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OUT-OF-NETWORK STUDENT-ATHLETE HEALTH CARE: A SURVEY OF THE BIG TEN CONFERENCE AND SELECTED HEALTH MAINTENANCE ORGANIZATIONS

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By

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ABSTRACT

Out-of-Network Student-Athlete Health Care:
A Survey of the Big Ten Conference and Selected
Health Maintenance Organizations

By

Kari Ann Langley

Student-athletes across the country are going away to school not knowing how their medical expenses are going to be covered, especially when their insurance company is a health maintenance organization (HMO). This particular type of insurance company may introduce problems when a student-athlete attends school out-of-network according to their policies. Fortunately for the athletic department, recommendations have been set forth to guide the primary insurance filer in acquiring coverage by the HMO.

The purpose of this paper is to determine if the Big Ten University insurance officers are utilizing these recommendations and to determine if the medical directors of HMOs are willing to consider these recommendations. Two separate surveys were devised. One was sent to all Big Ten athletic insurance officers and the second was sent to medical directors of randomly selected HMOs. It was found that the insurance officers were not utilizing the recommendations to the extent that it is suggested they be used and that the medical directors were inconsistent with their responses regarding the recommendations.

In loving memory of my mom, Pamela Ann.

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Finally, and most importantly, I thank God and pray he will continue to guide me as I close this chapter of my life and begin yet another chapter of my life.

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LIST OF ABBREVIATIONS

AMCRA.....American Managed Care and Review Association

CMP.....Competitive Medical Plans

GHAA.....Group Health Association of America

HMO.....Health Maintenance Organizations

NCAA.....National Collegiate Athletic Association

OOP.....Out-of-Plan

PPO.....Preferred Provider Organizations

USDE.....U.S. Department of Education

Chapter I

INTRODUCTION

Advancements in medical technology have been invaluable considering there has been a 50% increase in adult life span from 40 to 60 years (Ginzberg, 1995). However, along with these advancements in medicine come increases in health care costs (Arnett, Cowell, Davidoff, & Freeland, 1985). Most informed investigators give credence to the continuing rise in health care costs to the innovations that flow from the discoveries in the research laboratories (Ginzberg, 1995). Health insurance coverage is a necessity, therefore, in order to benefit from and afford these new discoveries and prosper from a longer life span.

A recent article published in the November issue of the NATA News described the delivery of health care for college students attending school away from home (Hunt, 1997). A more in-depth evaluation of the literature as a result of this article indicates that students attending college away from home are sometimes left without medical coverage (Hunt, 1997; Scitovsky, Benham, & McCall, 1981; Capell, 1997, Bushee, 1996; Clark, 1997; Chambers, Ross, & Kozubowski, 1986). Currently, the literature demonstrates that the lack of health insurance coverage is often overlooked when going away to school and 10% of all students will go to college uninsured (Clark, 1993).

As long as the percentage of students enrolled in college continues to increase as it has from 1985 to 1995 exhibiting a 27.8% to 34.3% shift, the issue of on-campus

medical care is significant (Census Bureau, 1997). Currently, according to the National Collegiate Athletic Association (NCAA), representing Division I college campuses across the nation, 12% of the entire student body are student-athletes, 8.5% at Division II, and 16% at Division III (Petr, 1998). From these figures, it is apparent that students are choosing to participate in sports while they continue their education. As these student-athletes participate in sports, they are also placing themselves at a higher risk to become injured than the normal population. Moreover, student-athletes commonly have different needs than those of the normal population in terms of time to diagnose, treat, and rehabilitate (Henehan & Jones, 1997).

Recently, the U.S. Department of Education reported that 79.6% of all college students are between the ages of 18-24 (U.S. Department of Education [USDE], 1997). Most employer health plans cover dependent full-time students up to 23 and sometimes 25 years of age. Therefore, the student-athlete is presumably covered by a health plan (Clark, 1993). However, it is important to understand how bills are going to be paid if a student-athlete becomes injured while on-campus (Sallis & Massimino, 1995; Clark, 1993). Student-athletes who are medically covered under a managed care service, specifically a health maintenance organization (HMO), are limited to the non-emergent care rendered to a certain geographical region (Clark, 1993; Chambers, Ross, & Kozubowski, 1986). Student-athletes do not choose which institution to attend on whether or not they are medically covered. In addition, athletic departments do not limit their search for talented athletes to the immediate vicinity of their university. In fact, recruiting at major universities stretches from coast to coast.

HMOs, begun 52 years ago, are health delivery systems which assume responsibility for financing and providing comprehensive health care services to a voluntarily enrolled population for whom periodic premiums are paid (American Managed Care and Review Association [AMCRA], 1994; Rogers, 1993; Anderson, 1995; Shouldice, 1991). Each enrolled member of an HMO is required to choose a primary care physician (PCP), often referred to as the "gatekeeper". This term means that the PCP is the person who sees all patients assigned to him or her and then makes the necessary referrals (Anderson, 1995). However, a PCP is usually located in the hometown of the student-athlete where the parents currently live. It is very difficult for the student-athlete to travel home to see his or her PCP when academics or athletic competition could be compromised. Moreover, if the student-athlete goes out of the college community for care, it is laborious for the university's medical staff to maintain proper records. Timely follow-up medical attention for the student-athlete will also be an issue because the PCP in control of the medical care for the student-athlete is not as accessible as the university's team physician.

As the number of HMOs and their enrollees increase, the chances of out-of-network coverage for non-emergent claims to be denied also increases. At this point, the out-of-network student-athletes have two choices. First, they may consider putting away money for possible medical expenses or, secondly, buy into the university's student insurance policy to cover those cases that are not an emergency. Regardless of the premiums already being paid by the parents to cover their dependents, this additional coverage may prove to be cost effective (Shea, 1995; Clark, 1993). However, it would be

important to be sure that the student health plan covers athletic injuries prior to purchasing.

Fortunately for the student-athletes, a majority of the universities will voluntarily assume secondary coverage for athletic related injuries and illnesses. For example, once the student-athlete's primary insurance company is billed; the university pays the balance (Lehr, 1992; Hart & Cole, 1992). As of 1992, 85% of all institutions provide secondary insurance coverage, including Divisions I, II, and III (Lehr, 1992). Therefore, the end result is generally increased out-of-pocket expenses for the university's athletic department due to every uninsured and out-of-network student-athlete unless the student-athlete returns home to acquire a proper referral (Walters, 1994).

Need for the Study

Effective communication between the insurance officers of athletic departments and the medical directors of insurance companies can possibly aid in addressing several issues. Insurance officers of universities are in need of finding methods for maintaining control over the medical care provided to student-athletes. These methods could prove to be effective in controlling out-of-pocket expenses in two separate areas: (1) for the athletic departments who do provide secondary coverage for athletic injuries and (2) for student-athletes whose athletic department does not provide secondary coverage for athletic injuries. This increase in communication can guide insurance officers to a better understanding of patterns of referral, reimbursements for medical services, and access to specialized testing (Henehan & Jones, 1997; Sallis & Massimino, 1995; Bushee, 1996, Walters, 1994).

Statement of the Problem

The purpose of this study was twofold. The first purpose was to determine if the college athletic insurance officers are currently communicating with HMOs, attempting to acquire out-of-network medical coverage for student-athletes. The second purpose was to determine if HMOs are knowledgeable about student-athletes falling out-of-network, who are not covered as determined by company policies, and if they are responsive to the requests of university insurance officers.

Research Questions

This study examined selected questions about the association between athletic insurance administration and HMOs. The survey, administered to the insurance officers of the Big Ten Conference, was designed to elicit responses to the following questions:

(1) Are university insurance officers in the Big Ten Conference trained to perform their job?

