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# Patient Care Documentation in the Secondary School Setting: Unique Challenges and Needs

**Tricia M. Kasamatsu, PhD, ATC*; Sara L. Nottingham, EdD, LAT, ATC†; Lindsey E. Eberman, PhD, LAT, ATC‡; Elizabeth R. Neil, PhD, ATC§; Cailee E. Welch Bacon, PhD, ATC||**

*California State University, Fullerton; †University of New Mexico, Albuquerque; ‡Indiana State University, Terre Haute; §Xavier University, Cincinnati, OH; ||A.T. Still University, Mesa, AZ

***Context:*** Athletic trainers (ATs) recognize patient care documentation as an important part of clinical practice. However, ATs using 1 electronic medical record (EMR) platform reported low accountability and lack of time as barriers to documentation. Whether ATs using paper, other EMRs, or a combined paper-electronic system exhibit similar behaviors or experience similar challenges is unclear.

***Objective:*** To explore ATs' documentation behaviors and perceived challenges while using various systems to document patient care in the secondary school setting.

***Design:*** Qualitative study.

***Setting:*** Individual telephone interviews.

***Patients or Other Participants:*** Twenty ATs (12 women, 8 men; age = 38 ± 14 years; clinical experience = 15 ± 13 years; from National Athletic Trainers' Association Districts 2, 3, 6, 7, 8, 9, and 10) were recruited via purposeful and snowball-sampling techniques.

***Data Collection and Analysis:*** Two investigators conducted semistructured interviews, which were audio recorded and transcribed verbatim. Following the consensual qualitative research tradition, 3 researchers independently coded transcripts in 4 rounds using a codebook to confirm codes, themes, and data saturation. Multiple researchers, member checking, and peer reviewing were the methods used to triangulate data and enhance trustworthiness.

***Results:*** The secondary school setting was central to 3 themes. The ATs identified challenges to documentation, including lack of time due to high patient volume and multiple providers or locations where care was provided. Oftentimes, these challenges affected their documentation behaviors, including the process of and criteria for whether to document or not, content documented, and location and timing of documentation. To enhance patient care documentation, ATs described the need for more professional development, including resources or specific guidelines and viewing how documentation has been used to improve clinical practice.

***Conclusions:*** Challenges particular to the secondary school setting affected ATs' documentation behaviors, regardless of the system used to document care. Targeted professional development is needed to promote best practices in patient care documentation.

***Key Words:*** clinical documentation, quality improvement, barriers, health care administration

**Key Points**

- Whether secondary school athletic trainers used a paper, electronic, or combined approach to documenting patient care, they identified setting characteristics (ie, time and patient load, multiple stakeholders, and various locations at which care was provided) that challenged their patient care documentation behaviors.
- Participants documented in various locations and at different times throughout the day and established their own criteria for documenting in the absence of robust employer expectations.
- Athletic trainers described a need for more specific professional guidelines about patient care documentation and resources to guide how to use high-quality documentation to improve clinical practice.

Patient care documentation is a record of the interactions (eg, injury evaluation, interventions, and communication of progress) between a clinician and patient.[1] As a professional standard[1] and a requirement of some state practice acts and employers, athletic trainers (ATs) should document each patient encounter.[2] Previous researchers[3,4] reported that ATs viewed patient care documentation as an important part of clinical practice for tracking patient progress, recording communication among stakeholders, and legal protection. Nevertheless, in a recent report[5] of ATs across practice settings, approximately 15% admitted they documented their patient care *occasionally to never*. Although the specific reasons for inconsistent documentation are not known, a lack of accountability for documenting, ambiguity about what to document, and lack of time have been cited as barriers to AT documentation practices.[4,5]

Specific characteristics of the secondary school setting (eg, high patient volume, employment model, and school resources) can affect ATs' clinical practice[4]; yet a lack of time and the perceived time burden associated with documentation have also been described by physicians, nurses, and other clinicians.[6–9] On average, these clinicians spent 26% to 60% of their workday documenting patient

