Professional Concerns

Documentation Practices of Athletic Trainers Employed in the Clinic, Physician Practice, and Emerging Clinical Settings

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Context: The documentation practices of athletic trainers (ATs) employed in the secondary school setting, including their strategies for, barriers to, and perceptions of documentation, have been characterized in previous research. The documentation practices of ATs employed in other settings have yet to be studied in depth.

Objective: To examine the documentation practices of ATs employed in the clinic, physician practice, and emerging clinical settings.

Design: Qualitative study.

Setting: Web-based interviews.

Patients or Other Participants: A total of 22 ATs: 11 employed in the clinic or physician practice setting and 11 employed in an emerging clinical setting.

Data Collection and Analysis: The ATs employed in the settings of interest were recruited with purposeful, convenience, and snowball sampling. Participants were interviewed using a Web-based platform so that we could learn about their behaviors and perceptions of documentation. Data were analyzed using the consensual qualitative research approach, followed by a thematic analysis. Trustworthiness was addressed using data source triangulation, multiple-analyst triangulation, and an established interview guide and codebook.

Results: Participants described following clear guidelines for documentation established by regulatory agencies, employers, and electronic medical record templates. They were motivated to document for patient safety and to demonstrate value. Participants typically documented in real time and continuously, which was facilitated by employer requirements. The ATs described experiencing a learning curve for documentation due to the unique requirements of their settings, but learning was facilitated by employer guidance and mentorship.

Conclusions: Employer guidelines, training, and ongoing support facilitated effective and thorough documentation in these clinical settings. Athletic trainers and employers in a variety of settings should consider establishing clear guidelines to promote thorough and effective documentation.

Key Words: medical records, electronic medical records, socialization, transition to practice, employer expectations

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Key Points

- Athletic trainers in the clinic, physician practice, and emerging clinical settings used electronic medical records and documentation templates to facilitate thorough and efficient documentation.
- In these settings, documentation was heavily guided by employer and regulatory requirements.
- Participants documented in real time or soon after they encountered each patient.
- On-the-job training and mentorship facilitated effective documentation for athletic trainers in these settings.

Documentation of patient care is a professional responsibility of athletic trainers (ATs).[1] Thorough and accurate documentation should include a complete picture of the AT's care supplied to a patient, including the services provided and communication with and about the patient.[2] Previous researchers[3–6] have revealed details about ATs' documentation practices, including their reasons for, mechanics and perceptions of, and challenges in completing documentation. Their documentation practices were influenced by their educational training, available resources, and patient volume.[3–6]

To date, most experts on athletic training documentation have focused on ATs employed in the secondary school setting,[3–5] with the exception of 1 group,[6] which captured clinicians in a variety of clinical settings. In a recent study,[7] ATs employed in the secondary school identified setting-specific experiences that shaped their documentation practices. For example, ATs employed in secondary schools provided a large volume of patient care in a short amount of time, often in multiple locations (eg, practice fields and athletic training facility).[7] Participants indicated that these work environments made it difficult to document patient care thoroughly and consistently.[7] Authors examining other topics, including work-life balance[8] and work setting characteristics,[9] described aspects of different practice settings that influenced ATs' daily lives. For example, Mazerolle et al[8] found that ATs working in traditional practice settings, such as secondary school and

collegiate settings, experienced more work-family conflict than ATs working in nontraditional practice settings, such as clinics, education, and industry. The researchers suggested that the experiences of ATs may vary depending on their work setting, and it is therefore valuable to explore professional concerns from a variety of perspectives.

Although much has been learned about ATs' documentation practices, most of the in-depth information has been obtained from ATs employed in the secondary school setting, which constitutes approximately 17% of the National Athletic Trainers' Association (NATA) membership based on salary survey respondents.[10] Previous investigators[8,9] proposed that although ATs have the same professional responsibilities regardless of work setting, the unique characteristics of a practice setting may affect an AT's ability to meet these professional standards. Strategies for and challenges to patient care documentation are important to understand when developing educational and other resources for documentation practices. Thus, the purpose of our study was to examine the documentation practices of ATs working in clinic, physician practice, and emerging clinical settings. Because these settings account for approximately 14% of the NATA membership, it is essential to examine this population of ATs in order to determine their documentation practices.[10]

METHODS

Design

We used a consensual qualitative research (CQR) design for this research study.[11,12] The CQR approach describes a structured qualitative research design that facilitates the collection of in-depth information from individuals who have experienced a phenomenon, such as athletic training documentation practices.[11] The CQR design also involves a robust data-analysis process that adds credibility to the research study.[11]