(2) Are the recommendations set forth in the literature being utilized to maintain authority over the medical care provided to student-athletes (see Table 1)?

a) What percentage of the insurance officers are requesting a temporary appointment of a primary care physician (Ray, 1994)?

b) What percentages of the insurance officers are requesting information from the insurance companies (Ray, 1994)?

c) What percentage of the insurance officers are pre-authorizing medical services? Which medical services are they pre-authorizing (Ray, 1994)?

d) What percentage of the insurance officers are mentioning free rehabilitation and follow-up visits in their conversations with the HMOs (Bushee, 1996).

e) What percentage of the insurance officers are requesting a percentage of the company's usual, reasonable, and customary rate (UCR) (Bushee, 1996)?

f) What percentage of the insurance officers are requesting the involvement of the team physician (Bushee, 1996)?

(3) What percentage of the insurance officers experience difficulty acquiring referrals to the university's team physicians from local PCPs for in-network student-athletes?

Table 1

Recommendations from the Literature Regarding Out-of-Network Care

Recommendation	Author
1. Explain that the rehabilitation and follow-up care is free.	Bushee
2. Attempt to financially negotiate coverage for student-athlete.	Bushee, Walters
3. Request that the team physician contact the medical director.	Bushee
4. Request that the HMO pay the deductible for the university's secondary insurance carrier.	Bushee
5. Request a percentage of the UCR.	Bushee
6. Request literature from the insurance company.	Ray, Bushee
7. Request that the HMO allow a temporary PCP appointment.	Ray

The survey administered to the HMOs elicited responses to the following questions:

(1) Are insurance companies cognizant of the issues surrounding out-of-network students such that they provide rider options to the subscribers?

(2) Are the medical directors responsive to the requests that the universities' insurance officers propose regarding out-of-network coverage for students?

(a) How frequently will insurance companies appoint a temporary primary care physician?

(b) How frequently will insurance companies forward literature regarding the policies and procedures of the company concerning out-of-network usage?

(c) How frequently will insurance companies pay a percentage of the UCR for medical services rendered out-of-network in exchange for free rehabilitation and follow-up visits?

(3) How frequently do medical directors of insurance plans place sports medicine specialists on the decision committee?

(4) How frequently do insurance officers provide transportability of coverage (allow the coverage to extend to the subscribers new geographical location) for those attending school out-of-network?

Assumptions, Limitations, and Delimitations

The researcher assumed that the responses elicited through the surveys administered were representative of both universities and HMOs around the country. The limitations of this study involved the usage of the after-the-fact survey method. This particular methodology induced some on-stage affects and attrition that possibly affected the results of the study. Finally, due to the large number of universities and HMOs in the country, the researcher limited the administration of the survey to insurance officers in the Big Ten Conference and a random selection of 45 HMOs were surveyed. This allowed for a manageable research study for the solitary author.

Chapter II

REVIEW OF LITERATURE

The purpose of this study was twofold. The researcher intended to assess if insurance officers in the collegiate setting are working to maintain costs and to keep student-athlete health care within the college community by utilizing the recommendations set forth in the literature. Secondly, the researcher wanted to determine if medical directors of HMOs are willing to consider the recommendations, presented in the literature by athletic trainers, concerning out-of-network student-athletes. The intent was to increase awareness of this issue, increase the continuity of care within the university community, and decrease out-of-pocket expenses by attaining coverage from the primary insurance company.

Overview of Key Articles

Athletic trainers and team physicians have recognized that managed care is a major component of their daily administrative insurance duties (Frankel, 1991). The need to understand managed care has been prompted by the urgency to address the challenges insurance policies pose regarding continuity of care, patterns of referral, reimbursements for medical services, and access to specialized testing (Henehan & Jones, 1997; Sallis & Massimino, 1995; Bushee, 1996). Although there have been many studies on managed care and its overall performance, there has been little research on the

significance of managed care and sports medicine on the health care of student-athletes (Sallis & Massimino, 1995).

In an article published in the NATA News, Rod Walters of the University of South Carolina also noted the issues surrounding out-of-network student-athletes and the limitations of their primary insurance (Hunt, 1997). He made a strong statement about increasing communication between the insurance companies and the university's health care team to help promote college community care for student-athletes. At Boston College, Steve Bushee (1996) has been arranging health care for out-of-network student-athletes and has proposed five recommendations to assist other athletic trainers: (1) explain to the HMO that the student-athlete is a student and going out of the university area for surgery or rehabilitation will disturb the education process in addition to delaying the return to competition, (2) make sure the HMO is aware that rehabilitation and follow-up visits are free if the team physician renders the services (3) contact the HMO's member benefits manager, explain the previous points, then begin to negotiate a payment agreement, (4) ask the team physician, as well as the parents, to contact the medical director and make the same points and, (5) request that the student-athlete's primary insurance company pay the university's deductible for its secondary insurance carrier. Some of these same guidelines were also brought up in Richard Ray's *Management Strategies for the Athletic Trainer* (1994). Ray suggests that the athletic trainer propose to the insurance company that a temporary primary care physician be appointed for the student-athlete's collegiate career.

Even though Bushee and Walters assert to having success with the recommendations aforementioned, Carol Malouf of Continental/NACDA Insurance, who

issues policies for many universities, noticed that many of the insurance companies are denying referrals. Greene (1997) attributes this to the outside pressures to decrease premiums, especially with the community-focused HMOs. There is an identified gap in the literature investigating out-of-network student-athletes, the administration of their health care, and the subsequent payment for medical services. However, it is important to understand how managed care has evolved, its characteristics, its goals and philosophies; how insurance companies are dealing with out-of-network issues; and then specifically how they tackle the issue of student-athletes who seek to further their education at institutions out of the insurance company's predetermined geographical service area.

Current Status of Coverage Provided by Athletic Departments

A 1992 article written, by Carolyn Lehr of the University of Georgia, investigated the extent and type of medical insurance coverage arranged for student-athletes at NCAA institutions. Lehr developed a questionnaire that demographically defined each institution as public or private, the undergraduate enrollment, NCAA division and sports offered. The second portion of her survey solicited information regarding the types and availability of insurance for the student-athletes. She demonstrated that there are currently no regulations that mandate coverage or limits for coverage for student-athletes. She does recognize, however, that the basic medical plan coverage is "limited to injuries sustained in scheduled games, supervised practices, and team travel" (p.12). However, her premise to investigate student-athlete heath care was prompted by the increase in litigation and insurance costs of medical care.

Lehr began by surveying the athletic directors of NCAA Divisions I, II, and II institutions. She found that most of the schools relied on other forms of insurance policies, such as student heath and/or the parent's policies, to provide primary coverage. Therefore, Lehr's postulate was upheld and is demonstrated by the following: 81% of Division I schools, 90% of Division II schools, and 88% of Division III schools offer insurance coverage secondary to that student-athlete's primary insurance for a combined average of 85% for all institutions. Only 13% of Division I schools, 7% of Division II schools, and 3% of Division III schools provide primary medical coverage for student-athletes injured in practice, competition, or sport related travel.

Managed Care Defined

Managed care organizations are delivery systems of health care with the goal of providing quality care at an affordable cost (Anderson, 1995; Campbell, 1997; Greene, 1997, Iglehart, 1992; Miller & Luft, 1994a; Emanuel & Brett, 1993). The concept behind the managed care plan is to keep people healthy by emphasizing accessibility and flexibility through careful selection of diverse physicians while monitoring, assuring, and improving the quality of care (Carter, 1997). There are currently three types of managed care: HMOs, the preferred provider organization (PPO), and the competitive medical plan (CMP). PPOs offer a fee-for-service health delivery system usually at a discount of the UCR charges and a CMP is a plan that is independent of the HMO and PPO, but provides at-risk Medicare and physician services via contracts with individual physicians (Shouldice, 1991 ; Miller & Luft, 1994b).