**Table 1. Participant Characteristics**

| Pseudonym | Sex | Experience, y[a] | Years at Current School | Approach to Documenting | Clinical Work per Week, h | Documenting per Week, h |
|---|---|---|---|---|---|---|
| Alexander | M | 30 | 13 | Both | 30 | 20 |
| Alexis | F | 2 | 1 | EMR | 26 | 2 |
| Ayesha | F | 6 | 1 | EMR | 40 | 7.5 |
| Ben | M | 8 | 5 | Both | 30 | 4.5 |
| Damon | M | 15 | 7 | Both | 55 | 8 |
| Emilia | F | 27 | 27 | Paper | 38 | 1 |
| Emma | F | 11 | 3 | EMR | 32 | 5 |
| Francesco | M | 50 | 34 | EMR | 47.5 | 5.5 |
| Gabriel | M | 16 | 7 | Paper | 36 | 10 |
| Jose | M | 24 | 24 | EMR | 30 | 5 |
| Juan | M | 32 | 27 | Both | 40 | 2 |
| Linda | F | 2 | 2 | Paper | 38 | 3.5 |
| Liz | F | 3 | 3 | Both | 26 | 2 |
| Louisa | F | 1 | 1 | Paper | 17.5 | 4 |
| Maria | F | 31 | 30 | Both | 45 | 11 |
| Martine | F | 18 | 18 | Paper | 35 | 2.75 |
| Olivia | F | 1.5 | 1 | EMR | 30 | 5.5 |
| Ren | M | 10 | 11 | EMR | 27.5 | 4 |
| Sofia | F | 15.5 | 11 | EMR | 60 | 6.5 |
| Victoria | F | 1 | 1 | Paper | 20 | 2.5 |

Abbreviations: EMR, electronic medical record; F, female; M, male; paper, paper records; both, electronic and paper record.

[a] Experience = years of experience as an athletic trainer in any setting.

care,[6–9] which affected their practice by limiting the time spent with patients to enable them to fit documentation into their day. This clinical practice alteration differs from reports of ATs who documented off-site or after their work day concluded,[3] which could lead to burnout or inconsistent documentation practices.

In 2017, the National Athletic Trainers' Association (NATA) released best-practice guidelines for documentation in athletic training.[2] This publication outlined the importance of documentation, rules and regulations, benefits of electronic medical records (EMRs), the organization's stance on digital communication and social media, and the development of a record-retention policy. Although the guidelines were not as detailed as those of other professions,[10,11] they established basic standards for ATs to review with an employer or adapt within the context of their state practice act. Resources on documentation are available to ATs but may not alone be sufficient to address barriers and translate quality patient care documentation into routine practice. Previous investigators[3,4] studied ATs in the secondary school setting who used a specific EMR, but it is unclear if ATs who use other methods (eg, paper based, other EMRs, or combined electronic-paper method) document in a similar manner or experience similar challenges. Therefore, the purpose of our study was to examine ATs' patient care documentation behaviors to identify common practices and barriers experienced while documenting on paper or electronically or using both formats.

## METHODS

Our study was grounded within a consensual qualitative research (CQR) approach.[12,13] The CQR method aims to reduce individual biases among team members throughout data analysis. Our team consisted of 5 researchers (3 core researchers and 2 auditors) with extensive experience in qualitative research and the CQR design. One researcher (C.E.W.B.) conducted CQR training for the research team at different timepoints related to collaborative research projects based on the recommendations of Hill et al.[13]

### Participants

After receiving institutional review board approval of our study, we used purposeful and snowball-sampling techniques to recruit ATs who practiced in various types of secondary schools. To gather insight into actual behaviors and challenges while documenting patient care in the secondary school setting, we stipulated that participants must have been employed for at least 1 academic year and self-identified as using an electronic, paper, or combined approach for documenting patient care. We began by contacting 15 individuals in our professional networks across the nation and asked them to forward our recruitment email or share the contact information with ATs who met the inclusion criteria. At the end of each interview, participants were asked to provide contact information for or forward our recruitment email to another AT employed in a secondary school from a different geographic region or who used a different approach to patient care documentation (ie, electronic, paper, or combined approach). Our participants were 20 ATs (12 women, 8 men; age = 38 $\pm$ 14 years; clinical experience = 15 $\pm$ 13 years; from NATA districts 2, 3, 6, 7, 8, 9, and 10). Most ATs were employed in public schools (n = 16/20, 80%) across 11 states and the District of Columbia. Additional demographics are provided in Table 1.