Settings and Participants

The purpose of our study was to examine the documentation practices of ATs employed in clinic, hospital, physician practice, and emerging clinical settings. Before recruitment, we categorized these settings into 2 groups to focus our recruitment. The clinic group consisted of individuals employed in the rehabilitation clinic, hospital, or physician practice setting. The emerging setting group consisted of ATs employed in military, performing arts, industrial, rodeo, and extreme sports settings. Our rationale for these groups was 2-fold: (1) the NATA has traditionally grouped these types of settings in the context of committee organization and (2) each group represents a similar percentage of the NATA membership (approximately 9%).[10] Although these groups reflect diverse subsets of participants, due to the few individuals practicing in several of these settings, we believed it was necessary to group the settings in order to obtain adequate data for saturation. To be eligible to participate, each individual was required to be a certified AT in his or her current position for ≥1 year and provide patient care to the specified populations for ≥30 hours per week. Individuals who did not meet these criteria, such as administrators, were excluded from the study. Additionally, ATs employed by a hospital or clinic who primarily provided patient care in the secondary school setting were excluded. Although we recruited individuals from the hospital setting, we were unable to secure any participants employed in this setting.

Instrumentation

We used an established interview guide (Appendix) developed for a previous study to examine documentation practices.[7,13] The purpose of our current investigation was consistent with that of the previous authors, and the questions included the new groups we sought to explore. We made minor modifications to the interview guide by removing references to a specific setting.

Procedures

Recruitment. We used a combination of purposeful, convenience, and snowball sampling to access potential participants.[14] Before recruitment, this study was approved by the principal investigator's (PI's) institutional review board. We began recruitment by seeking out individuals employed in the practice settings of interest by contacting our professional networks. For example, if we knew a colleague offered clinical education experiences in emerging clinical settings, we sent the recruitment email for that person to pass on to individuals who met the inclusion criteria. Individuals were sent an email with the study description and consent form and asked to contact the PI if they were interested in participating. Additional purposeful and convenience sampling was completed by posting the recruitment flyer on social media. Additionally, we canvassed published resources (eg, NATA website and *NATA News* magazine) for the names of individuals who worked in the included practice settings. Finally, at the end of each interview, participants were asked to provide the names and contact information of individuals they knew who met the inclusion criteria or to pass on the recruitment flyer or email to their colleagues. Professional acquaintances were interviewed, but close colleagues were excluded to minimize bias (although no individuals met this criteria). Recruitment continued until the PI perceived that data saturation had been met, which was confirmed by the co-investigators during data analysis.

Data Collection. Prospective recruits indicated interest in participating by emailing the PI. At that time, the PI confirmed that the individual met the inclusion criteria and scheduled a web-based interview. Participants were sent a demographic survey to complete electronically in advance of the interview. Interviews were conducted by the PI using the Zoom platform (Zoom Video Communications, Inc, San Jose, CA) with audio recording only. Before the PI asked the interview questions, each person provided consent to participate and to be audio recorded. Interview transcripts were automatically transcribed by Zoom within 24 hours. At that time, a research assistant reviewed each transcript alongside the audio file to correct any transcription errors. After review, the transcripts were finalized for analysis.

Data Analysis

We used the CQR data-analysis process as described by Hill et al,[11,12] followed by a thematic analysis.[15] First, we

independently analyzed 3 interviews using an inductive coding process and drafted individual codebooks. Second, we met to discuss our codebooks and determined that the coding process matched a previously developed codebook used with the interview guide. At that time, we decided to proceed with the CQR analysis approach using internal rotating auditors (Figure).[11] The clinic and emerging setting groups were analyzed separately, and we agreed that saturation had been obtained. After the CQR analysis of the separate groups, we conducted a thematic analysis across both groups. Thematic analysis allows for a global analysis process and holistic interpretation of the data.[15] This process allowed us to identify similarities between the groups and highlight emerging findings unique to these populations compared with previous studies. Themes across groups were identified and organized with supporting categories, and the analysis was deemed complete.

Several measures of trustworthiness, or credibility, were implemented during the research process. We collected data from participants working in a variety of settings throughout the United States as a mechanism of data-source triangulation.[14] The use of multiple analysts throughout the coding process facilitates a thorough and accurate analysis that reduces bias via triangulation.[11,14] We kept analytic memos at each step of the analysis to record observations and reflections on the data.[16] We used an established interview guide and codebook that have been validated and published, adding credibility to the methods.

RESULTS

Recruitment resulted in 22 participants, 11 in the clinic group and 11 in the emerging setting group (Table 1). The data analysis revealed 4 themes: (1) guidelines for documentation, (2) motivation to document, (3) real-time and continuous documentation, and (4) learning curve for documentation.

