Medical Claims at National Collegiate Athletic Association Institutions: The Athletic Trainer's Role

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Context: National Collegiate Athletic Association (NCAA) institutions are required to certify insurance coverage of medical expenses for injuries student-athletes sustain while participating in NCAA events. Institutions assign this role to a variety of employees, including athletic trainers (ATs), athletic administrators, business managers, secretaries, and others. In 1994, Street et al observed that ATs were responsible for administering medical claim payments at 68.1% of institutions. Anecdotally, ATs do not always feel well suited to perform these tasks

Objective: To investigate the ways athletic associations and departments coordinate athletic medical claims and the role of ATs in this process.

Design: Cross-sectional study. **Setting:** Online Web-based survey.

Patients or Other Participants: All 484 National Athletic Trainers' Association members self-identified as a head AT within an NCAA collegiate or university setting were solicited to respond to the online Web-based survey. Responses from 184 (38%) head ATs employed in collegiate settings were analyzed.

Main Outcome Measure(s): Institutional demographic characteristics, type of insurance coverage, person assigned

to handle insurance claims, hours spent managing claims, and training for the task.

Results: In 62% of institutions, an AT was responsible for processing athletic medical claims. The head and assistant ATs spent means of 6.17 and 10.32 hours per week, respectively, managing claims. Most respondents (62.1%) reported no formal training in handling athletic medical insurance claims. When asked when and how it was most appropriate to learn these concepts, 35.3% cited within an accredited athletic training program curriculum, 32.9% preferred on-the-job training, and 31.1% selected via continuing education.

Conclusions: At NCAA institutions, ATs were responsible for administering athletic medical claims, a task in which most had no formal training. An AT may not possess adequate skills or time to handle athletic medical claims. Even if ATs are not solely responsible for this task, they remain involved as the coordinators of care. Athletic training programs, professional organizations that offer continuing education, and hiring institutions should consider focusing on and training appropriate personnel to manage athletic medical claims.

Key Words: primary insurance, secondary insurance, health care administration

Key Points

- A total of 93% of National Collegiate Athletic Association institutions purchased secondary insurance policies for all their student-athletes.
- Athletic trainers were handling athletic medical claims in 62% of institutions.
- Most athletic trainers (62.1%) received no formal training in managing athletic medical claims.

ational Collegiate Athletic Association (NCAA) institutions are required to certify insurance coverage of medical expenses that result from athletically related injuries sustained while students participate in NCAA events (NCAA Bylaw 3.2.4.8). An NCAA covered event was described by Lens and Lens² as any intercollegiate sports activity that includes practices and conditioning sessions, team travel, and competitions. National Collegiate Athletic Association institutions will either purchase or require their student-athletes to have a primary insurance policy. In most cases, NCAA institutions also purchase secondary insurance for their studentathletes.³ The administration of athletic medical claims involves ensuring that the primary insurance (if applicable) is used, submitting proper and timely claims to the secondary insurance company, and making payments if the institution chooses to pay out of pocket. The administrator also handles any complications or concerns

from the primary insurance, secondary insurance, or providers of the service throughout the process.

Institutions assign this role to a variety of employees, including the head athletic trainer (AT), assistant ATs, athletic administrators, business managers, secretaries, and others. In 1994, Street et al³ found that ATs held this role in 68.1% of institutions and that most ATs were undertrained to perform this task: 94% received no formal training and learned "on the job."

Street et al³ also observed that ATs were spending from 15% to 25% of their workday handling athletic medical claims, which is just a single component of the administrative tasks for which ATs are responsible. The National Athletic Trainers' Association's (NATA's) "Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics" advised that all administrative tasks should make up no more than one-quarter of an AT's workweek. Although ATs appear to be dedicating too

much time to handling athletic medical claims, the "Appropriate Medical Coverage for Intercollegiate Athletics" (AMCIA) document⁵ noted that two-thirds of NCAA institutions failed to meet the staffing recommendations for ATs.