### Instrumentation

We used a semistructured interview guide, which was modified from earlier studies[3,4] on ATs' documentation practices. This interview guide was adjusted to capture the perceptions of ATs using an EMR, paper, or a combined approach to patient care documentation and consisted of 14

**Table 2. Interview Guide[a]**

1. Tell me about your background as an athletic trainer.
2. Please discuss what patient care documentation means to you.
   a. What are your thoughts when you hear the phrase "patient care documentation"?
   b. What does documenting athletic training services mean to you?
3. Describe your typical work week at the secondary school during the academic year.
   a. When does patient care documentation occur?
   b. What strategies do you use, if any, to note patient encounters throughout the day?
   c. Where does patient care documentation occur?
4. Are there specific patient care documentation requirements at your secondary school?
5. Please discuss what mechanisms (eg, paper or EMR) you currently use to document patient care in your clinical practice.
   a. Do you primarily document via paper or electronic methods? Please explain.
6. What are the primary reasons you document patient care?
   a. Do you have any type of systematic approach to documenting your patient care? Please explain.
   b. How do you decide what to document or what not to document regarding patient care?
   c. Please describe your process for documenting an initial injury versus documenting follow-up care.
7. In what ways, if any, do you use your patient care documentation to influence your actual patient care decisions?
8. Please discuss what mechanisms you have used in the past to document patient care in your clinical practice.
   a. If these mechanisms differ from what you have used in the past, can you reflect upon any differences in your documentation practices since changing mechanisms?
9. What are your perceptions of your own patient care documentation behaviors?
10. In what ways, if any, do you feel you could refine/evolve your patient care documentation behaviors?
    a. To enhance your patient care documentation behaviors, are there any aspects of your clinical practice you would change? Please explain.
11. What are your perceptions of patient care documentation in the athletic training profession?
12. What barriers, if any, do you believe clinicians have toward patient care documentation?
    a. Follow up to determine if the barriers identified are ones they personally have.
13. What strategies do you feel are/would be useful for improving patient care documentation in the athletic training profession?
    a. Are there any educational techniques you think would be useful to help educate or reinforce the importance of documentation in athletic training?
14. Is there anything else you would like to add about patient care documentation or your personal clinical experiences?

Abbreviation: EMR, electronic medical record.

[a] Instrument is reproduced in its original form.

items with follow-up probes to be used as needed. Before piloting, 2 peer reviewers with content-area expertise and qualitative research experience assessed the interview guide for clarity and comprehensiveness. Minor adjustments to wording were made and then it was pilot tested with 2 individuals who met the study criteria. Only minimal changes were then made to the wording, and 1 item was moved to later in the interview; therefore, the pilot interviews were included in our analysis. The interview guide is provided in Table 2.

## Procedures

Two researchers (T.M.K. and S.L.N.) individually contacted potential participants via email and described the research study aims and procedures. Interested participants responded to the email, and a telephone interview was scheduled at a convenient time for the participant and one of the researchers. After obtaining participant consent, a researcher completed an individual interview with each participant that lasted an average of 30 to 45 minutes. Interviews were audio recorded to capture the perspectives of participants from different geographic regions, transcribed verbatim by an outside company, and deidentified to maintain participants' confidentiality. The interview transcript was sent to each participant to member check for accuracy and provide additional details or clarification if necessary during a 3-week period. However, participants were not allowed to change or delete information from their transcripts during this review process. Before conducting the analyses, we assessed the transcripts for differences in questioning between researchers and deemed it consistent.

## Data Analysis and Management

Based on the CQR tradition,[12,13] multiple researchers participated in data analysis to reduce individual bias and provide different perspectives throughout the process. The primary research team (T.M.K., S.L.N., and C.E.W.B.) independently coded transcripts during 4 rounds using a consensual codebook to confirm codes, themes, and data saturation. Over multiple meetings, the primary research team established the initial codebook; revised the codebook after another round of coding; confirmed the coding completed by the other team members; and then reconvened to confirm categories, organization of themes, and representativeness of participants' quotes. The external auditors (L.E.B. and E.R.N.) individually assessed 2 transcripts to confirm codes and themes. Response frequencies are presented using the terms *general* (18+ participants), *typical* (10–17 participants), *variant* (4–9 participants), and *rare* (1–3 participants).[13] Member checking and peer review of the modified interview guide were applied to enhance trustworthiness. Also, multiple researchers analyzed the transcripts and confirmed the findings for data triangulation.

# RESULTS

Three themes emerged regarding ATs' perceptions of and behaviors while documenting patient care in the secondary school setting: (1) documentation challenges, (2) documentation behaviors, and (3) professional development needs. Themes, categories, and frequencies are shown in Table 3. We identified multiple categories within each theme and present participant quotes to represent each category.

## Theme 1: Documentation Challenges Specific to the Secondary School Setting

The ATs described the challenges of documenting care in the secondary school setting. Within this theme, 2 categories were present: (1) time and patient load and (2) multiple stakeholders or locations where care was provided.