Guidelines for Documentation

Participants in our study described several entities that guided their documentation practices, including regulatory requirements, employers, and electronic medical record (EMR) templates. Additional supporting quotes are listed in Table 2.

Regulatory Requirements. The ATs provided several examples of how their documentation practices were guided by regulatory requirements, including insurance companies, workers' compensation, and Medicare guidelines. Mel, an AT in the physician practice setting, described how workers' compensation guidelines informed the content of her documentation:

> We see a lot of work comp [workers' compensation] injuries. If it's a work comp patient, you're going to ask when did they get injured, what do they do for work, how long they've been there, have they had any prior injuries to the shoulder, any previous work comp cases.

Insurance company reimbursement guidelines also guided ATs' documentation practices. Cindy stated:

> For me, there's so much change that comes down from insurance companies on what they're going to do for the
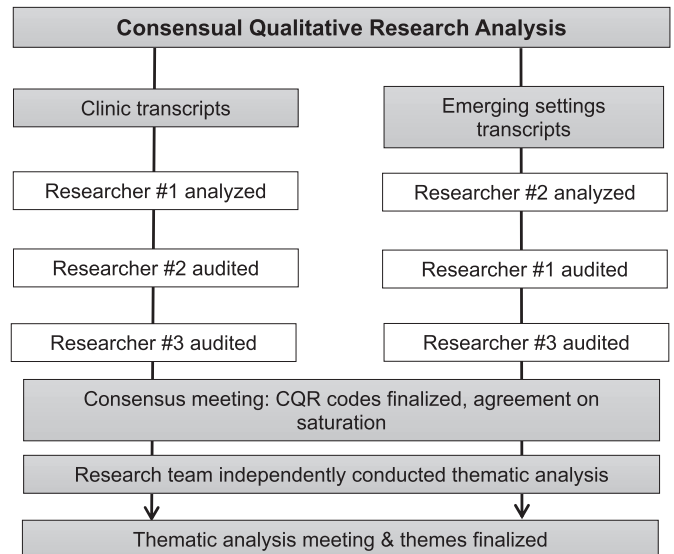

Figure. Data-analysis process. Abbreviation: CQR, consensual qualitative research.

patient and reimburse the patient so… I'm also documenting to make sure my patient is not stuck with a very unaffordable bill.

Employer-Specific Requirements. In addition to broader regulatory requirements, several participants' employers provided expectations for documentation. In the physician practice setting, ATs worked closely with their supervising physicians, who had particular requirements for documentation. Serena said: "the physicians… there are certain things they want in their notes." Luke, an AT employed in the industrial setting, noted: "We need to document every program, and that's one of the services that we provide to the employees, so they want that documented." Those ATs employed in the military setting also observed specific expectations for the content of patient care documentation. Juan indicated that quality control was enforced with peer review: "There's a lot of things that go into notes that have to be there as mandatory because they peer review your notes."

Several participants described patient care documentation as an expectation of their job and compared this expectation with that of other clinical settings in which they had worked. Louisa commented: "I know that some people will document in quite a limited fashion. Well, in a physician practice setting, I don't have that choice what I dictate or what I don't. Every encounter, we dictate it."

Electronic Medical Record Templates. The use of EMRs and the templates within these EMRs provided participants with a clear structure for the content and depth of documentation. Many of these EMR templates were employer designed and mandated. Zoey explained:

> We have templates that we document into, so each surgeon has their own preferences of their templates that they use, and all the templates are structured as to meet the different billing standards that they have to meet for the providers.

Jolene, in the performing arts setting, described: "We have options for different templates that we can choose

Table 1. Participant Demographics

Pseudonym	Work Setting	Years of Experience	Years in Current Job	Years in Job Setting	Supervisor of AT Services	Patients Treated/Wk, Average	Documentation Time/Wk, h
Amanda	Military	8	1	7	Physician	15	7.5
Ariana	Performing arts	8	4	5	Director of school of dance	50	2.5
Ava	Physician practice	6	5	5	Physician	75	10
Cathy	Military	20	2	2	Physician	50	15
Christine	Physician practice	7	3	7	Head AT	50	16
Cindy	Physician practice	30	7	14	Physician	150	20
Erik	Industrial	11	1	5	Head AT	27	5
Jason	Physician practice	5	1	1	Physician	75	3
Jolene	Performing arts	15	15	15	Physician	3	9
Juan	Military	12	2.5	12	Physician	25	12
Julia	Physician practice	9	5	7	Physician	214[a]	42
Kirsty	Public safety	18	2	7.5	Physician	50	4
Lisa	Industrial	6	6	5	Director of safety	15	10
Louisa	Physician practice	5	2	3	Physician	100	10
Luke	Industrial	7	1	1	Self	15	5
Maya	Clinic	14	1	13	Physician	80	3
Mel	Physician practice	4	4	4	Physician	80	35
Paul	Military	27	10	27	Head AT	125	12
Rita	Clinic	4	1	1	Other	20	5
Sean	Industrial	5	3	3	Director of operations	10	3
Serena	Physician practice	4	2	2	Physician	40	20
Zoey	Physician practice	5	2	3	Associate clinical manager	75	30