Although there are several health plan structures, HMOs are one of the most popular and are often considered the "grandfather" of managed care (Carter, 1997). An

HMO is an establishment that provides comprehensive health care to enrolled subscribers at a predetermined monthly fee (Vadakin & Lipton, 1986; Wagner, 1989). This organization consists primarily of three parts; the consumer or subscriber, the providers including the primary and specialty physicians and hospitals, and the health plan which provides organization and management (Shouldice, 1991).

The term "health maintenance organization" did not come into existence until it was coined by Paul Elmwood in the early 70's. His efforts were to acquire government support of prepaid health care by emphasizing the positive connotation versus the negative connotation often associated with the terms "medical care" or "sickness care" (Luft, 1981; Greene, 1997). The ideals of this organization parallel those of managed care in that it strives to provide quality coverage that is available and affordable (Greene, 1997). Providing quality care while containing costs became an issue back in the early 30's when the Kaiser Plan was founded in the west. It was soon considered to be the most widely known HMO prototype (Ellwood & Lundberg, 1996; Hunt, 1995; Vadakin & Lipton, 1986; MacLeod, 1989). However, HMOs did not get their official start until the 1970's when the federal government realized that the concept of prepaid health plans might help combat the problems associated with the fee-for-service (FFS) indemnity plans (Vadakin & Lipton, 1986; Friedman, 1986). FFS is a health plan structure that traditionally bills for each individual service rendered to the patients (Anderson, 1995; DelPizzo, 1996). With this knowledge, it is obvious that there exists an incentive to provide more services to increase revenues. Therefore, a need to help reduce this stimulus was necessary and obtained through the implementation of HMOs (Kongstvedt, 1989; Luft, 1981).

To assist in matters supporting HMOs, Congress passed the Health Maintenance Organization Act of 1973 which required employers to offer their employees a variety of health plan options (Iglehart, 1994b). In retrospect, this Act also generated the demand for more HMOs due to expanded enrollment and interest (MacLeod, 1989). Since then, HMOs have built a reputation that some argue to be the exact opposite of FFS, meaning erring on the conservative side to save money. Yet, HMOs have still managed to become the model program in health care (Hunt, 1995).

In 1989, approximately 32.2 million people were enrolled in more than 550 HMO health plans (Shouldice, 1991). According to a news release in 1993 by the Group Health Association of America (GHAA), the number of people subscribing to HMOs increased by almost four million from nearly 40 million subscribers amongst the now 725 different HMOs (Iglehart, 1994a; Evenson, 1997; AMCRA, 1994). Furthermore, the GHAA predicts that in the year 2000, there will be roughly 112.7 million HMO subscribers (Evenson, 1997). As of 1993, half of all persons whose employers provided health insurance coverage were enrolled in managed care plans and 22% of managed care insured persons subscribe to HMOs (Inglehart, 1994).

Classifications of HMOs

There are currently five distinct models of HMOs that provide care for enrolled populations with the major difference between each model being the relationship between the HMO and the staffed physicians (Wagner, 1989; Vadakin & Linton, 1989). Miller and Luft (1994a) recognize only two major HMO models. Nonetheless, the five will be defined and they are as follows: staff, group, network, individual practice association (IPA), and direct contract.

Staff Model HMOs

Staff model or "closed panel" HMOs directly employ physicians. This means that the physician is paid by the HMO and that the HMO must employ a variety of physicians to meet the needs of the enrolled population. With this type of plan, non-plan physicians are not allowed to participate (Wagner, 1989; Miller & Luft, 1994a; Shouldice, 1991). The advantage to this type of plan is that the HMO has greater control over the physician practice patterns, but on the other hand, there are a limited number of physicians from whom the members can choose (Wagner, 1989; Shouldice, 1991).

Group Model HMOs

Group model HMOs contract with multi-specialty physician groups to provide their members services. This model also employs the closed panel idea where non-plan groups cannot participate (Shouldice, 1991; DelPizzo, 1996). The advantage with this type of plan is that the multiple physician involvement and the shared resources involved in the decision-making equate to more effective medical services.

Network Model HMOs

Network model HMOs contract with more than one group practice to provide services to the HMO members. These contracts are generally limited to large single or multi-specialty groups (DelPizzo, 1996). It is possible with this service plan for the medical groups to contract with more than one HMO (Wagner, 1989; Shouldice, 1991; Vadakin & Lipton, 1986). The major advantage of this type of model is the potentially increased geographic service area.

Individual Practice Association (IPA) Model HMOs

IPAs are the models displaying the greatest number of plans and enrollments (Wagner, 1989; Miller & Luft, 1994a). This model type was originally designed to allow physicians to work out of their own office versus a central facility. IPA models contract with both group and individual physicians. Physicians also have the freedom to see their individual patients as well as their HMO patients allowing them an "open panel" operation (DelPizzo, 1996; Ellwood & Lundburg, 1996; Wagner, 1989). The advantages of this model type are the broad-based physician choices that practice out of their own offices and thus, a decrease in the necessity to refer patients to nonparticipating physicians to obtain services (Wagner, 1989; Miller & Luft, 1994b).

Direct Model HMOs

This model directly contracts with each individual physician. The direct contract draws upon both primary and specialty physicians to render services. This model utilizes the "gatekeeper" concept extensively where the primary care physician (PCP) authorizes any referral to specialty physicians and assists with management. The advantage of this model is that the HMO can avoid mass physician termination that could turn out to be an inconvenience to its members. The disadvantage would be any unjustified referrals to specialists (Wagner, 1989).

In summary, all the models generally have the same goals and philosophies in mind such that the "HMO typically limits the choice of providers to the HMO network of physicians and hospitals: regardless of the contract" (Albolm, 1996, p.28). Overall, the advantage of the HMO is found within the name itself, to maintain health via preventative health services, diagnostic services, accessibility 24 hours a day, and to be

reimbursed for emergency services rendered out of the geographical area if found medically necessary (Chambers, Ross, & Kozubowski, 1986; Shouldice, 1991). Other advantages involve the ability to choose a PCP and develop a relationship for the duration of the plan membership (Gold, Hurley, Lake, Ensor, & Berenson, 1995).

A Comparison of the Different Model Types

A study performed by Miller and Luft (1994a) compared the different models of HMOs looking at health care utilization; level of premiums; use of preventative tests, examinations, and procedures; quality of care; and enrollee satisfaction versus the FFS structured plans. Keying in on the five areas aforementioned, this comprehensive study was based entirely on the authors' study of previous individual investigations that they had distinguished and considered relevant. Miller and Luft (1994a) found through their review of the literature, that HMOs have lower hospital utilization, lower usage of expensive and arbitrary testing and procedures, and increased preventative services versus the FFS health plans. When looking at patient satisfaction, members enrolled in the HMOs were less satisfied, however, they reported that it was offset by the decreased out-of-pocket expenses. Interestingly, however, no significant findings indicated that one model HMO performed better than another model HMO. Unfortunately, the overall quality of care was not assessed due to difficulty with interpreting the inconsistencies of the studies selected for review. Also it is interesting to note that the results of this literature analysis conflicted with a previous literature analysis done by Luft (1981) concerning the different HMO plans. In 1981, Luft found some nonspecific performance differences among the different models. Miller and Luft (1994a) attribute the differences in their results from the results of Luft's 1981 analysis mostly to the lack of observations

for each type of HMO and the profound similarities between the models. Gold et al. (1995) also found in their study that the HMO models were very similar in their plans. They found that 55% of the models claimed to be a group or staff model when in fact the health plans were mixed models. Nevertheless, Miller and Luft (1994a) still concluded from this review of literature that there were no performance differences.