**Table 3. Themes, Categories, and Frequencies**

| Theme | Category | Frequency | No. |
|---|---|---|---|
| 1. Documentation challenges | a. Time and patient load | Typical | 16 |
| | b. Multiple personnel and locations of care | Variant | 8–9 |
| 2. Documentation behaviors | a. Process | General | 20 |
| | b. Content | General | 20 |
| | Patient care | Typical | 15 |
| | Communication | Variant | 10 |
| | Required documentation | General | 18 |
| | c. Mechanics and logistics | General | 19 |
| | Location | General | 18 |
| | Time of day | General | 19 |
| 3. Professional development needs | a. Professional resources | Typical | 13 |
| | b. Strategies for professional development | Typical | 16 |
| | Importance of documentation | Typical | 11 |
| | Application of recommendations | Variant | 9 |

**Time and Patient Load.** Many ATs described time as a challenge to documenting patient care in terms of how time is spent during the workday and limited time to care for a high volume of patients. Alexis elaborated:

> If you don't have time to document whatever injury evaluation, then it's either not going to get done or it's going to get done at a level that's less than stellar, which I think every athletic trainer doesn't have enough time to do.

Juan also described how prioritizing responsibilities, work-life balance, and patient care documentation was challenging:

> Do I go to practice and watch practice?... Or do I go back in my office and shut the door and work on records?... And when everything's over and I'm leaving for the day, do I go home and spend time with family? Or do I go into the other room, shut the door, and do my patient charts? And that becomes a big issue. And it's not bad the first day or second day because you'll say, "Oh, I'll do it tomorrow." Then the next day, "Oh, I'll do it the next day." And then it just starts building up. It becomes overwhelming by the end of the week.

Limited time to provide athletic training services and complete other tasks, such as documentation, was also complicated by a high volume of patients in the secondary school setting. Ren shared: "I don't think there's any other setting where 1 athletic trainer is in charge of possibly 800-1000 or more patients and athletes." Similarly, Alexander commented on the challenges associated with patient load and the school schedule:

> In the secondary school setting, especially if there's just 1 athletic trainer, you have to take a minute and write some stuff down. And it's hard to do that when you've got 40 people waiting to see you and you've got 30 minutes to get everyone figured out and out to practice.

In a rare case, Ren admitted, "Patient care documentation is very minimal. Timing and resources and the ability to provide each patient with a significant amount of time is very difficult."

**Multiple Stakeholders or Locations of Care.** Multiple individuals (eg, physicians, parents, and coaches) involved and multiple locations where care was provided (eg, physician's office, off-campus venue, and on-campus venues) complicated ATs' documentation of patient care. Thoroughly documenting a patient's case was difficult because ATs frequently need to gather and record information from multiple sources. Gabriel described the struggle to obtain medical notes from other providers:

> In my setting, it's a matter of just making sure that we get follow up from when they go off site. It's hard pressed to get a note back or copy of an x-ray or even for them to show up with it. A lot of times, they forget or they'll come in and say, "Oh, this is what happened" but then they don't have a notation to back that up. So if they get any kind of confirmation of what they got off site, it's the biggest barrier at this level.

Documenting communication with stakeholders and keeping everyone up to date was also a challenge. Martine expressed the difficulty of recording communication with multiple walk-on coaches, whereas Maria cited documenting communication with parents: "Parents contacting me on my phone… or also text messages that are sent. Those things are a little bit difficult to record."

Due to the variety of sports and timing of events after school, participants noted how their patient encounters happened at various locations and not always in the clinic where documentation typically occurred. Louisa said, "Other health care providers are in their offices or in 1 setting. But, athletic trainers, I have an athletic training clinic. I've got the football field. I've got the baseball and softball field at the other school setting." To counter documenting everything after the fact, Liz occasionally attempted to document using a mobile device while away from the clinic: "If I'm out at the field for a long day, then I will go on to SportsWare on my phone and document from my phone, at the field occasionally, as well, not frequently." However, sometimes patient care in the secondary school setting took place at an unanticipated location, further complicating later documentation. Juan stated:

> I know that if an athlete sees me, for example, in the hallway, "Hey, can you look at my wrist real quick in

between classes?" I should be documenting that. But I don't. And a lot of that is just because of time or because you're walking in the hall, you don't have a pen and paper. And then by the time you get back to your office, you forget.