In 2011, Schilling⁶ observed the entry-level educations and perspectives of ATs in collegiate settings. A large number of participants felt that "insurance issues" were not taught adequately in athletic training programs but that learning about insurance was necessary when becoming employed.⁶ Focused on the nursing profession, Field⁷ and Corlett⁸ stated that students must be patient (*a function of time*) until they have attained sufficient knowledge and acquired sufficient experience to assemble all of the essential components of nursing into a coherent whole. Field⁷ and McHugh and Lake⁹ supported this statement by observing that didactic learning alone did not provide sufficient education and must be accompanied by clinical learning for an optimal experience.

The objective of our research was to better understand how athletic medical claims were handled at NCAA institutions and to examine the roles and responsibilities of ATs at those institutions. We also explored how to improve education and training during and after completing the professional athletic training degree program.

METHODS

We used a cross-sectional design to obtain information regarding athletic medical claims and the role of the AT in handling them. Selection of an online Web-based survey was purposeful to engage a geographically diverse group of respondents, reduce cost, and allow us to download data directly into analytic software to reduce recording errors.

Data-Collection Procedures

After we received institutional review board approval from the University of Central Florida, potential participants were invited by an e-mail distributed by the NATA. This e-mail provided each potential participant with the purpose of the research, consent information, and institutional review board approval. The e-mail also contained a link directly to the survey. A reminder e-mail was sent 2 weeks later.

Participants

The NATA membership database had 484 members listed who self-identified as a head AT within a college/university setting. A total of 199 responded (41%, n = 199). A power analysis was not performed as we sent the questionnaire to all 484 head ATs. The response rate makes it highly likely that these data reflect the population from which the sample was drawn. Of the 199 responses, 7 were excluded because the recruits did not consent to participate. Of the 192 remaining, 8 were excluded because the recruits did not answer past the sixth question of the survey. The remaining responses (38%, n = 184) were then analyzed. All participants were required to affirm employment in a collegiate setting as the head AT (ie, not retired or unemployed) at the time of the study.

Demographic Data

Participants were asked for their institution's size and athletic division, as well as the number of ATs and student-athletes. In some situations, the head AT who completed the questionnaire may not have been the individual who was assigned the role of handling athletic medical claims; rather, the head AT may have had only oversight knowledge of the athletic medical claims process. The participants did not provide any personal or identifying information about themselves.

Instrumentation

Data were collected via an online collection site (Qualtrics, Provo, UT) during the fall of 2015. Participation was contingent on access to a reliable computer, laptop, tablet, or mobile device that could access the Internet and Qualtrics.com.

We used the questionnaire of Street et al³ as a template for this research. Modifications were made to update the language, terminology, and current practices regarding athletic medical claims. The 13-item questionnaire contained 9 multiple choice, 2 choose all that apply, and 2 fill-in-the-blank questions. The questionnaire also included "display logic" questions, which offered further questions or options depending on the answer chosen. The participants did not report any personally identifiable demographic information related to name, gender, age, race, or ethnicity but did provide demographic information regarding the athletic division of their institution. Some of the questions are listed in Table 1.

To ensure that the questionnaire was a pertinent tool, modifications were developed and evaluated by 2 ATs with a combined 10 years of experience serving as insurance coordinators at Division I institutions. Modifications included requesting the size of the institution, adding *insurance coordinator* as an option for the person primarily responsible for the payment of athletic medical claims, asking for the number of hours spent each week by the AT on athletic medical claims, increasing the answer options regarding formal training, and inquiring if the training received was adequate, as well as where ATs should be educated to handle athletic medical claims.

Data Analysis

The results were analyzed using SPSS (version 21; IBM Corp, Armonk, NY). Frequencies were calculated for the individual components of the questionnaire. Descriptive statistics were used to calculate means \pm standard deviations for items 3–6 of the questionnaire.

