

Incentive. In line with a general lack of expectations and prioritization related to patient care documentation, ATs also described a lack of incentive to document in relation to payment for patient care services. In particular, Heron noted, "especially people who work in settings where they are not actually billing for every service they provide."

Taylor expanded on this idea:

> All the other medical professions I see, especially working now, [documenting] is so important because that's how they get paid. You have to have the documentation. So I think, unless you really make them, make [ATs] document it, and that may be tough, but I guess even if we can't bill for services, now maybe just stressing the importance of that, and that's never going to come without proper documentation. . . but we'll never be able to do that, I feel like, until [ATs] can show that they can document and prove that their services are needed and that they are helping patients.

Whereas billing for athletic training services is not an incentive to document for many ATs, reports generated from documentation could be used to demonstrate the value of an AT. Heron commented:

> I personally think the documentation is very useful for me to show what I'm doing and how much I'm doing at the high school setting, especially because my bosses are the athletic director of my high school, who doesn't know that much about athletic training, and my clinic director, who I may see every 3 or 4 months. . . So I keep a log of referrals and things like that, and then I can run a report and show how many people that I tape and how many injuries did I see, and I can put monetary amounts to that, which is helpful when our district is going out for a rebid for athletic training.

Culture of the Secondary School Setting. Athletic trainers described characteristics of working in the secondary school setting that influenced their patient care documentation. Baker shared his perceptions about interactions with adolescents:

> Being in a secondary school setting, we have a lot of kids that will come in, and they'll just be looking for a reason [to get] out of practice, or they'll be looking for an excuse not to do something.

Blynn said:

> You don't get a ton of follow up at the high school level. I think something hurts one day, and you're fine the next, or just high school kids just aren't as responsible or accountable. They are just not coming in for extra care, and so I think that can impact documentation because it's just not there.

Athletic trainers' continuation of care may also change depending on parent or guardian decisions, as Carter described:

> A lot of times [the student-athlete] would just see me first, and we would have a treatment plan, and then they'd go home, and their parents [would] just take them to the emergency room, and then that takes them out for 2 weeks of rest or whatever. So I think patient compliance, and I don't know if that counts as compliance, but like the population is always a challenge, and so you don't really have much to document.

Table 2. Participant Cases by Category for Perceived Barriers Theme

Category	Frequency	Participant Cases, No.
Time	General	9
Uncertainty	Typical	5
Facility resources	Typical	6
Personnel resources	Typical	8

Perceived Barriers to Patient Care Documentation

Data analyzed from this theme were reduced to 4 essential categories: time, uncertainty, facility resources, and personnel resources. The frequency of participant cases per category is displayed in Table 2.

Time. Generally, ATs described time as the primary barrier preventing them from enhancing the quality of their patient care documentation. Heron conveyed:

> I think the biggest perceived barrier is time, that it takes a lot of time, and [ATs] don't have a lot of extra time on top of all of the other things that they are supposed to be doing, but I guess it depends on where you're working and what you have readily available. If all you have is paper and a pen, I could see that it is going to take you a little bit more time.

Blynn noted:

> I definitely think time is a huge issue. I think, especially at secondary schools, not many [ATs] are full time, so it

> is going to cut into your administrative time. There is really no time allotted for administrative duties. So it is really difficult to even just find a good time to get through all of [the patient care documentation]. It is just whenever I have a spare minute, which is not often.

In addition to general concerns about lack of time, ATs typically discussed how the volume of patients might be a barrier related to time. In particular, Taylor observed, "Well, I think everyone is probably going to say that time is a factor, but I don't know if it is necessarily just the time or the volume of patients that [an AT] might see." Murphy reflected:

> There is just not enough time in my perception. You want to do a thorough evaluation and document thoroughly, but sometimes there are 10 or 15 [student-athletes] in your [athletic training facility] at once, and you are trying to do so many things at once. You can kind of keep track in your mind, but sometimes everything does not translate into the [patient care] documentation that you do later when you do have down time.