Abbreviation: AT, athletic trainer.

[a] Julia reported seeing 42 patients/wk in person and interacted with an additional 300 patients/wk over the phone.

within the system." Many ATs discussed how EMR templates facilitated thorough and efficient documentation. For example, Christine, in the physician practice setting, stated: "Our biggest strategy is using our smart phrases in our templates. I have a smart phrase for every extremity that I just have to go through and put negative or positive." For several individuals, the use of smart or dot phrases, which are abbreviations entered by the clinician that automatically expand into longer phrases in the note, were helpful timesavers.

Motivation to Document

We asked participants to share their reasons for documenting, and 2 categories emerged: (1) patient safety and outcomes and (2) demonstrating value. Additional supporting quotes are listed in Table 3.

Patient Safety and Outcomes. The ATs described several instances in which a key reason for documentation was to ensure patient safety. Accurate documentation in these settings indicates whether patients can safely enter surgery, fly a helicopter, or work at a factory, and ATs took their role in patient safety seriously. When asked why she documented patient care, Maya remarked: "Just for a peace and safety, especially things like allergies and making sure that they have a medication allergy [documented], that's the biggest thing is safety." The ATs in the industrial setting also spoke of documenting for patient safety in relation to injury prevention. Luke commented: "If I find 4 people have sprained their ankle at the recovery boiler, now we can start to change that area, maybe, to make it so that doesn't happen as much."

Our participants also perceived that documentation was important because their current treatments were linked to long-term patient outcomes. Amanda noted:

I work mainly in a military setting; for me, documentation is key. When they retire, if they need to get follow-up care with the VA [Department of Veterans Affairs], having documentation is important, for not only them right now but also in the future for them to get follow-up care.

Demonstrating Value. Our participants were also motivated to document because it helped them demonstrate their value as ATs. Zoey explained that documentation "proves our value as an athletic trainer in the physician practice setting." Documenting to show value was a particularly strong theme for the emerging setting ATs. For example, Jolene, who worked in the performing arts setting, expressed:

I have definitely used numbers to advocate for higher fees. We are supported by student fees, so being able to... pull numbers out and be able to demonstrate value with those is super helpful, so that's an important part of documentation.

Sean, an industrial AT, also spoke of the importance of demonstrating value: "I think it's important to have a document for what we're doing overall, so we can demonstrate our value and what we do each day, so people understand what we're doing." In the military setting, ATs' value was often quantified by reimbursement. Paul said:

That's what helps get reimbursed from Tricare and the insurance companies. The better your note is, the better the reimbursement, and that shows the more worth that you have to the military.

Table 2.   Guidelines for Documentation: Additional Quotes

Regulatory Requirements
"Documentation is also vital for them in terms of workers' compensation paperwork. If there's a lawsuit, they want to prove how much time and effort they put into their own duty." – Kirsty, public safety
"Our billing office is always talking about how if we had an electronic medical records [system] and we could hit these specific guidelines that Medicare is going to require as of this year and every year is different." – Julia, physician practice
"There's certain durable medical equipment that we do stock and charge for and so we want to make sure that all of our documentation is in order, so that students can get reimbursed if they make a claim to their insurance company." – Jolene, performing arts