### Theme 2: Documentation Behaviors

The second theme comprised 3 categories: (1) the process or criteria for documenting care, (2) the content documented, and (3) the mechanics of when and where they documented patient care. Overall, ATs described spending 5 ± 4 hours per week documenting patient care. Oftentimes, they indicated that their patient care documentation behaviors were affected by the challenges in theme 1.

**Process or Criteria.** Participants elaborated on their process for documenting patient care and the criteria used to determine whether to document the encounter or not. Most ATs used a sign-in sheet, treatment log, and Subjective, Objective, Assessment, Plan (SOAP) notes to document patient encounters. Several ATs described their criteria for documenting, which included time-loss injuries, encounters requiring referrals, or if athletic training services were provided. However, Alexis discussed the handling of a nondocumented encounter that warranted follow-up care:

> Then I will write my initial SOAP note when it becomes a practice modification or time-loss injury. And I will put in the note when it first happened, and hopefully, I'll have the date of that initial encounter because they will have signed in. And I'll say what happened on that date and then I'll say what's happened since.

The decision to document was complicated for Emilia because of a lack of patient follow-up:

> To be honest, your typical run-of-the-mill ankle sprains, and tendinitis, and you know, I see the kid for ice, and I tape him for 2 days, and they never come back. I have their sign in for that, but I really don't have anything else documented.

Rather than documenting only time-loss injuries or those requiring referrals, participants such as Francesco purposefully documented each patient encounter:

> We document everything… because we want to know how many injuries are occurring and not just time-loss injuries. A lot of the non–time-loss injuries require more time on our part than the time-loss injury.

Jose also documented everything, but his approach for documenting each encounter varied:

> It's the depth that changes. So, a simple wound we might truly just have a very quick note that that's what we saw. On someone who has a cervical spine strain and results in an EMS [emergency medical services] transport, you know we are going to be very thorough. It's all SOAP note based.

**Content.** In addressing their documentation practices, ATs described the content recorded, which included the patient care provided, communication with stakeholders, and required documents or forms. Maria shared, "Any type of email that is sent to us from a nurse or a physician would get copied and pasted into the patient's file." Evidence of services provided and communication were also important for Ayesha:

> I have all of this stuff, even to the point where I've had to screenshot text messages from parents. Because, I had a parent once try to go to my administration saying that I did not treat her son properly for a concussion. And I didn't contact her that night. And I did, and I had the timestamp. I have them saved in a PDF and said, "No, this is exactly what I did. So..." and then she had no case after that, so that helped me, and again it helped my administration. And it helped them trust me too.

When asked if their employer required completion of forms, most ATs stated they were required to complete a basic form, such as an accident report. Victoria noted, "We have an incident report form that we file anytime we have to activate EMS on site. That I file through security. That's the only thing that's required." Ben, who worked at 2 schools, observed differences in documentation requirements. At 1 school, it was a "basic incident report form the coaches fill out," but the other school's requirements were "far more robust than many other facilities who have athletic trainers who don't have the hospital forcing them to make sure they have more comprehensive documentation." In most cases, school- or employer-required forms were less descriptive than ATs' patient care documentation.

**Mechanics and Logistics.** Participants discussed various locations and timing throughout the day when they performed patient care documentation. A few ATs described primarily documenting in an office or their athletic training clinic. Ayesha explained, "I have my own office, like my own clinic. So, I have a filing cabinet that locks, I have a desk and everything, so I like to sit there and get all that stuff done." Victoria primarily documented in the clinic but occasionally documented elsewhere:

> Our files are stored in the athletic director's office. So that's where all their physicals and stuff are stored. So, if I have a really easy day, there's not a lot going on… sometimes I'll go into the athletic director's office and document there and then file.

Linda described the fluidity of using her paper sign-in sheet so she could document in multiple places: "It actually occurs kind of on the go, or they all have to sign in, and I'll take that maybe out to a field with me, and kind of write my notes on it." Alexander also documented in many locations using an online EMR:

> Sometimes it occurs in the athletic training room. Sometimes it occurs in my classroom, sometimes it occurs on the athletic field, and sometimes it occurs at home. We're using SportsWare online, so I can access SportsWare from my home, from my athletic training room, from various fields or facilities [where] I happen to be present.

Regarding the timing of documenting patient care, the majority of ATs documented at various times throughout the day. Louisa remarked that her documentation occurred

> Whenever I have time. So, a lot of times, if not a lot of kids come in to me before I have to go out to games or practices, I'll try to get as much done in that time frame. If I've just been super busy, a lot of kids came in, I've just got to go out to practices, I'll do it at the end, after my games. And I'll just stay late and do any kind of documentation that I need to do then.