Characteristics of HMOs

In order to grasp the philosophy and goals of HMOs, it is important to understand the characteristics of HMOs. There are eight characteristics commonly associated with HMOs and these are illustrated by Shouldice (1991) and Miller and Luft (1994b): (1) HMOs are organized systems that provide services including primary, specialty, ambulatory, and inpatient care, (2) comprehensive benefits including drug coverage, extended care, home health care, and mental health services in addition to the services mentioned above, (3) enrollment is voluntary where members are given numerous health plan options, although other researchers indicate that there is an increased number of employers who offer only a single health plan option (Emanuel and Dubler, 1995; Iglehart, 1982), (4) services are rendered in a defined geographical area to promote accessibility and availability to its members, (5) assume risks to produce incentives to control costs which Campbell (1997) sees as an advantage because it helps retain a patient base, (6) offer a prepayment plan for premiums, (7) look to contain costs that will lead to reduced utilization, and finally, (8) enhance management through the services of a "gatekeeper" or a primary care physician.

Use of Primary Care Physicians (PCP) and the Authorization System

The idea to use a PCP as a "gatekeeper" to help maintain costs by controlling access to other physicians, services, and hospitals has resulted in mixed reports (Hillman, Welch, & Pauly, 1992). Kassirer (1994) informs that HMOs limit access to specialty care by implementing the PCP as a mediator. This causes the patients to feel as if they have lost some control over the kind of care they receive. A study was done in 1989 on the effects of gatekeepers and their management of medical care provided to patients (Martin, Diehr, Price, & Richardson, 1989). Martin et al. (1989) studied new enrollees in a plan with a PCP and those in a plan without a PCP. Both plans offered the same benefits and subscribers were randomly assigned to one or the other plan. With the PCP plan, Martin et al. (1989) established that there was no incentive to limit costs of care, only to monitor referral care. The PCP was defined as the person responsible for the primary care, referrals to specialists, ancillary services, and hospitalizations. Those in the PCP plan were required to choose a PCP and then obtain preauthorization from their PCP prior to seeing anyone else or they would be solely responsible for the bill. The members enrolled in the non-PCP plan were permitted to seek out any care they desired within the city limits and would be reimbursed 100%. Results of the study showed that those enrolled in the PCP plan had more visits to the PCP, saw fewer specialists, and had lower hospital visits than the non-PCP group enrollees. At the end of the twelve-month study, a questionnaire was distributed to measure out-of-pocket expenses and satisfaction with the plan. The results of the questionnaire did not reveal any difference in out-of-pocket expenditures between the two plans during the study period. As far as satisfaction of the enrollees was concerned, the researchers found that those enrolled in the non-PCP plan

were more satisfied that those enrolled in the PCP plan. The authors of this study did, however, recognize problems with the study. Martin et al. (1989) recognized that some of those enrolled on the non-PCP plan may have been used to seeing a PCP first and vice versa. The authors also recognize that those enrolled in the non-PCP plan were aware that the study would only last for a year, thereby taking advantage of the reimbursement policy and seeking out several physicians.

Regardless of this finding concerning PCP plan satisfaction, Emanuel and Dubler (1995) advocate the importance of preserving the physician-patient relationship between an enrolled member and a PCP. These authors and Gordon, Baker, and Levinson (1995) point out in their review of literature that the "physician-patient relationship is the cornerstone for achieving, maintaining, and improving health" (p.328). Yet, Emanuel and Dubler (1995) defined the ideal physician-patient relationship by virtue of the six C's concept: choice, competence, communication, compassion, continuity of care, and (no) conflict of interest.

"Choice" involves practice setting, primary care physician, specialist, and treatment alternatives. Emanuel and Dubler (1995) state that the enrollees have the option to decide or choose what is best for them regarding the practice setting, primary care physician, specialists, and treatment alternatives. Communication, competence, and compassion are those virtues the authors argue that the PCPs should work to maintain and uphold. Continuity of care is an element that the authors support; once the relationship is established, it should endure over time. Emanuel and Dubler (1995) argue that the stronger the relationship, the better the physician can prescribe the appropriate services. The concept of no conflict of interest includes having the best interest of the patient in

mind and putting aside the physician's own personal interests, especially those of a financial nature.

Out-of-Plan Usage

As long as HMOs restrict their services to a predetermined geographical region and have a solid authorization system, it is important for the insurance companies to evaluate out-of-plan (OOP) usage. Two studies have been performed specifically looking at OOP use and prepaid group practices.

The first study addresses several issues regarding OOP usage (Scitovsky, Benham, & McCall, 1981). The authors attempt to address the extent of OOP use in terms of the number, the services, the characteristics of the OOP users, and the out-of-pocket expenses for the OOP users. In addition to this, the authors make an effort to review the problem of defining and measuring OOP use.

Definitions of out-of-plan use. The exact definition for out-of plan use has been rather ambiguous and inconsistent (Scitovsky et al., 1981). Some researchers define it as a service attained by a plan member from a non-plan physician or some other type of health professional (Richardson, Boscha, Weaver, Drucker, & Diehr, 1976). In most studies there are three elements that define OOP use; (1) services not covered by the plan and therefore not paid by the plan, (2) services covered by the plan, obtained from non-plan physicians but were covered because the plan member was out of the area, in the midst of an emergency, or was referred, and (3) services covered by the plan that plan members received from non-plan providers and were therefore not reimbursed. In a study performed by Pope, Freeborn, and Greenlick (1972), OOP services are characterized by the following: (1) services neither covered or provided by the plan; (2)

services not covered by the plan but available through the plan; (3) services covered by the plan but not available at the plan thus utilizing outside physicians on a referral basis; and, (4) services available through the plan and covered if the services are rendered by the plan physician. For the purpose of their study, Scitovsky et al. (1981) defined OOP use as "all medical services other than telephone consultations obtained from non-plan physicians and paramedical personnel, except those for which the plan paid," (p. 1170) due to emergency services rendered when members were out of the area of the plan and referrals. This means that if a subscriber went out of the system for care without preauthorization or referral, that service is defined as OOP service.

Scitovsky et al.'s study involved retrieving data covering in-plan use from medical records and OOP use via telephone interviews every three months for a twelve-month period. At the time of the phone interview, the plan members were asked to report information on the service, the name of the provider, the reason for going OOP, the place of service, the out-of-pocket expense, and the type of service obtained. The foremost question the authors desired to answer was, "How are the benefits packages of a plan meeting, or failing to meet, the needs of plan members?" Also from this study, the authors wanted to be able to differentiate the type of people who go OOP.

The authors first report the number of OOP usages. They found that in one plan there was 25.2% OOP usage versus the 31.7% OOP usage in a second plan. Next, the authors reported the characteristics of OOP users. They found that for a high number of the plan members "dissatisfaction with the plan" was one of the most important reasons for OOP use. In regards to the first plan, 16.5 % were likely to go OOP when they were not satisfied and 10.8% of the members of the second plan were likely to go OOP for the

same reason. Other significant characteristics for going OOP included having additional insurance and the length of time the members were enrolled in the plan. If plan members were covered by the plan for less than five years, they were 4.7% more likely to go OOP. The authors also found that number of family members, age, marital status, and health status were related to OOP use in one group but not in the other. Incidentally, the greater the number of people in the family, the less the number of OOP usages. Females were more likely to be an OOP user than males and the youngest age group (>15 years) was less likely to go OOP than the oldest age group (45-64 years). There was no statistical difference between the 15-44 year age group and the oldest age group with respect to the probability of OOP usage. Finally, the authors cite the top five reasons for OOP use. Of the members enrolled in the first plan, 50.7% attributed their OOP usage to the fact that they preferred a non-plan physician. Some members of the second plan also preferred a non-plan physician (43.5%). Needing emergency care was the next highest percentage with 13.8% from both plans. The third reason, being too far away from plan providers, was seen more often with the second plan (26.9%) than the first plan (13.2%). Next, the authors found that having to wait too long for an appointment was the fourth reason with 12.1% for the first plan and 6.1% with the second plan. The final reasons fall under the "other" category with a plethora of findings mostly related to confusion regarding the policies of the plan. In conclusion, the authors found that their study did not produce significant results of high OOP use and recognize that OOP use will occur from time to time. The two main areas of concern for Scitovsky, et al. (1981) are the dissatisfaction with the plan associated with OOP use (although the authors never established the root of

this dissatisfaction) and, the question regarding duplicate insurance, which the authors feel, may complicate the evaluation of the rates of usage of each plan.