Employer-Specific Requirements
"When I was learning in residency, I was told everything that we write has to hold up in court, so basically everything that the provider says, everything that they talked about in the room, is getting documented." – Zoey, physician practice
"Yes, they require a ton of patient documentation, and we follow a lot of federal guidelines on med[ical] training on HIPAA compliance... also, my company is known as one of the leaders in providing services, so we tend to have many more specifics that we will insist upon to follow very specific standards like meaningful use, quality, a lot of outcomes measures. Our docs are known for their plethora of research that they do day in and day out." – Cindy, physician practice
"I always have to let them know whether or not that person is able to deploy or go to another base, and I always have to let them know whether or not, it's called the DNIF: 'duties not including flying.' I always have to put that in every single note, regardless of what body part I worked on." – Cathy, military
"The practice that I work in, the biggest thing is that he looks for in like an H and P, is the pain score, the functionality of normal, and pain medicine, mostly because he does depositions, and those are the biggest things for depositions when they come around.... So my physician really wants us to do it in a certain way, as long as you have those 3 things down, the rest is what you feel is necessary." – Mel, physician practice
"We put the note in [when] we do the AP section, which is where we would end up coding them with the ICD 10 code, and then as long as we get those in, that's the most important part and that your codes match your notes." – Amanda, military
"I think in the clinical setting, it's a little bit easier because you're required to do it. I feel like when I'm at an outside coverage and event coverage... you don't actually document. You don't put all of your things down like as you would in the clinic." – Christine, physician practice

Electronic Medical Record Templates
"The Navy has a predetermined evaluation form that is scanned into TWMS [documentation system]. It is the military-wide generic initial evaluation. So when they're initially seen for a musculoskeletal injury, we pull up this documentation, and like I said, it's cut and paste into the note." – Paul, military
"During patient clinic days, I have my notes precharted, and I already have dot phrases, so I already have a specific template for lumbar spine, cervical spine, thoracic spine, head injury, head trauma. So that just makes it easier [to] make sure that I'm not missing any pertinent details or questions that may need to be asked for that specific case for that specific chief complaint." – Serena, physician practice
"Whether you're submitting for billing and you have to meet all those criteria or you're just trying to document a thorough exam, I guess the most important part is truly just having a system, and you do it the same every single time, and you're consistent and move from there. Now the details change for each patient and services provided, but in general, you're still following the same algorithm each time." – Louisa, physician practice
"Each place that I've worked in the military setting is different on how they like to have their notes written. I usually have my own template, but then I get with the flight doc[tor] or my supervisor, who's going to be reviewing my notes, and I like to ask them what they like to see like as far as template format." – Amanda, military
"In the EHR system, everyone that we see is entered in there, either because they have a prescheduled appointment or if they come [as] a walk in, we should have our front-desk staff entering them, and even if they come for ice bath, self-referring themselves, they are entered into our EHR scheduling side, which then creates a ticket, so that we can always go back and see who did what." – Jolene, performing arts

Abbreviations: AP, assessment and plan; EHR, electronic health record; H and P, history and physical examination; HIPAA, Health Insurance Portability and Accountability Act; ICD 10, World Health Organization. *International Statistical Classification of Diseases and Related Health Problems* (10th rev, 2nd ed. Geneva, Switzerland: World Health Organization; 2004).

Real-Time and Continuous Documentation

Participants in our study were self-described thorough and efficient documenters. These ATs were seeing high patient volumes within short time frames, but various strategies facilitated timely documentation. Additional supporting quotes are listed in Table 4.

Strategies. Participants communicated strategies for documentation that typically consisted of documenting in real time or immediately after seeing a patient, as Maya, who worked in the clinic setting, did:

Every time I [enter] a room [with] a patient, I have to document what they're being seen for, pain level, do they have any allergies, vitals, and also anytime we're answering a patient phone call, that is also documented in the patient's chart. I just document as I talk to the patient.

Ava also documented in real time: "I try to dictate as I see the patients after each encounter."

Although most emerging-setting ATs did not work in the same structured environment as the clinic group, they pursued similar systematic approaches to continuous documentation throughout the day. Sean, an industrial AT, provided care in a variety of facilities and did not have a central office. He addressed his approach to documentation:

Typically, at the end, before I leave the client, I just try to find an office, sit down for about half an hour or so,

Table 3. Motivation to Document: Additional Quotes

Patient Safety and Outcomes

"For the patient, it's for them to have accurate medical records. So the practice that I work in, we are a surgical practice, so operative reports, even like disability paperwork from the pre-op[erative] notes to the post op notes, everything needs to be as accurate as possible because of the life-threatening things that can happen after surgery." – Mel, physician practice

"So the reason we document is so that we can start to track who's starting to get hurt when, what time of year, and if it becomes a common trend, how we can start to avoid that." – Sean, industrial

"I try to remind myself that whenever I'm doing this, it is for not only the current issue that's going on for the airmen but for long term as well. I know that this can make or break someone getting full disability from the government and from the VA or not, so I try to be as descriptive as possible because I know it will be reviewed at some point." – Cathy, military