Gabriel also made quick notes during the day, "but the bigger or longer documentation and putting it actually into the computer won't take place until the end of the day." Similarly, Juan stated,

> I would do that during the day. Again, depending on the extent of athletic trainer to patient care provided. If there are a lot of charts that need to be done, I might come in a little earlier during the day. I also may do them at night while I'm at home.

Emma, like some other ATs, specifically planned around the school and sports schedules to complete this administrative task:

> Typically, I will do that before, when I get to work, I will do a lot of documentation prior to the kids getting out of school. Otherwise I will do it at end of the day. After I've seen the athlete, I make sure to do it right away, so I don't forget anything or miss anything.

Patient care documentation was also prioritized for timely communication with school personnel. Maria said, "That's the first thing we do when we come in, in the morning, because most of the time that's when the nurses are corresponding." Similarly, Damon recounted,

> I come in around 9:30 AM or so, and catch up, get organized for the day. Catch up on emails. [I] may email teachers or administrators based on kids' injuries the night before. We try to share limited information within HIPAA [Health Insurance Portability and Accountability Act] standards if a kid breaks his arm or, you know, they might need accommodations in class.

In a rare case, Francesco conveyed that documentation was always completed at the point of care:

> We do it immediately. We do not save it until the end of the day because one of the problems is we will have anywhere from probably 60 to 100 kids come into the athletic training room every day.

### Theme 3: Professional Development Needs

To enhance their patient care documentation, many ATs in the secondary school setting expressed the need for practical professional development on the topic. This final theme emerged with 2 categories: (1) the need for more professional resources and (2) application of patient care documentation recommendations.

**Professional Resources.** Several participants wished for more specific guidelines or resources on best practices for ATs' patient care documentation. Thinking practically, Ren said, "There needs to be some sort of common ground between what's feasible and what needs to be documented." Similarly, Jose suggested:

> I really think we should kind of set, and people recognize, at a bare minimum you should have a record that contains A, B, C, D, and E. How you get to that is up to you. It's personal preference. It's institutional preference. So, I really think that should be out there.

Our participants observed that professional resources could be delivered as publications or at conferences and meetings using online webinar platforms. Liz believed it would be helpful to have "articles in the NATA [*News*] talking about documentation. Just really having constant reminders out there to our profession that documentation is important." Professional development programs should include practical pointers, as Damon noted: "Even providing some helpful hints, that kind of thing, or seeing an example of how people do it."

**Application of Documentation Recommendations.** When discussing professional development on patient care documentation, several ATs stressed that the importance of documentation and how it relates to clinical practice should be emphasized. Olivia said, "Maybe offering a little workshop here and there, or at NATA or something like that, might help athletic trainers get a better understanding of why they need to do it." Linda elaborated on the need to provide relatable evidence of the benefit of quality documentation: "If we can show exactly what we're doing in clinic… or around the country. And showing like, this is billable, and insurance would accept that, I think we would be more inclined to buckle down on documenting everything."

On the other hand, Martine emphasized the legal perspective:

> Because if it's a matter of protecting themselves, maybe they'd see more reason to do it. I know that's, kind of, a selfish way of looking at it, but face it, you've got to protect yourself. And I think just getting everyone else out there to understand how important it is.

Sofia also wanted more of the following:

> Talks and continuing education on the liability standpoint and how beneficial the documentation can be to you from the liability standpoint but also from [the perspective of] increasing your ability to treat the patients in a manner that is more efficient.

Beyond the legal ramifications, Damon explained that professional development should also address the importance of documentation and its application to clinical practice:

> I think, just bottom line, show the overall benefits of documentation and not from the legal perspective, the cloud that hangs over our people. But showing the

benefits, like I said, showing the patient outcome improvements or that kind of stuff, that if you can show the value of your services, you're more likely to get a bigger budget or bigger salary from your side. . .. I think showing successes is helpful.

When asked about what type of professional development on documentation would be most meaningful, several ATs cited tips or feedback on their own documentation practices. For example, Olivia preferred a directed approach: "I think possibly, even doing continuing education on how to write a better SOAP note would be a good option to start with." Ren suggested a forum for ATs to collaborate or interact regarding their documentation practices to "[share] what they're doing, how they're doing it, how they find time, what works, what doesn't work." Alexis also valued the opportunity to interact and seek feedback on documentation practices:

I think some sort of medium where we could, like, a person taking the course could ask questions and some sort of seminar maybe. Or even like a web seminar, where they could ask questions about their specific plan and see how it applies to them and actually figure out how they could do it. Or what changes they need to make to make it better.