Two years after the publication of Scitovsky et al.'s (1981) study, Hennelly and Boxerman (1983) resolved to take a closer look at the dissatisfaction of plan members. They, too, during their review of literature noted that OOP use is strongly correlated with dissatisfaction of the plan. Therefore, these two researchers reviewed three areas: (1) factors leading to OOP use, especially the role of satisfaction, (2) factors leading to disenrollment, and (3) the relationship between OOP use and disenrollment. Data for this study were collected via a questionnaire sent out to enrolled families. Several demographic questions were asked in addition to questions that would lead to resolving the three areas of concern posed earlier. A chi-square analysis was utilized to deduce the significance of OOP usage. The satisfaction variable was determined on a satisfaction index via the summation of eight scores from eight questions regarding patient satisfaction. Scores ranged from -2 to +2. The authors found seven factors significantly related to OOP use: (1) age (20.9% OOP use if $\leq$29 years), (2) duplicate insurance, (3) length of membership in the plan, (4) ability to name a regular plan physician, (5) a plan member's perceived health status, (6) days lost from usual activities, and (7) satisfaction index values. The satisfaction index values revealed members' tendencies to go OOP and were found to be the most important predictor of OOP use. Due to this, the authors concluded that dissatisfaction may be due to the ability of family members to identify a regular physician. Roemer and Shonick (1973) mention that dissatisfaction and OOP use has been the subject of research on several occasions, however, the term dissatisfaction

remains undefined with regards to OOP use. Again, this pattern was observed in the two studies previously discussed.

Relationship of Managed Care and Sports Medicine

The idea of a PCP as the gatekeeper posed some problems with the sports medicine department and the out-of-network student-athlete at colleges and universities. The PCP acts not only to authorize care, but to see that the service is rendered in an institution that has contracted with the plan and is medically necessary (Kongstvedt, 1989). The only way a student-athlete can acquire a proper authorization or a referral is to see his or her own PCP who is typically located in his or her hometown. Otherwise, the HMO will cover only those procedures that involve emergency care (Bushee, 1996; Clark, 1997; Hunt, 1997; Chamber, Ross, & Kozubowski, 1986). Henehan and Jones (1997) have observed that the medical needs of an athlete can be quite different from the needs of most patients. In fact, the insurance companies typically place limitations on the PCPs in regards to how quickly, what quantity, and what type of service can be rendered, which is exactly what the student-athlete requires when suffering from an injury. A watch-and-wait approach is more or less unacceptable in the world of sports and delays can often have adverse effects on a sports career. Athletic trainers and team physicians are not advocating against primary care physicians because it is the primary care physician who is capable of providing care to at least 75% of all sports related injuries (Sallis & Massimino, 1995). Moreover, the sports medicine staff proposes appointing a temporary primary care physician for the student-athlete during the student-athlete's career for reasons which parallel the goals and philosophies of managed care; namely, to increase the continuity of care and to maintain a physician-patient relationship (Ray,

1994). Ray further explains that if the student-athlete is attending college in the same town as his or her HMO physician, then the trip to that physician is merely an inconvenience, however, if the student-athlete is attending college hundreds of miles from home, the problem becomes more complex. From these few points, insurance companies researching the idea of the physician-patient relationship should be able to recognize that there would be a disruption in the relationship and continuity of care for the duration of the student-athlete's career at his or her chosen university. This alone, based on the research performed by the insurance companies themselves, justifies the need for a study on managed care and sports medicine particularly with OOP student-athletes.

Chapter III

METHODS

Despite the research done on managed care, there is currently very little published on out-of-network health insurance policies and procedures and their effect on student-athletes. Furthermore, there exists little research on how universities are attempting to keep college student-athletes in community care. In fact, there have been no studies to date on managed care and sports medicine (Henehan & Jones, 1997). There have been, however, several suggestions on what insurance officers of colleges and universities should do to maintain costs and medical control over their student-athletes. The focus of this study was threefold: 1) to determine if insurance officers of the Big Ten Conference currently put into effect the recommendations set forth by Ray (1994), Walters (1994), and Bushee (1996), 2) to determine if the medical directors of insurance companies are cognizant of the out-of-network issue surrounding college students and if the insurance companies will consider the recommendations in the literature at the request of the university insurance officers. The after-the-fact survey method was utilized to determine if university insurance officers communicate with HMOs regarding out-of-network student-athletes. This investigation permitted the researcher to understand what the university's insurance officer has done to attain coverage by the student-athlete's primary insurance company to decrease the out-of-pocket expenses incurred by the university.

Also, the insurance company's medical director was given the opportunity to provide the company's point-of-view concerning OOP utilization. An open-ended question was posed at the end of the survey to allow the medical directors of the HMOs an opportunity to voice any concerns regarding out-of-network usage.

Participants

The participants in this study were categorized into two groups. The first group included the insurance officers responsible for processing claims for student-athletes in the Big Ten Conference. The survey provided information concerning the position this individual holds within the athletic department (head athletic trainer, assistant athletic trainer, athletic director, assistant athletic director, department secretary, or risk manager), and if he or she has undergone any special insurance training. Participation was on a voluntary basis and the results of each survey were kept confidential. Unfortunately, with only 11 universities in the Big Ten Conference, it was important for all insurance officers to respond to add validity to the findings.

The second survey was administered to HMOs across the country and was addressed to the office manager familiar with the policies of the company. These companies were chosen randomly from the sample provided by the insurance officers in the Big Ten Conference as well as from a list of HMOs published by the AMCRA. Again, the replies from the HMOs were voluntary and the results were kept confidential.

Instrumentation

The assessment of primary insurance coverage concerning out-of-network student athletes and the HMOs policy was conducted by two separate surveys developed for this study (see Appendices A and B).

The first survey was distributed by mail to every Big Ten University insurance officer. The survey consisted of two parts: demographic information and cost containment. The demographic information section requested information from the insurance officers of the universities regarding the number of male and female sports, the approximate number of student-athletes, facts about the insurance officer(s), and facts about their current insurance administration system. The second section related to the cost containment procedures of the institution and inquired about possible coverage for the out-of-network student-athlete. For example, did the insurance officer contact the insurance company: (1) for an explanation of benefits, (2) to pre-authorize medical procedures, (3) to request literature, (4) to request a temporary PCP, or (5) to request a percentage of their usual and customary rate in exchange for free rehab and follow-up visits. Also did the insurance officer request the help of the team physician to acquire coverage (see Appendix A).

The second survey was directed toward the insurance companies themselves. This survey also had two parts. The first part was a demographics section that requested information regarding policies and procedures of the insurance company, including the number of physicians employed, type of medical services covered, maximum age dependents are covered under their parent's policy, and how they define out-of-network. The second section was designed to investigate policies and procedures related to out-of-network care including: (1) the temporary appointment of a PCP, (2) paying a certain percentage of their usual and customary rate for diagnostic testing including x-rays, MRIs, bone scans, CT scans etc., (3) providing rider options for those students attending college out-of-network, and (4) placing a sports medicine expert on their review board for cases pertaining to student-athlete injuries, etc. (see Appendix B).