RESULTS

The number of full-time certified ATs on staff at the participating institutions (n = 184) was 3.84 ± 2.010 (range, 1–14). The number of graduate assistants, interns, and part-time certified ATs on staff was 1.82 ± 2.285 (range, 0–15). Most institutions (71.3%, n = 129) required their student-athletes to have their own primary medical insurance (purchased by the student-athlete or the parent or guardian). The majority of institutions (93%, n = 145) purchased a secondary insurance policy to pay bills that were not covered by the student-athlete's primary insur-

Table 1. Questionnaire Items^a

What is your institution's National Collegiate Athletic Association affiliation?

Other sports are Division I, and football is FBS.

Other sports are Division I, and football is FCS.

All sports are Division I, and institution does not have a football program.

Most sports are Division II.

Most sports are Division III.

What is the size of your institution?

0-10 000 students.

10001-20000 students.

20 001-30 000 students.

30 001-40 000 students.

40 001-50 000 students.

>50 000 students.

Which of the following is true at your institution?

The institution purchases a secondary insurance that will pay bills that are not covered by the student-athlete's primary insurance.

The institution does not purchase secondary insurance—all athletic medical claims are paid out of pocket by the college/university/athletics once the primary insurance has paid their part.

The institution pays all athletic medical claims out of pocket regardless of whether the student-athlete has primary medical insurance. The institution does not expect primary medical insurance plan to pay any claim.

How many full-time certified athletic trainers (ATs) are on staff in your athletic department?

How many graduate assistant, intern, and part-time certified ATs are on staff in your athletic department?

Who is primarily responsible for the payment of athletic medical claims?

Head AT.

Associate/assistant AT.

Full-time insurance coordinator who is not a practicing AT (20 hours per week).

Part-time insurance coordinator who is not a practicing AT (<20 hours per week).

Other administrator (business manager, secretary/clerical).

Other.

How many hours does the head AT typically spend on payment of athletic medical claims in a given week?

How many hours does the associate/assistant AT typically spend on payment of athletic medical claims in a given week?

Has this person had any formal training in the payment of athletic medical claims?

No.

Yes, within the curriculum of an undergraduate or graduate degree program in athletic training.

Yes, within the curriculum of an undergraduate or graduate degree program other than athletic training.

Yes, our institution trained this person (they did not have training within their degree).

I am not sure what training they have received.

Do you feel that the level of training this person had was adequate to perform the task?

Yes.

No, they had to learn a great deal on the job, but have managed well.

No, they had to learn a great deal on the job, and problems have resulted.

In your opinion, how/when would it be best for an AT to learn about the payment of athletic medical claims?

Accredited athletic training program curriculum.

Continuing education unit event.

Article/book reading.

On-the-job training.

Abbreviations: FBS, Football Bowl Subdivision; FCS, Football Championship Subdivision.

ance. Complete demographics of the participating institutions are reported in Table 2.

An AT was responsible for handling athletic medical claims in 62% (n = 114) of institutions. In Divisions I, II, and III, an AT was responsible 60.4% (29 of 48), 64.2% (34 of 53), and 61.4% (51 of 83) of the time, respectively. The number of hours spent by the head AT on this task was 6.17 \pm 5.24 (n = 86, range = 0–25 hours). The number of hours spent per week by an associate or assistant AT was 10.32 \pm 6 (n = 22, range = 3–20 hours). More specific data regarding who was responsible and the hours spent are provided in Table 3. Most participants reported that the person responsible for handling athletic medical claims had no formal training (62.1%, n = 103) and only 34.4% (n =

56) of participants believed that the level of training was adequate. More specific data regarding the training received by the individual who handled athletic medical claims are shown in Table 4.

Participants were asked how and when it would be best for an AT to learn about the payment of athletic medical claims. Of the 167 who responded, 35.3% (n=59) believed ATs should be trained via the curriculum of an accredited athletic training program, whereas 32.9% (n=55) preferred on-the-job training, and 31.1% (n=52) selected continuing education unit (CEU) events. Only 0.6% (n=1) stated that this education should be obtained by reading articles or books.

^a Questionnaire items are reproduced in their original form.