Demonstrating Value

"I document and make sure their process goes as well it possibly can and then, of course, for proving that the clinic is worth having in the department and so that's where more than the billing and some of the other aspects come into play [in] documenting how much time each officer spends in the clinic… what kind of treatments they're doing, which equipment gets used the most, so that way if something breaks, I can say 'we use it all the time,' so just in general proving the worth of myself in the clinic and the items in the clinic is so important." – Kirsty, public safety

"And so it goes out to the bottom dollar of the bottom line, the dollar amount, how much you're saving in the military. We can prove this slowly with what they're paying for outside their own referrals as well when they retire and pay back to the VA [Department of Veterans Affairs]. That's what the return of investment is going to be with athletic trainers." – Juan, military

and just make sure that I can record all before leaving. That way, I don't have to go home and try to remember all the interactions with patients that I've had.

Employer Time Requirements. Several ATs indicated that their real-time documentation was often guided by employer expectations of timely completion of documentation. Lisa, who practiced in the industrial setting, stated: "We are now requiring a 48-hour window for day shift and a day of documentation [completion] for our night shift." She went on to say that the time guidelines helped keep multiple providers aware of a patient's status. Additionally, ATs in the military setting abided by time requirements for documentation. Amanda conveyed: "For most med[ical] groups, they tell you [you] have about a 72-hour business-day window [to complete the documentation]." Employers required our participants to complete their documentation in various time frames, ranging from 4 to 72 hours for most individuals.

Learning Curve for Documentation

Many participants remarked that they learned documentation on the job because they perceived documentation to be different and more detailed than in other athletic training settings and what they learned during professional education. Many attributed their high-quality documentation procedures to practice and experience, which was guided by on-the-job training and mentorship. Additional supporting quotes are listed in Table 5.

Documentation Unique to Settings. Participants described learning the nuances of documentation that were different than their previous experiences in professional education or traditional practice settings. Cathy commented:

"I just think being able to document the way that I do for the military is definitely different than I have in the past, whether it's been paper documentation or an EMR. I feel like this is more in depth." Serena, a physician practice AT, recommended that educational programs teach how to

Table 4. Real-Time and Continuous Documentation: Additional Quotes

Strategies

"When I was doing my residency, I was in the room with the physician dictating, so I was either dictating or he was dictating into Iscribe [medical transcription app] and then where I'm currently working, I'm out of the room and the physician is dictating, so I've kind of done both sides of it." – Jason, physician practice

"I just try to be as efficient as possible. A lot of the note can be completed before we enter the room, and so I tried to be really efficient putting in the diagnosis, the prior treatments, the surgical procedure… I try to get a lot of that kind of taken care of before we go in the room, so I can document what the patient talks to the provider about and the provider's history and physical exam, so I just try to be efficient and get everything done before we leave for the day." – Zoey, physician practice

"Documentation happens throughout the day because if I don't write it down the minute it happens, it's almost like it didn't happen sometimes, with the number of different people that I have coming." – Kirsty, public safety

"It's always same day. It's not always right after the same patient, but I always finish my morning before lunch. And afternoon before I go home. So, it's always within a 6-hour time period, but for the most part, I can get it done pretty quick within a couple of patients." – Julia, physician practice

Employer Time Requirements

"All my notes have to be done within 72 hours. I always tried my best to document all my notes, all my treatments, any evaluations, any physician referrals, that kind of thing by the end of that day because that 72-hour window also includes when the physician has to sign off. If not, that's usually the thing that I do as soon as I can the next day." – Cathy, military

"We have a very strict policy, this physician and I, that we don't leave until everything's completed for that day because the day is not done till we already have everything written down, so I think that I do very well in that regard on dictation and documentation." – Ava, physician practice

Table 5. Learning Curve for Documentation: Additional Quotes

Documentation Unique to Settings

"I was not really exposed to [good documentation] prior to coming to work with a physician. So when I was in school and working in the collegiate setting, that was just bare-bones documentation. We would barely even get a list of who had been in the athletic training room, let alone what was performed at that time, so I felt like I was just trying to keep my head above water when I first started learning different techniques, tactics on how to document, and I don't think it's pushed heavily enough [in education]." – Ava, physician practice

"I know we are we are 100% guilty of this as a profession, as we have so many acronyms, and I remember learning how to write a SOAP [subjective, objective, assessment, plan] note with all the medical abbreviations in undergrad[uate school], and [when] we come into the physician practice setting, that was a huge no-no. You can't write a note with all these acronyms that another doctor who's not trained in orthopaedic tests reads and has no idea what you're saying. So... learning how to just document as health care professionals and not just as athletic trainers is really important because that will help interprofessional communication, that will help reading others' written documentation and things like that." – Zoey, physician practice