Data Collection

Prior to sending the surveys to the prospective participants, a pilot survey was sent to a local provider's billing office. The office personnel were requested to make suggestions. Revised surveys were developed taking into consideration the submitted comments. All surveys were then mailed with a courtesy letter and a business reply envelope to ensure no extra costs for the responding participants (see Appendix C). The surveys were coded to guarantee confidentiality but allowed the researcher the ability to identify who has not returned a survey. After 3 weeks, a follow-up phone call was made to all who had not returned their survey and a second survey was either mailed or faxed at the request of the university insurance officers and the medical directors of the insurance companies.

Data Analysis

A descriptive and qualitative analysis was conducted upon receipt of the data contained in the surveys. Results of the Big Ten Universities' insurance officers responses were compiled to percentages and presented in table format focusing on the percentage of insurance officers instituting the recommendations. Also, a description of the insurance officers was reported. This portion of the results disclosed the professional title of the insurance officer and the amount of training involved in the preparation of this individual. The insurance company questionnaire was analyzed in actual numerical format due to the low response rate. The size of the HMO was established by the amount of physicians it employs or contracts. The responses provided by the medical directors concerning the recommendations is also given. Results of this portion of the study are presented in table format.

CHAPTER IV

Results

The following are the results of the two surveys administered to both the insurance officers of the Big Ten Universities and the medical directors of HMOs. The responses from the Big Ten insurance officers will be presented first reporting the school's athletic demographics, information regarding the insurance officers themselves, and then their responses to the questions regarding the recommendations from the literature. The responses from the medical directors of the HMOs will follow the results of the Big Ten insurance officers. A short demographics section is presented, followed by medical director's responses to the questions pertaining to the recommendations found in the literature.

Big Ten Insurance Officers

A 100% return rate was attained from the Big Ten insurance officers. The results of the average number of male and female athletes at each institution and the average number of male and female sports per institution are presented in Table 2. From the demographics section of the survey, it was determined that there are approximately 7,000 student-athletes in the Big Ten Conference with an average of 377.2 male varsity athletes and 263.5 female varsity athletes at each institution (male range = 250-500; female range = 164-346). The number of sports per institution was also determined, consisting of an

average of 11.4 male varsity sports (mode = 11; range = 8-17) and 10.6 female varsity sports (mode = 11,12; range = 8-17) at each Big Ten institution.

Table 2

Big Ten University Gender and Sport Demographics

	Gender	
	Male	Female
Varsity Athletes per School	377.20	263.50
Varsity Sports per School	11.40	10.60

Note. Values are representative of the mean.

The person responsible for filing insurance is presented in Table 3. Among the insurance officers, 63.6% are department secretaries/clinicians, 9.1% are risk managers from the university's risk management office, 9.1% are assistant athletic trainers, and

Table 3

Insurance Officer Demographics: Job Title and Training

Job Title	n =	M	% Trained
1. Head Athletic Trainer	0	00.0	00.0
2. Assistant Athletic Trainer	1	09.1	00.0
3. Athletic Director	0	00.0	00.0
4. Assistant Athletic Director	0	00.0	00.0
5. Clerical/Departmental Secretary	7	63.6	14.3
6. Risk Manager	1	09.1	00.0
7. Other	2	18.2	100.0

18.2% represent the "other" category consisting of either an administrative assistant or an insurance coordinator. To date, there are no head athletic trainers, athletic directors, or assistant athletic directors acting as athletic insurance officers in the Big Ten Conference. When asked if the acting athletic insurance coordinator has received any special training, only 27% have received any special training. The rest of the individuals stated they either received no training or relied on in-house training and experience.

The researcher also determined the method of medical coverage the universities in the Big Ten Conference are currently utilizing for their student-athletes. A total of 91% of university athletic departments cover their student-athletes secondarily after other forms of insurance, including both student and parental plans, are billed. In reference to policy riders specific to the university's insurance coverage, 72.8% report that they do have a specific rider. When asked what the rider specified, 75% reported that the rider restricts them to athletic-related injuries and illnesses only.

Finally, the insurance officers of the universities were asked to approximate the cost of their out-of-pocket expenses directly related to student-athlete health care. These expenses were restricted to that which is not covered by the primary source of insurance coverage, i.e. student health insurance or parental coverage. Out-of-pocket expenses remain high for 80% of the universities accounting for $80,000.00 or more annually (n=10).

Section two of the survey focused on the cost containment procedures implemented by the institutions. These are presented in Table 4.

Table 4

Current Cost-Containment Practices of Big Ten Insurance Officers

	Responses		
Recommendations	Yes	No	Sometimes
1. Requests temporary PCP	3	7	1
2. Requests % of UCR in exchange for free rehab and follow-up visits	0	9	2
3. Requests literature	5	6	0
4. Requests help of team physician	3	3	5
5. Requests pre-authorization for medical services	8	3	0
6. Trouble acquiring a referral from a local PCP to team physician	3	4	4

Nine of the insurance officers responded that they are currently contacting the insurance companies. When these officers contact the insurance companies, 77% are inquiring about pre-authorizations and explanations of benefits, in addition to explaining the necessity of the treatment. The two insurance officers that do not contact the insurance company stated that they expect the physicians' office to call or that the university pays the bill regardless of the benefits.

The researcher then inquired about the request of a temporary PCP. Three of the officers stated that they request that the insurance company appoint a temporary PCP. One officer reported a 75% success rate while a second officer reported a 20% success

rate in acquiring a temporary PCP appointment. The third officer did not provide any data regarding success rate of a temporary PCP appointment.

Approximately 82% of the officers currently are not requesting that the HMO pay a percentage of the UCR for out-of-network student-athletes in exchange for free rehabilitation and follow up visits. About 45% of the officers are requesting benefit information and/or literature regarding the policies and procedures of the insurance company, especially if the insurance officer is unfamiliar with the insurance company, if the insurance is international, or if the insurance officer is concerned about optical or dental coverage. The insurance officers that do not call for information state that the university pays the bill regardless of the benefits or that they do not have the time. Regarding pre-authorization for medical services, 72.7% reported they do call for pre-authorization and are concerned with pre-authorizing mainly major diagnostic testing and surgeries. One of the 3 insurance officers that does not contact the HMO for pre-authorization of medical services states that the provider's office calls for the pre-authorization. Finally, 27.3% encountered problems when local student-athletes needed a referral, 36.4% said that they did not have trouble, and 36.4% said that they sometimes had difficulty acquiring a referral.

Insurance Company Responses

Results of the insurance company surveys were also determined using quantitative analysis. A total of 11 surveys were returned from the original 45 that were administered yielding a 24.4% return rate. The number of physicians the HMOs employ reflected the size of the insurance company. The average number of physicians employed at each HMO was 4250 (range = 300-18,500). The specific medical specialties covered by each

HMO were also determined. Insurance coverage for dentistry was not provided by any of the HMOs, whereas, 3 HMOs covered sports psychiatry, 6 covered exercise physiology, 8 covered manipulative therapy, and 9 covered substance abuse. All other medical services were covered by all of the HMOs.

The researcher also intended to try and delineate a working definition of the term "out-of-network". According to the responses of the surveys, out-of-network was defined in 5 different ways including: (1) if member is not referred by a PCP, (2) if member did not see or use a contracting provider, (3) if member received services outside service area, did not get authorization, and did not see a PCP, (4) if member did not live or work in the designated service area and, (5) if member received any service "out-of-plan".