Table 2. Institutional Demographics

Variable	Frequency (%)
Institution's National Collegiate Athletic Association affiliation (n = 184)	
Other sports are Division I, and football is Football Bowl Subdivision. Other sports are Division I, and football is Football Championship Subdivision. All sports are Division I, and institution does not have a football program. Most sports are Division II. Most sports are Division III.	19 (10.3) 14 (7.6) 15 (8.2) 53 (28.8) 83 (45.1)
Size of institution ($n = 184$), No. of students	
0-10 000 students 10 001-20 000 20 001-30 000 30 001-40 000 40 001-50 000	139 (75.5) 25 (13.6) 12 (6.5) 7 (3.8) 1 (0.5)
No. of full-time certified athletic trainers (ATs; $n = 184$)	
1–3 4–6 >6	87 (47.3) 88 (47.8) 9 (4.9)
Number of graduate assistant, intern, and part-time certified ATs ($n=184$)	
0 1–3 4–6 >6 certified ATs	69 (37.5) 80 (43.5) 30 (16.3) 5 (2.7)
Primary insurance requirements (n = 181)	
Student-athletes are required to have their own primary medical insurance (purchased by the student-athlete or the parent/guardian).	129 (71.3)
Student-athletes are provided primary medical insurance if they can prove financial need (the primary insurance may or may not cover nonathletic or out-of-season injuries).	13 (7.2)
Student-athletes are not required to have their own primary medical insurance.	39 (21.6)
Secondary insurance requirements (n = 156)	
The institution purchases a secondary insurance that will pay bills that are not covered by the student-athlete's primary insurance.	145 (93)
The institution does not purchase secondary insurance: all athletic medical claims are paid out of pocket by the college/university/athletics once the primary insurance has paid its part.	11 (7.1)
The institution pays all athletic medical claims out of pocket regardless of whether the student-athlete has primary medical insurance. The institution does not expect the primary medical insurance plan to pay any claim.	0 (0)

Table 3. Athletic Medical Claims Responsibility

Variable	Frequency (%)
Individual primarily responsible for the payment of athletic medical claims (n = 184)	
Head athletic trainer (AT)	87 (47.3)
Associate/assistant AT	27 (14.7)
Other administrator (athletic director, school nurse, business manager, secretary/clerical)	22 (12)
Full-time insurance coordinator who is not a practicing AT (20 h/wk)	11 (6.0)
Part-time insurance coordinator who is not a practicing AT (<20 h/wk)	5 (2.7)
Secondary insurance handles processing	11 (6.0)
Student-athlete is responsible	13 (7.1)
Other	8 (4.3)
Hours/week typically spent by head AT on payment of athletic medical claims (n = 86)	
0–5	56 (65.1)
6–10	17 (19.8)
>10	13 (15.1)
Hours/week typically spent by associate or assistant AT on payment of athletic medical claims ($n=22$)	
0–5	6 (27.3)
6–10	10 (45.4)
>10	6 (27.3)

Table 4. Training Received on Handling Athletic Medical Claims

Variable	Frequency (%)
Has this person had any formal training in the payment of athletic medical claims? (n = 166)	
No	103 (62.1)
Yes, within the curriculum of an undergraduate or graduate degree program in athletic training	10 (6.0)
Yes, within the curriculum of an undergraduate or graduate degree program other than athletic training	2 (1.2)
Yes, our institution trained this person (he or she did not have training during the degree program)	22 (13.3)
I am not sure what training he or she received.	29 (17.5)
Do you feel that the level of training this person had was adequate to perform the task? ($n = 163$)	
Yes	56 (34.4)
No, he or she had to learn a great deal on the job but has managed well.	90 (55.2)
No, he or she had to learn a great deal on the job, and problems have resulted.	17 (10.4)

DISCUSSION

Typical Athletic Medical Claims Practices

When an athletic injury occurs, the primary insurance company is usually billed first, and the remaining balance is billed to the secondary insurance. This is usually the least expensive and less risky route for the institution. In 1994, Street et al³ found that approximately 85% of institutions purchased a secondary insurance policy to pay for medical costs in excess of the student-athlete's primary insurance coverage. However, they did not investigate whether student-athletes were required to have primary insurance. We observed that 93% of institutions purchased a secondary insurance policy, but 21.3% of participants also reported that their institutions did not require studentathletes to have their own primary insurance. Most institutions either required (71.3%) or provided primary insurance coverage if a student could prove financial need (7.2%).