Learning on the Job and Through Mentors

"We have a 6-week training program with every new hire, and part of that [is] a very step-by-step systematic approach to all of our systems, in that they're learning what makes sense in a patient-flow process as well as how to collect and document every single thing that are [sic] needed for the patient to make sure everything is accountable." – Cindy, physician practice

"It helps to have really strong colleagues around me who you work alongside someone in clinic and read their notes from prior patients, 'Oh, wow, they really laid that out really well, really explained that well' and that kind of helps hold me to a higher standard. They wrote a really great note from last time. so I have to be able to write an equally good note to give the next person that same information, so that kind of helped hold me accountable a little bit too." – Zoey, physician practice

"I was lucky that when I came in, I worked with other athletic trainers that were on a different contract and basically showed me the way. But my colleague that came into the position had no clue and it was like, well, how would she know, because no one told her." – Cathy, military

document what insurance companies want and make sure that notes are detailed enough and readable for the insurance companies to understand them easily.

Learning on the Job and Through Mentors. Our ATs identified several mechanisms for learning these setting-specific documentation guidelines, ranging from structured on-the-job training to informal mentorship. Most ATs learned on the job from a physician or colleague, as Julia did: "In our practice, it's mostly physician directed. So I feel very highly trained, very highly educated by my physician, because that makes his job easier and more efficient." Amanda discussed implementing a peer-review process for documentation at different military bases:

ATs that are working at the [other] air force base are going to be working with us and reading each other's evaluations, and I think that will help me see how another AT documents. I think there's always room for improvement, and I think the peer evaluations will help.

DISCUSSION

Guidelines for Documentation

Our investigation revealed that ATs in clinic, physician practice, and emerging clinical settings had clear guidelines for completing patient care documentation. These findings differ from those of previous studies[3,4] conducted with ATs employed in the secondary school setting, who described a lack of expectations and accountability from employers regarding patient care documentation. Similarly, researchers[6] who primarily examined secondary school and collegiate and university ATs found that their workplace cultures did not emphasize the need for documentation, thereby creating a barrier to documenting. Participants in our study perceived that documentation was a requirement, not a choice, in their positions, suggesting that employer expectations motivated clinicians to complete patient care documentation.

We also determined that the content of ATs' documentation in these clinical settings was heavily guided by regulatory requirements, such as insurance reimbursement and workers' compensation. These findings have been demonstrated in previous studies of ATs' documentation practices. However, this result was not surprising considering that most of our participants worked in a medical setting and interacted frequently with other health care providers. Researchers[17,18] have suggested that the medical model of delivering athletic training services aligns more closely with patient-centered care than with the athletics model. It appears that working in a medical environment may have facilitated more thorough patient care documentation by our participants.

Employers should consider providing clear guidelines and expectations for the content and timely completion of patient care documentation. In the athletic model of health care delivery, in which the employer is a school district and a supervisor is an athletic director, ATs should contemplate developing their own guidelines for appropriate documentation in consultation with their supervising or collaborating physician. In clinical settings in which an AT supervises other ATs, these individuals should consider developing standards for documentation within their facilities. Providing clear guidelines and holding ATs accountable for patient care documentation may facilitate higher quality and more timely completion of documentation.

Finally, our participants used EMR templates extensively to help facilitate thorough documentation that met these employer and regulatory requirements. This finding, along with previous results,[13] suggests that electronic documentation helps facilitate efficient and complete documentation. Although many ATs faced barriers to using EMRs,[13] they should be working with employers to overcome these barriers and obtain access to them.

Motivation to Document

Participants in our study were motivated to document for patient safety and long-term wellbeing. This is an encouraging outcome, as it indicates that ATs are providing patient-

centered care. This theme of documenting for patient safety is also new to the literature, as earlier investigators[3,6] noted that ATs primarily documented for legal protection, tracking patient progress, and communicating with other clinicians. Athletic trainers across practice settings should consider how their documentation can aid in injury prevention, patient safety, and long-term positive patient outcomes.

In addition to patient safety, our participants were motivated to document in order to demonstrate their value to employers. This was particularly emphasized by the emerging-setting ATs, who wanted to show their contributions to working with military personnel, industrial personnel, and public safety employees. Earlier authors[6] observed that ATs cited value as a reason for documenting patient care. Other researchers[19,20] and the NATA[21,22] have also encouraged ATs to record patient encounters and outcomes to demonstrate their value. We urge ATs to access the available resources[21,22] to show their value through documentation.