The age of dependent coverage is up to 25 years of age as long as the dependent is a full time student. Rider options for college students are offered by 36.4% of the HMOs. Two of these HMOs stated that the employer provides this option on the company health policy as a selection and the remaining two HMOs stated that the rider is part of the basic plan, thereby not really constituted as a rider. When asked if the HMO would consider developing a rider for their subscribers, 6 responded "no" and 1 responded "possibly".

The responses of the HMOs to the recommendations set forth in the literature are presented in Table 5. Nine HMOs stated that they would never appoint a temporary PCP, although four responded that they have appointed a temporary PCP in the past. Only four stated that they would never pay a percentage of the company's UCR for surgical procedures in exchange for free rehabilitation and follow-up visits. In fact, three companies said that they "frequently" or "very frequently" agreed to this financial agreement and 4 indicated that they "occasionally" agreed. With athletic trainers

currently looking into pursuing third party reimbursement, 100% of the HMOs stated that they would not change their mind to the financial agreement of partial payment for surgical cases that require follow-up visits and rehabilitation. This area of concern will be discussed in more detail in the discussion. When asked if the insurance company would agree to payment of a percentage of the UCR for diagnostic testing, 3 responded very frequently, 3 responded occasionally, and 5 responded never. Six of the HMOs stated that they would not pay the deductible for the university's secondary insurance policy in exchange for medical control over the student-athlete.

Table 5

HMOs and their Stand Concerning the Recommendations

	Frequency				
Question	N	R	O	F	VF
1. Allow a temporary PCP	9	1	1	0	0
2. Pay a percentage of UCR (surgical)	4	0	4	1	2
3. Pay a percentage of UCR (diagnostic)	5	0	3	0	3
4. Pay university's secondary insurance policy's deductible	6	1	4	0	0
5. Does distance to home matter when ruling on a claim	6	1	1	3	1
6. Does attendance to out-of-state school matter when ruling on a claim	6	1	3	0	1
7. Does athletic scholarship affect ruling on a claim	9	1	1	0	0
8. Is transportability of coverage an option	7	1	1	1	1
9. Is sports medicine specialist on panel	5	1	3	1	1
10. Consider placing a sports medicine specialist on panel	1	4	3	1	2

Note. N= Never, R= Rarely, O= Occasionally, F= Frequently, VF= Very Frequently. Number indicates the actual number out of a possible 11.

A mixed response was received when the HMOs were asked whether or not distance from home was a deciding factor on the ruling of a claim. One insurance company responded that mileage was frequently considered and gave a figure of 30 miles. Whether or not the patient was attending school out-of-state did not factor into the ruling of a claim nor did the fact that the patient was on an athletic scholarship. Most of the HMOs stated that they would never allow the transportability of coverage for young adults who attend out-of-network universities. However, one company stated that it performs this option "very frequently", meaning that the benefits of the plan would be the same as if the subscriber was in-network.

When asked if a sports medicine specialist was ever on their claims panel, 54.5% responded "rarely" to "never", while the remainder stated that they do. When asked if they would consider placing one on the claims panel involving student-athletes, 90.9% stated that that would consider it. Only one insurance company stated that it would not.

CHAPTER V

Discussion

The findings of this investigation only begin to simplify the issues of athletic health insurance administration and its association with HMOs. The importance of understanding the insurance system in the athletic department and how HMOs operate is rudimentary in nature with regards to the entire health care aspect of student-athletes.

Only one of the Big Ten institutions designates an athletic trainer to run their insurance program as an insurance coordinator whereas 63.6% execute their health insurance program through a departmental secretary. Interestingly enough, the head athletic trainer was only a small part of the insurance administration. In fact, there was a lack of participation from the head athletic trainers when some surveys were mailed to them in addition to the primary insurance officer. One head athletic trainer stated that the survey was beyond his scope and that the department secretary would be the best person to answer the survey. While having a departmental secretary running the insurance administration can free time for an athletic trainer to be an athletic trainer, it is important that he or she and the head athletic trainer be knowledgeable about insurance matters. The head athletic trainer is typically the final reviewer of an insurance claim before payment by the athletic department is rendered.

Understanding the facts and terminology of sports medicine, in addition to the terminology of the insurance companies, is of utmost importance. Research indicates that typically there is a multi-head approach to handling the medical insurance of student-athletes, which could prove to be problematic (Hart & Cole, 1992). In this model, one person researches the claim, one person prepares the paperwork for the claim, while yet another person pays the bills. With so many hands on one project, miscommunications equal errors that can add up to financial loss. Hart and Cole (1992) support this view by stating that the individual who does take responsibility for the student-athlete's insurance must have some budgetary training or experience. This training could be valuable when dealing with the overwhelming costs of medical insurance. Of the insurance officers surveyed, only 27% had any special training related to the insurance program. The remaining insurance officers relied on in-house training. This is consistent with what Bushee (1996) discovered. He reported that the educational backgrounds of the insurance officers did not address the particulars of insurance administration. Furthermore, if these insurance officers leave their position in the athletic department and the head trainer is not knowledgeable about the process, the next insurance officer could be involved in a long trial and error training process.

The trained insurance officers routinely request literature and acquire the help of the team physician when deemed necessary. Moreover, one of the insurance officers stated that calling the insurance companies for information concerning explanation of benefits and referral information and procedures can be helpful when advising student-athletes with non-athletic related injuries and illnesses. Requesting a temporary PCP and acquiring pre-authorization are other practices used by 67% of the trained insurance

officers. Those who exercise pre-authorization have at least 50% success in obtaining a pre-authorization for medical procedures. Other insurance officers who do not call about pre-authorizations say that they expect the provider's office to call or that the athletic department will pay the bill regardless. The problem with having the provider's office call to pre-authorize is that they know that the university will pay secondary regardless of the coverage provided by the primary insurance company. Therefore, the provider's office may not try as hard to convince the HMO that the service needs to be rendered in the university community and that the insurance company should subsequently provide coverage. If an injury is not a result of athletics, then the university will not pay secondary to the student-athlete's primary insurance. Therefore, if the injury is non-athletic related, then the student-athlete must pay and suffer from the out-of-pocket expenses. In addition to this, not all universities are financially able to pay secondary to the primary insurance. As stated earlier from the literature, some of the institutions at all of the division levels fall into this category.

Of the universities surveyed, 75% have a rider stating that athletic-related injuries and illnesses only are covered. This means that for the student-athlete who has a non-athletic related injury of illness, coverage will be denied if he or she does not return home for the proper referral back to the university team physicians. But that does not mean that a referral is assured, because even local student-athletes are being denied referrals to university team physicians. One of the insurance officers expressed that the initial PCP does not feel it is worth the paperwork.

As far as the implementation of the recommendations, university insurance officers are not communicating with the HMOs as Ray (1994), Walters (1994), and

Bushee (1996) advocate. In fact, only two of the insurance officers are currently requesting a percentage of the HMO's UCR in exchange for free rehabilitation and follow-up visits, and then on an inconsistent basis only. This may be the primary reason for the increased out-of-pocket expenses experienced by 80% of the Big Ten Institutions, accounting for at least $80,000.00 annually per school due to lack of insurance coverage. Most of the insurance officers are requesting literature from the HMOs. Those who do not request literature claim not having enough time or state that the athletic department will pay the bill regardless. Currently, 95% of the medical procedures that get pre-authorized include both diagnostic testing and surgery. This is important because this is where the insurance officer can introduce the concept of free rehabilitation and follow-up visits in exchange for coverage.

When requesting any further comments regarding insurance coverage and its availability to the out-of-network student-athletes, many of the insurance officers made known their frustrations. One individual stated that HMOs are "virtually worthless" when it comes to coverage for out-of-network student-athletes. Another insurance officer stated that HMOs "either cover or they don't, there is no way to change their contract with the insured". However, as one will see with review of the HMOs surveys, only a few of the companies do provide some laxity in their policies for college students who attend school out-of-network.