An institution that classifies itself as *self-insured* accepts complete financial responsibility for athletic medical expenses.³ If an athletic injury occurs, the institution pays the bills out of pocket. Self-insured institutions may still require student-athletes to demonstrate they have a primary insurance policy in order to limit risk. If an athletic injury occurs, the primary insurance is billed first, and the institution pays the remaining balance out of pocket. Two studies^{3,10} conducted in the 1990s showed that 4% to 5% of institutions were considered self-insured. In our research, the number of institutions considered self-insured had increased to 7.1%.

The Role of the AT in Processing Athletic Medical Claims

In the processing of athletic medical claims, the AT serves as a gatekeeper among student-athletes, health care providers, and insurance companies. The fifth edition of the Athletic Training Education Competencies (2011)¹¹ required athletic training programs to teach and assess the content area of health care administration. Health care administration includes risk management, health care delivery mechanisms, insurance, reimbursement, documentation, patient privacy, and facility management. The competencies mandate that the following must be included in the curriculum: common health insurance models; insurance contract negotiations; the common benefits and exclusions identified within these models; and the criteria

for selection, common features, specifications, and documentation needed for secondary, excess accident, and catastrophic health insurance. Programs are not restricted in how they address these competencies and have discretion regarding how to present and assess these topics. Because of this discretion, topic emphases may vary among programs and may be minimal in some programs. This can result in a lack of preparation when the AT enters the workforce. 12

Although processing athletic medical claims has become a large portion of many ATs' job responsibilities, 62.1% of our respondents stated that the person in this role had no formal training. This remains concerning but is an improvement from the 1994 results³ that showed 94% reported no formal training.

Time Constraints and Ramifications

In 1994, Street et al³ found that ATs were handling the athletic medical claims process at 68% of institutions and the head AT, assistant AT, or secretary or clerical person responsible for the task was requiring 15%, 25%, or 50%, respectively, of the workday. We noted that ATs were handling athletic medical claims at 62% of institutions and spending 6-10 hours a week. During a 40-hour workweek, 6 to 10 hours handling athletic medical claims can constitute up to 25% of an AT's time.3,4 In 2010, the NATA released the "Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics,"4 which assessed the factors affecting health care professionals' time for all tasks associated with athletic training. The units of measure for the time allotted to each task are called *health care units*. The recommendations stated that a single AT could reasonably manage 12 health care units and that this should be the starting point for each institution. Administrative tasks could account for a maximum of 3 units out of the 12. This 3-unit maximum translates to the 25% of total work time that should be used to perform all administrative tasks.⁴

Given the extensive list of administrative tasks ATs already perform, it is troubling that medical claims take up such an extensive portion of this time. If ATs are dedicating the amount of time that should be used for administrative tasks as a whole to a single administrative task, it is logical to assume that time is being drawn away from other important tasks. This possibility is consistent with the results of Aparicio et al,⁵ who observed through the AMCIA that about a quarter of full-time ATs had administrative duties exceeding 40% of their workload.⁴

Potential Solutions

National Collegiate Athletic Association institutions have a responsibility to ensure that student-athletes have insurance coverage to defray the financial burden of significant illness and injury. This requires either the assignment of an individual with extensive training in medical claims or an increase in the size of the staff to ensure timely and efficient completion of claims. Twothirds of NCAA institutions failed to meet the AMCIA recommendations⁴ for the appropriate staffing of ATs.⁵ To handle medical claims, the NCAA should consider whether an AT or a health care administrator or health information manager is the best choice. Some institutions may claim they are limited by finances, yet 60%-65% of institutions assigned an AT these tasks, regardless of whether they were in Division I, II, or III. Therefore, financial status alone is unlikely to be driving these decisions. It is possible that little thought actually goes into who should handle athletic medical claims, but educating institutions and the NCAA about the topic may lead to solutions other than assigning an AT this role. Such education may require advocacy by ATs at the institutional level and by the NATA at the national level.