Carter explained:

> There are just too many [student-athletes], and too much is happening. It is not like you have 1 patient, and you sit with the 1 patient for 30 or 45 minutes. You might have 6 to 10 [patients] going all at once in a half hour [of] time. There are just so many people, and to try to document everything is just overwhelming.

In a rare case, Baker felt that others should not perceive time as a barrier to patient care documentation:

> I do not consider myself [to be] the most organized person, but I still find time to document. I would say [that, for] somebody who is new to the profession or new to the secondary school [setting], time could definitely be an issue. I think that is really the only viable excuse someone might have. Then again, I really don't even think time is a barrier. You can always find 15 or 20 minutes out of your day to write something down. I really don't feel like there really is a reason for not documenting [patient care].

Uncertainty. Along with lack of time, ATs typically described the uncertainty of what to document as a notable barrier preventing quality patient care documentation. Baker said, "I struggle with [what to include] every day. It is not something that I've figured out how to deal with." Similarly, Murphy mentioned, "There [is] nothing saying that you have to document this way or a certain way," whereas Blynn stated, "I don't really feel like I had a good background in [patient care documentation], so I just do what I think is right." Lund remarked:

> I don't think the struggle [to document] is intentional. I think it is a misunderstanding of the purpose of [patient care documentation] and how it can help [ATs]. So they don't take it seriously because they don't understand the consequences of not doing it.

Carter thought similarly:

> I think it is just unawareness. I mean, when you go to a conference, they will say, "You should document," but maybe for other people, it may be an unawareness of what should be documented.

Facility Resources. Whereas time and uncertainty may be viewed as personal barriers to quality patient care documentation, ATs also typically perceived certain facility resources as a barrier. In particular, physical space was a concern. Murphy discussed the issue of office space: "If I'm writing things on paper, I run out of room very quickly as far as storing it in a file." Lang remarked:

> I would have to say privacy is an issue. [Patient care documentation] would be so much more refined and easier if it was like an office-type situation where you have more of a 1-on-1 atmosphere and not having everybody crawling over your shoulder and invading that patient's privacy.

Blynn commented:

> The first 2 years [at the secondary school], we didn't have an athletic training room. I would go in early for the purpose of doing my documentation, and then 5 people [would] come by, and I wouldn't get anything done. I don't know quite how to fix that.

All participants used the Web-based EMR within the AT-PBRN for their patient care documentation, but several facility-type barriers to its use existed. In some instances, ATs described facility resource barriers, such as Internet access and comfort using EMRs. Peters said: "First off, Internet access, and that is a difficulty especially at some smaller schools that can't afford to give you Internet access." Murphy noted:

> Because of the [poor] Internet at the school, it's just so hard to keep track, so I have to write it down, and then I have to go back in [to the EMR]. Sometimes I just write the whole thing because the Internet just does not work.

Murphy's comment suggests that some participants supplemented EMR documentation with paper documentation when they had difficulty with Internet connectivity. This relates to the finding in part I of this study[16] that ATs used multiple methods of documentation. Carter added:

> Other clinicians probably do not have an [EMR] system that they are comfortable with. I don't know. I think once you buy into one of the systems, you have to wholeheartedly support it and do everything you can to learn it well.

Personnel Resources. The ATs also discussed insufficient personnel resources as a barrier to quality patient care documentation. In particular, they commented on the need

for additional personnel, as well as the potential challenges of part-time versus full-time positions. Murphy said, "I see that [patient care documentation] is important, but I also see [ATs] having a hard time at a high school if it is only themselves." Peters agreed, "All of the schools in our area only had 1 [AT], so they are trying to cover everybody, but sometimes there are just so many kids that you can't remember every little detail."

Baker remarked:

> I think a lot of the [patient care] documentation problems that I have is the lack of an assistant [AT]. With me only being there Monday, Wednesday, and Friday, it makes it a little bit tough to get consistent daily reports.

In a rare case, Carter expressed her concerns for other ATs but did not share them:

> I almost feel like I am not in the real world because they give me computers, assistant [ATs], and I don't teach all day, but I can't imagine other [ATs] doing this if it [is] just 1 person, if they have both boy and girl sports. I can't imagine doing [quality patient care documentation] for football. I just don't know how it would all get done.