Real-Time and Continuous Documentation

Our participants depicted themselves as efficient documenters who often recorded patient encounters in real time or immediately after seeing the patient. This finding differed from that of previous researchers[3,6] who noted that ATs usually completed documentation at the end of the day or a few times a week. Most ATs in our study treated patients on a schedule, which may have facilitated this routine practice of documenting immediately after seeing a patient. However, many of our participants described seeing high volumes of patients in a compressed time period, similar to ATs in the secondary school and other settings.[3,6] Additionally, several of our participants' employers placed time limits on when documentation should be completed (eg, by the end of the day or within 72 hours). If employers or supervisors have expectations regarding the content of documentation, they should consider the added accountability of a time requirement for completing the documentation. Our ATs specified using strategies such as dictation, templates, EMRs, and blocking time to document to help facilitate efficient documentation. Those ATs in other settings may consider using these strategies to increase the frequency of their documentation.

Learning Curve for Documentation

Most participants described on-the-job training for documentation as a necessity. For some ATs, this was because of setting-specific documentation requirements. Others perceived that their professional education or previous work experience (or both) in traditional athletic training settings prepared them inadequately for the rigorous documentation required in their current job. These results emphasize the importance of onboarding and orienting new employees to workplace expectations. In examining the transition to practice, authors[23] have identified ATs' struggle with role ambiguity, including documentation requirements. Providing clear expectations for documentation and orienting employees to these requirements are important steps in the hiring process, as noted by previous researchers[23] and our participants.

In addition to clear expectations and onboarding, ongoing support and mentorship can help individuals learn thorough and efficient documentation practices. Our ATs acknowledged the value of having colleagues serve as mentors to help them learn good documentation practices, and in existing literature, investigators[23] emphasized the value of mentorship. Our participants also addressed the value of having colleagues peer review and model effective documentation. Employers and supervisors should consider integrating mentorship and peer review of documentation. An AT who is the sole health care provider in a workplace should consider reaching out to colleagues to peer review his or her documentation. Similarly, a school district with multiple ATs employed individually at its schools could implement a mentoring and peer-review program. Finally, professional education programs should ensure they are teaching students the complexities of documentation they may face in a variety of settings, including insurance reimbursement guidelines, meaningful use standards, and appropriate use of abbreviations.

Limitations and Future Research

Although our study included ATs from a variety of clinical settings, some environments (eg, hospital, extreme sports, and rodeo settings) were not represented. Therefore, these findings may not apply to ATs working in all clinic, physician practice, and emerging settings. Our characterization of documentation practices depended on participants' self-reported behaviors, such as their time spent documenting and the number of patients treated, which may not have represented their actual behaviors. Future researchers should examine actual documentation behaviors using methods such as observation and document analysis. Considering our key finding that employer requirements heavily guided the participants' behaviors, it would be interesting to explore these requirements in more depth and across settings to potentially provide more guidance for ATs, employers, and educators.

CONCLUSIONS

Athletic trainers working in the clinic, physician practice, and emerging clinical settings were self-described thorough and efficient documenters. Participants described their documentation practices as heavily guided by employer and regulatory requirements, and they used EMRs and documentation templates to ensure they followed these guidelines. Additionally, ATs were motivated to document because they perceived it as important to their patient's safety and well-being, and documentation helped demonstrate their value to their employers. These ATs completed their documentation in real time or immediately after seeing the patient and rarely waited longer than a day to record their patient encounters. They described developing this efficiency with practice and by using a system in response to the time limits many employers placed on completing documentation, which further encouraged their efficiency. Finally, most ATs learned documentation on the job via training, practice, and mentorship. Employers and supervisors in a variety of settings should consider developing clear expectations for documentation, communicating these standards, and holding employees accountable to facilitate thorough and efficient documentation.

Our findings echo those of previous researchers[8] who identified differences among athletic training clinical

practice settings. In contrast to previous investigations on documentation practices, ATs in clinic, physician practice, and emerging settings appeared to have different perceptions of and self-reported behaviors regarding documentation practices. Participants in this study seemed to document thoroughly and efficiently and were motivated to do so to ensure quality patient care. These practices were facilitated by employer requirements and on-the-job training. Athletic trainers in other settings should reflect on their documentation strategies and consider whether more employer structure and employee mentorship would facilitate more timely and complete documentation. Because on-the-job training was important for many participants, educators may also think about offering more extensive training on documentation practices for a variety of clinical settings, both didactically and clinically. Because documentation varies among practice settings, professional and continuing education providers should encompass the unique characteristics and needs of each of these settings. Finally, additional research on documentation practices across other settings that have yet to be investigated may provide a more holistic understanding of documentation practices by ATs.

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