## DISCUSSION

We conducted an in-depth exploration of ATs' perceptions and behaviors while documenting patient care in the secondary school setting. Participants described time, patient load, and characteristics of the secondary school setting as factors that affected their documentation behaviors. Ongoing professional development and targeted interventions were proposed to address barriers, document accurate and legally supporting records, and ensure the patient was receiving the best possible care.

### Documentation Challenges and Behaviors

Practical challenges existed regardless of ATs' use of paper versus electronic systems to document patient care in the secondary school setting. Our participants reported a lack of time and high patient volumes as barriers to documenting, which are consistent with the results of previous studies of ATs[4,5] and other health care professionals.[6–9,14] In addition to providing care within a condensed time associated with a bell schedule, our participants elaborated on how tracking down documentation from other health care professionals, recording text messages from parents, and documenting patient encounters in school hallways or across sports venues added to the difficulty of documenting patient care. As such, ATs typically reported documenting outside of work hours, a practice called "pajama time," which may also contribute to work overload and dissatisfaction.[6,8,15] To counter memory lapses from delays in the timing of their documentation, ATs commonly used paper sign-in sheets and added notes. This strategy, however, should be evaluated to determine if patient privacy is protected, if paper sheets are safely stored or destroyed, and if another format or system would be preferable.[2,16]

The perceived time burden may also be partially related to some ATs' reports of documenting everything. This practice is time intensive and lengthy to navigate when reviewing a patient chart in the future.[14] Although ATs exhibited a wide range of behaviors regarding the details and frequency of documentation,[3,5] our participants appeared to use individualized criteria for their own documentation behaviors. It is unclear if the perceived time barrier influenced some participants' decisions to document only time-loss injuries. However, using time loss as a criterion for documentation is not uncommon among ATs in various practice settings.[5] Documenting only time-loss injuries may reduce the time associated with documenting patient encounters but does not adequately characterize the services ATs provide or provide legal protection for encounters that were not recorded.[17,18] Additionally, because documentation can play a vital role in demonstrating ATs' value and worth,[3,5] it is essential that ATs produce high-quality documentation to help mitigate risk and promote cost containment. Athletic trainers seeking to improve their position or facility can reference the NATA's secondary school value model[19] for specific recommendations on strategically gathering and presenting objective information to employers (eg, school administrators and hospital and clinic supervisors).

Athletic trainers are encouraged to review their state practice act and communicate with their employers to establish clear guidelines and expectations.[2] When specific requirements have not been established, professional judgement should be used to determine what is pertinent to the patient's continuum of care and should be documented accordingly.[2,16] For example, an approved list of abbreviations and the extent of information to be recorded should be discussed with employers in advance to limit errors and maximize legal protection.[20] It is important to note that our respondents described differences in employer requirements for documentation, such as a school incident report, that could be completed by a coach versus the more extensive records of a hospital or clinic. Our participants did not report lack of accountability as a barrier, as demonstrated by Welch Bacon et al[4]; however, differences in employer's expectations may affect the consistency and quality of ATs' patient care documentation. Therefore, ATs should also communicate with employers and coaches to discuss expectations and prioritization of time, such as completing documentation versus rushing out to observe practice.

### Professional Development Needs

Similar to ATs who used an EMR platform,[21] many of the ATs in our study expressed a desire for more guidance regarding the extent of the details that should be included in documentation. The NATA's best-practice guidelines[2] promoted the importance of documentation and the establishment of policies and procedures that align with state and federal laws and employer expectations. However, these guidelines[2] were broad and did not explicitly provide recommendations regarding the extent of details to be recorded or examples of quality documentation. Although documentation requirements vary across practice settings and state practice acts, more specific guidelines for ATs may be warranted to fulfill professional standards[1] and for

**Table 4. Self-Reflection on Documentation Behaviors[2,16,20]**

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|---|
| General Questions |
| Do patient records have limited to no abbreviations, jargon, or personal opinions? |
| Is consent documented? |
| Are records signed or initialed and dated? Are they organized consecutively and written soon after care was provided? |
| For paper documentation: is it legible and organized? Is it locked in a filing cabinet? |
| For electronic records: is the system password protected? |
| Documented Components |
| Does the injury evaluation include pertinent history, observations and inspections, physical examination results, objective measures, and differential and clinical diagnoses? |
| Are the patient's problem areas, functional deficits, and societal limitations identified? |
| Is the treatment plan specific with clear instructions for the patient? Are goals and timelines stated? |
| Are missed appointments or the patient's noncompliance documented? |
| Is interprofessional and stakeholder communication and care documented? |
| Are treatment logs and progress notes updated? Is there a discharge note? |
| Employer and State Requirements |
| Are there federal laws or state practice act requirements you must follow? |
| Have you established clear criteria and expectations with your employer? |
| Are there specific forms required for the school, district, or contractor? |

legal protection. For example, the American Physical Therapy Association's guidelines[11] outlined recommendations regarding the correction of charting errors; a bulleted list of components to record for physical examinations, plans of care, and discharge notes; and authentication by a clinician versus a student.