DISCUSSION

This qualitative inquiry demonstrated that the practical barriers ATs encountered in the secondary school setting might influence their perceptions of patient care documentation. Overall, participants questioned the current quality of patient care documentation completed by ATs. In particular, ATs perceived the current quality of patient care documentation to be low, which could be attributed to numerous potential barriers. The time barrier was generally attributed to a lack of time to complete patient care documentation; participants provided examples of the time constraints in their individual settings. However, citing time as a barrier might be associated with ATs' perceptions that patient care documentation was not a priority and, therefore, the incentive to document was low. Another challenge participants identified was a lack of clear expectations and accountability for patient care documentation, which may lead to uncertainty about what information must be included. Finally, they also noted several other challenges, particularly a lack of facility and personnel resources, which were exacerbated by the culture of the secondary school setting.

Time Requirements of Patient Care Documentation

Nearly all participants identified time as a primary barrier to their patient care documentation. Our findings may corroborate the findings of other investigators about ATs employed in the secondary school setting. McLeod et al[17] observed that of 4045 secondary school ATs surveyed, roughly 70% worked at schools with enrollments between 500 and 3000 students. In addition, 29% of the respondents worked more than 41 hours per week, and 71.2% of ATs stated that they provided medical coverage at all competitions and at practices 55.5% of the time.[17] These numbers suggest that ATs employed at the secondary school are required to spend much of their time providing coverage at either practices or competitions and, therefore, must divide the remaining time among their primary athletic training responsibilities, including but not limited to new patient injury evaluations, treatment or rehabilitation services, and patient care documentation.

The task of quality patient care documentation may become daunting, particularly in the secondary school setting, where it is not uncommon for 1 AT to be the sole provider of medical care outside of normal school hours.[18] However, it is unclear why some ATs in similar circumstances may believe that time is not a barrier to their patient care documentation. Athletic trainers who did not identify time as a barrier may have established efficient documentation strategies or perhaps do not perceive patient care documentation to be a priority when compared with their other required duties. This notion may also be supported by our findings that ATs perceived little or no external incentive (eg, reimbursement) to complete high-quality patient care documentation, particularly in the secondary school setting. Further investigation of ATs' documentation strategies is necessary to promote routine documentation behaviors and decrease stress related to administrative duties.

Athletic training is not the only medical profession in which providers have expressed concern about the amount of time necessary to document patient care. In a national survey of physicians, Rosenstein[19] reported that 87% of participants cited paperwork and administrative concerns as the leading cause of work-related stress and burnout. In a survey of medical residents, Christino et al[20] found that 92% believed their patient care documentation requirements were *excessive*, and 91% stated that documentation compromised the time they could spend with their patients. In addition, participants believed the quality of their patient care was inversely related to the amount of patient care documentation they had to complete; as patient care documentation increased, the quality of patient care decreased.[20] Specifically, medical students thought they had to sacrifice the time they spent with their patients to complete their patient care documentation requirements in order to be reimbursed by insurance companies. However, ATs, specifically at secondary schools, are not reimbursed for services. Whereas ATs practice under similar, albeit broader, patient care documentation requirements, their pay is not contingent on thorough completion of patient care documentation. If they choose to work with a patient or they run out of time in their day because they are covering athletic events, they will be paid regardless of whether they document completely.

Perceptions of time and lack of appropriate knowledge as barriers are not uncommon in athletic training and have been expressed about topics such as evidence-based practice[21–25] and patient-oriented outcomes.[26,27] Thompson et al[28] suggested that ATs who struggle with a topic often find the process daunting and, therefore, perceive the task to be more mentally time consuming than the physical time it would take to actually complete the task. For patient care documentation, ATs may perceive they do not have enough time to document their patient care because they are not familiar enough with the topic or comfortable with their own approach to documentation. In addition, they may believe they have limited availability to schedule specific

times to dedicate solely to patient care documentation.[4] However, regardless of the perceived barrier of time, ATs must accept patient care documentation as a priority of clinical practice to prove their value to patients, other health care professionals, and the health care industry.