Since 1994, the frequency with which ATs handle athletic medical claims has changed only minimally. Following this trend, ATs will probably remain in this role for some time.3 Therefore, we also thought it important to examine the educational preferences of ATs: 35.3% believed training should be provided in the curriculum of an athletic training program, 32.9% preferred on-the-job training, 31.1% selected CEUs, and 0.6% chose reading of articles and books. Another potential solution is for the NATA Intercollegiate Council for Sports Medicine to host a continuing education event to ensure consistent training across the NCAA. Proper education will most likely require a multilayered approach, including didactic and clinical approaches and perhaps continuing education to ensure complete understanding of athletic medical claims.

The nursing profession educates via both didactic and clinical components. Field⁷ and Corlette⁸ described a function of time as the phase students inhabit until they acquire sufficient knowledge and experience to integrate all of the essential components of nursing. Benner¹³ described the function of time as the "practice-education gap," which refers to the gap between the knowledge and skills attained while in school compared with the knowledge and skills necessary for being successful in practice. Didactic learning alone is not capable of providing sufficient education. Clinical learning is essential to providing the knowledge necessary for the promotion of optimal education.^{7,9,13} Educators who practice in both clinical and academic settings promote the relationship of didactic knowledge and clinical skills because didactic learning alone will not result in clinical expertise.^{7,13}

Although training for handling athletic medical claims currently appears to be inconsistent, 35.3% of respondents believed this education should occur in the curriculum of an accredited athletic training program. Managing athletic medical claims should be addressed through clinical learning both in and out of the classroom. Also, an appropriate educational foundation allows the expedited acquisition of skills through experience.⁹ Professional

organizations should offer CEU events specific to the knowledge and skills needed to handle athletic medical claims in varied practice settings. Of course, some on-the-job training will likely always be necessary, but if the individual responsible for handling athletic medical claims has received adequate training before being hired, the function of time and practice—education gap will not loom as large.^{7,13}

LIMITATIONS

It is notable that our sample reflected a large number of Division III institutions (45.1%); Division II participants constituted 28.8%, and Division I, 26.1%. Therefore, the data may be slightly skewed by the uneven distribution. This could have occurred because ATs at larger institutions were covering football in-season during the study and may have lacked the time to participate. A potential solution could include soliciting respondents during the summer months, when most sports are out of season, which would perhaps allow the ATs more time to complete the questionnaire.

Another factor could have been the opting out of receiving research requests from the NATA by the head ATs of larger institutions. To remedy this limitation, future researchers could obtain contact information for the head AT at each institution individually rather than relying on the accessible database of the NATA.

CONCLUSIONS

We investigated the ways NCAA institutions handle athletic medical claims and determined that ATs were assigned to be the administrators who oversee policies and procedures related to these claims 60%-65% of the time. These ATs are dedicating 25% of their time to this single task, despite a recommendation that administrative tasks as a whole should constitute only 25% of an AT's weekly schedule. Two-thirds of NCAA institutions are understaffed, which could be a factor leading to this work-time imbalance. Thus, each NCAA institution should review its AT staff and their workloads to identify and address any imbalances.^{4,5,6} We also studied the education of ATs assigned to this role and determined that 62.1% of these individuals had received no formal training, and most had to learn a great deal on the job. This lack of time and training is concerning because failing to process athletic medical claims properly can lead to serious financial ramifications for the student-athlete, the institution, or both. National Collegiate Athletic Association institutions should examine whether the AT is the most appropriate person for this role. Considering the minimal change in the frequency with which ATs handle athletic medical claims, they will most likely remain involved in this task.² Athletic training programs and professional organizations should increase didactic and clinical education to ensure that ATs are adequately prepared. 7,9,13

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