Health care professionals can reflect on the quality and consistency of patient care documentation using objective chart-audit tools (eg, Cat-ch-ing and D-Catch) and tips (Table 4).[2,16,20,22,23] For example, an AT can select a handful of patient records and use these tools to assess the content of documented notes, inclusion of patient outcomes, tone, formatting, and security of files.[24] In other health care professions, such as nursing, it is not uncommon for patient care documentation tips and reminders to be published periodically in professional journals or magazines.[20,25] This notion of providing periodic tips and refreshers aligns with our participants' desire for more resources. However, resources alone may not suffice. Athletic trainers who participated in a professional development module on medical documentation improved their perceived knowledge of documentation but still exhibited many areas for improvement when assessed in a follow-up chart review.[26] It is also noteworthy that even when ATs identified an area for improvement, they often prioritized interests over needs when choosing between coinciding sessions at a professional conference.[27] Therefore, it is necessary to not only provide ATs with more specific guidelines but also encourage the mindset of continuous quality improvement, instead of interest alone, when selecting or creating professional development opportunities.[28]

The quality improvement concept requires ATs to reflect on the care they provide and be willing to make changes to optimize patient care.[28] As it relates to patient care documentation, an AT's goal of increasing the frequency of documenting at the point of care could include setting visual or auditory reminders and observing if the hours spent documenting outside the work day decrease. Over time, the AT could also assess if the quality of the documented encounters improves, if patient records are complete, or if strategies were adapted to document more efficiently. Routine, high-quality documentation would then accurately reflect the athletic training services provided and enable treatment effectiveness to be evaluated. Additionally, as part of the Prioritized Athletic Training Research Agenda,[29] improving documentation practices will also aid in promoting ATs and the return on investment for the care they provide. For example, Marshall et al[30] used patient records from the Athletic Training Practice-Based Research Network to estimate that ATs' management of ankle sprains produced a cost savings of $533.72 ± $508.88 per patient. This is one example of how documentation can be used to demonstrate the importance of the timely, quality care provided by ATs in the secondary school setting.

### Limitations and Future Directions

Due to the voluntary nature of these interviews and the sampling technique, it is possible that our participants held a more positive perception toward patient care documentation and regularly documented as part of their clinical practice. Regardless of their perceptions, ATs in this sample exhibited a range of documentation behaviors and a similar need for additional resources to aid in enhancing their documentation practices. It was also out of the scope of our investigation to assess ATs' actual documentation practices, the quality of their patient care documentation, or the perceptions and behaviors of ATs who did not document patient care. Future researchers could audit deidentified patient records to evaluate the documented content or assess if professional development programs are effective in improving documentation practices. As the ATs in our study were employed in the secondary school setting, future investigators can also explore whether ATs in other practice settings exhibit similar behaviors or experience similar challenges.

## CONCLUSIONS

Lack of time, high patient loads, and multiple stakeholders or locations where care was provided were reported as barriers to ATs' documentation practices in the secondary school setting. These challenges were not specific to the method of documentation used and might be partially addressed by establishing more detailed criteria for documenting patient care in the athletic training profession. Athletic trainers described similar processes for documenting patient encounters but wanted professional development to enhance their documentation practices. These participants expressed a need for specific documentation standards, feedback regarding their documentation, and examples of how high-quality documentation can be used to improve clinical practice. In the absence of currently available specific guidelines for quality documentation in athletic training, ATs can conduct internal chart audits to

reflect on their own documentation practices, review state practice acts, and communicate with their employers about specific expectations for documentation at their secondary schools.

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*Address correspondence to Tricia M. Kasamatsu, PhD, ATC, Associate Professor & Co-Clinical Education Coordinator, Athletic Training Program, Department of Kinesiology, California State University, Fullerton, 800 North State College Boulevard, Fullerton, CA 92831. Address email to tkasamatsu@fullerton.edu.*