Given that time is a commonly reported barrier to patient care documentation among ATs, finding ways to address this concern is important so that ATs can become more proficient. However, proficiency comes with knowledge of and experience with a topic. The time barrier may also be related to ATs' mechanics of documentation, which were presented in part I of this study.[16] Further understanding the strategies ATs use to document may help us determine how to overcome barriers associated with fitting patient care documentation into their work day. Whereas the National Athletic Trainers' Association has established some guidelines,[2] the suggestions tend to be very broad, which may result in greatly varying methods of documentation among practicing ATs. Without specific standards, it may be difficult for ATs to truly know how to properly document their patient care.

Unclear Expectations as a Barrier to Documentation

Athletic training organizations require ATs to document patient care,[2–4,29] but aside from general recommendations of what to include, most documentation is left to the discretion of the AT. This is likely the primary reason why our participants perceived few to no expectations and little accountability for patient care documentation and also indicated uncertainty about what to document as a barrier to their patient care documentation.[16] The guidelines for documentation in athletic training are less detailed than those for other professions, such as physical therapy, which provides specific categories for types of patient encounters and what should be documented in each encounter.[30] Other health care professions also rely more heavily on Centers for Medicare and Medicaid Services[1] guidelines to meet eligibility for reimbursement. Guidelines available for ATs are more general,[2] possibly leading to confusion about when and which patient care encounters should be documented. Athletic training may benefit from providing more specific standards for patient care documentation, which could be used to educate ATs at both the professional and continuing education levels. Without more specific guidelines, however, ATs will likely continue to pursue individual approaches to patient care documentation.

Given that ATs are not held accountable for documenting the athletic training services they provide, they may be less likely to document all of their patient care. However, this is a grave oversight, as not documenting could put ATs at risk if legal action were taken against them based on the results of their patient care. As stated, patient care documentation can be a beneficial tool during legal proceedings to prove the AT was practicing properly and was not at fault.[1,2,4,5] In addition, quality patient care may be compromised when effective documentation is not used to track its effectiveness and outcomes. Whereas ATs described legal protection as a reason to document in part I of this study,[16] it is plausible that perceived barriers complicated the completion of high-quality patient care documentation, regardless of potential legal action.

In addition to legal protection, patient care documentation provides an opportunity to characterize how ATs are practicing. Several studies[7–9,17,31] have been conducted with data from Web-based EMRs to describe the most common types of injuries ATs see, how they treat patients with those injuries, and the cost of the patient care services ATs provide. Analysis of documented athletic training services can supply objective evidence of ATs' value, which is particularly important in settings such as secondary schools.[32,33] However, whereas these findings are useful in identifying our worth as health care professionals, the quality of the patient care documentation used to determine these findings may be questioned. Without specific guidelines for best practices in patient care documentation, we cannot determine if our participants were documenting effectively. Therefore, if ATs are uncertain about what and when they should be documenting, important data about athletic training practices may be lost.

Additional Challenges to Patient Care Documentation

Our participants also noted several other challenges to completing high-quality patient care documentation in the secondary school setting. Specifically, they identified facility and personnel shortcomings at secondary schools as potential barriers to patient care documentation. Wham et al[18] found that 67% of the schools had only 1 certified AT on staff, whereas 22% did not employ an AT at all. Pryor et al[34] reported similar results. Athletic training services were provided in 70% of secondary schools; however, only 37% of ATs were full time, 31% were part time, and 2% were per diem.[34] A lack of personnel is a challenge that is not unique to the secondary school setting. In the collegiate setting, Aparicio et al[35] reported that 66% of National Collegiate Athletic Association Football Bowl Subdivision-level institutions did not meet the recommended number of full-time–equivalent athletic training personnel for football. These data demonstrate that, regardless of setting, the time and effort required to provide athletic training services, including patient care documentation, must be assessed to ensure that ATs can effectively provide quality patient care.[35]

The ATs in our study perceived that the addition of another athletic training staff member would make completing their patient care documentation easier. Whereas 8 of the 10 participants indicated that a lack of personnel was a barrier, they also perceived that the addition of another staff member would decrease their coverage responsibilities, ultimately providing them with more time to document patient care. Therefore, although many ATs thought they would benefit from having more personnel, they may have been indicating that they needed more time to properly document their patient care.

Given that our participants used a specific Web-based EMR for patient care documentation, some of the facility resources or lack of adequate resources identified may be directly related to the documentation platform. To document patient care through a Web-based EMR, an adequate Internet connection and a suitable computer or electronic device are necessary. Whereas 1 participant identified a lack of private space in which to engage patients as the main facility barrier to patient care documentation, most

ATs instead cited a lack of adequate Internet access or computer equipment. These barriers led to ATs using a mixed approach to documenting on paper and with the EMR, as described in part I of this study,[16] that may make documentation less efficient or thorough. McLeod et al[17] found that 60% of secondary school ATs operated with a budget of less than $4000. With all the supplies needed to perform the daily duties of an AT, it is likely that little money is available to ensure an AT has a suitable computer or other technology; therefore, using a Web-based EMR may be challenging.

In addition to facility and personnel barriers, the culture of the secondary school setting may exacerbate the practical barriers ATs encounter to completing patient care documentation. Our participants reported they might see as many as 15 to 20 patients in as few as 30 minutes before student-athletes must attend a practice or competition. With such a high patient load, ATs employed in the secondary school setting may need to prioritize providing coverage for athletic events rather than comprehensive patient care. Therefore, the "get in, get treated, get to practice" culture that is often exhibited in a traditional secondary school setting may intensify the other barriers that ATs perceived to completing high-quality patient care documentation.

Whereas inadequate resources, including facilities, were a perceived barrier for most participants, further research is necessary to fully understand the effect that a lack of resources can have on patient care documentation. To our knowledge, minimal research has been conducted on the types of facilities and resources secondary school ATs currently have available to document their patient care. An understanding of how facility barriers affect patient care documentation behaviors may provide administrators with insight into the minimal facility requirements that secondary school ATs need to successfully provide optimal patient care. In addition, ATs must become familiar with available resources that may naturally diminish perceived barriers. For example, if an AT struggles with budgetary constraints in a particular clinical setting, he or she may need to search for low-cost or free Web-based EMRs (eg, CORE-AT EMR) that will provide an efficient documentation platform without sacrificing cost.

Practical Applications

1. Athletic trainers should consider patient care documentation a priority of clinical practice to help track patient outcomes, protect themselves from legal action, and communicate with other health care professionals.
2. If they are uncertain of what should be included in patient care documentation, ATs should access available resources and guidelines (eg, *Documentation and Coding Guidelines for Athletic Trainers*,[2] *BOC Standards of Professional Practice*,[3] and state practice acts).
3. Athletic trainers should establish an approach to patient care documentation that meets existing standards for medical documentation but is also manageable in their unique patient care settings.

LIMITATIONS

Our participants were selected from a specific group of ATs who were part of the AT-PBRN and employed in the secondary school setting. Therefore, they were a small, nonrandomized sample of the larger athletic training population. As part of the AT-PBRN, these ATs incorporated a customized, Web-based EMR into their daily practice. Throughout this investigation, we assumed that all participants were truthful in their answers to the interview questions, but the self-report nature of the study could be a limitation. Future research is necessary to determine if these barriers are common among the larger population of ATs at secondary schools, as well as across the diverse settings in which ATs are employed.

CONCLUSIONS

As ATs work to become more highly regarded among other health care professionals and the general public, substantial focus should be given to prioritizing and improving the quality of patient care documentation. Whereas the ATs in this study acknowledged the importance of patient care documentation and the need to find a balance so they can document well, they identified several practical barriers related to facilities and resources that may prevent successful patient care documentation in the secondary school setting. Given that patient care documentation is essential to demonstrating our real-time value as health care professionals, clear professional standards and guidelines may provide ATs with a better understanding of expectations for documentation. The first step in this process is to determine where the barriers to patient care documentation behaviors exist; the ultimate goal should be to improve as a profession.

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