Regardless of the fact that some of the insurance officers have had good results with these recommendations either from reports in the literature or from the responses of this survey, the majority of the HMOs' responses indicate otherwise (Table 5). Prior to analyzing the results of this survey, it is important to recognize that there was a very low

survey return rate from the HMOs (24.4%). One individual explained that a number of the HMOs were currently going through a merger. Their lawyers advised them not to fill out the survey in case the results were to "get into the wrong hands and complicate the merger". Therefore, perhaps at a different time, the HMOs would be more cooperative in responding to a survey. On another note, the researcher attempted to contact the insurance officers of the universities to request a contact name that might aid in acquiring HMO participation in the study. Only one university insurance officer was able to provide a name. A separate insurance officer stated that when she attempted to request a prior contact person, the HMO quickly responded that "anyone can help you with that", and proceeded to transfer her call to anyone but the person she requested. She further explained that, in her experience, it seemed as if the insurance companies try to avoid building any relationships with the providers or third party persons involved in the claim. Another insurance officer stated that this is typically the case. Insurance companies generally do not give policy information to a third party. This can be problematic because some university insurance policies, in order to pay for a student-athlete's bill, must follow the proper channels which includes requesting policy information.

There were conflicting replies to some of the questions, for example, when asked if the HMO would consider assigning a temporary PCP, most responded that they would never do so. However, when asked if they had ever appointed a temporary PCP, four said that they had. In fact, one of the HMOs that responded "never" to a temporary appointment said "yes" to having done so in the past further explained that it was performed with a written "out-of-network" approval. This leads the researcher to believe

that on more than one occasion, these HMOs were willing to consider each case and make a ruling on it individually.

The arguments for free rehabilitation and follow-up visits appear to be convincing in that a majority stated that they would at least consider them. Another key reply for the profession of athletic training pertains to third party reimbursement. Of the seven HMOs that responded either "frequently" or "very frequently" in agreeing to partial payment for medical services in exchange for free rehabilitation and follow-up visits, 100% stated that they would still agree to partial payment if athletic trainers pursue billing for rehabilitation programs and follow-up visits. This is an important concept as the profession of athletic training becomes more and more recognized as an allied health profession. Once insurance companies understand the role of the athletic trainer as an allied health professional, athletic trainers can begin to bill for the services they render in the training room. However, one of the arguments that has been utilized is the free rehabilitation and follow-up visits in the training room in exchange for coverage. Therefore, if athletic trainers begin billing for these services, are they potentially losing out on a viable argument for coverage? Walters (1994) states that athletic trainers pursuing third party reimbursement must proceed with caution for this very reason and for the philosophy of the profession. In the past, this philosophy has been to provide care to the athletic population without financial compensation, only the gratification of a student-athlete back to competition due to the hands of an athletic trainer. Now, that philosophy seems to be changing in some employment settings for athletic trainers.

Distance to home, attendance at an out-of-state college, and the possession of an athletic scholarship did not appear to have an effect on the status of a claim. One of the

medical directors stated that the "student-athlete on scholarship should be covered by the university". This is more than likely the perspective of most of the medical directors. This concerned the researcher because one of the areas the HMOs were researching themselves included OOP usage and the involvement of secondary coverage. Research on behalf of managed care found that OOP usage was related to having secondary coverage. If it is the insurance company's intent to decrease OOP usage as a result of secondary coverage, then this perspective is misleading and inconsistent with managed care goals.

In most cases, there are no sports medicine specialists on the claims panel that makes those decisions. Only two of the HMOs have sports medicine specialists on their panels. However, of the remaining HMOs, all but one stated that they would consider placing a sports medicine specialist on their panel. The researcher believes that if there were a sports medicine specialist who can attest to the necessity of a procedure, understands the circumstances surrounding the academics and the urgency of the return to competition, there would be an increase in the coverage of student-athletes by their HMOs.

In order for this and other practices to occur, there must be communication between the athletic trainer and the insurance company. When the HMOs were given the opportunity to respond to an open-ended question, one actually stated that making a "quick call to make sure of a member's benefits and options" might begin to help untangle the issues and increase the full use of the benefits as much as possible. Another medical director responded that the subscriber might want to consider a Point-of-Service plan where the subscriber has a list of participating physicians that he or she may choose

from in the event of an out-of-network situation. These suggestions demonstrate to the researcher that the insurance companies are willing to help answer their subscribers questions and educate them on their chosen plan if their help is sought, confirming the necessity for increased communication.

CHAPTER VI

Conclusion and Recommendations

Athletic trainers and insurance companies need to improve methods of communication for the sake of the student-athletes health, academics, sports participation, and out-of-pocket expenses. Commonalties have been drawn from the literature and this survey to help guide insurance administrators in this process.

Conclusion

Insurance officers in the university setting are knowledgeable about the out-of-network issues and student-athletes, however, they are not completely implementing the recommendations proposed by fellow colleagues to help maintain medical control over the student-athletes and to contain department costs. If more insurance officers agree to dedicate themselves to obtaining specialized training and implementing more of these recommendations, precedence could possibly be established to help achieve these goals and aid others. From this, a detailed record of insurance companies, including a contact name, benefit explanations, and university/insurance company relationship history, can be devised to attain a better handle on where the most time needs to be spent when inquiring about coverage. In the meantime, insurance officers can help educate the parents to get them prepared for circumstances that may arise due to non-urgent injuries.

Medical directors of HMOs are indifferent regarding the issue of out-of-network care. They realize that if they deny the claim, 85% of the time the university is going to cover the expenses. However, the parents of these student-athletes are already paying for coverage of their dependent. Therefore, if more people alert these medical directors of out-of-network care, the medical program offered by the insurance company could be revamped to make amends. Moreover, the funds saved by the athletic department could be reallocated to purchasing more equipment and or supplies for the benefit of the student-athlete. In addition to these previous points, the medical directors of the HMOs could help educate both the employers, who provide the different types of plans, and the parents to help them understand what to expect once their child goes out-of-network for an education. Finally, there have been recent talks on behalf of the HMOs to move toward regionalization (Brown & McCool, 1990). This means that they are considering branching out into other areas of the country as the company becomes bigger and stronger. For example, the Cleveland Clinic in Cleveland has opened entirely new sites in Arizona and Florida. These remote sites are offering a full range of services in all geographical areas. This could be extremely beneficial for the student-athlete attending college out-of-state.

Recommendations for Future Studies

This investigation was only a portion of the research needed in the area of health insurance in the athletic setting. More research needs to be conducted to delineate some of the findings of this study and nurture the actions of both the insurance companies and the insurance officers.

1) There was a very low return rate of surveys from the HMOs, which later was found to be a result of supervisors and lawyers in the companies advising marketing departments not to respond. Perhaps at a different time, this survey could have elicited more valuable information.
2) Submit the survey to other conferences outside of the Big Ten Conference and compare those results to the results of this study.
3) Another area that should be further investigated is the issue of who is performing the responsibilities of the insurance officer and the training he or she has received.
4) One might want to further investigate the issue of dissatisfaction and its root by surveying the parents of students and student-athletes to see if the issue of out-of-network coverage has any affect on basis of dissatisfaction. By the statistics given in the review of literature concerning the age group involved, out-of-state college students could possibly have a bearing on the dissatisfaction issue.
5) One might consider investigating the request that a sports medicine specialist be placed on the claims panel.
6) Consider the involvement of the parents when contacting the insurance company to request coverage from the HMO or a temporary PCP appointment.
7) Investigate how the remainder of the student population is dealing with this issue of out-of-network services.

Glossary

1) Deductible - An amount that an individual must pay before the insurance coverage begins.

2) Health Maintenance Organization (HMO) - A health delivery system which assumes responsibility for financing and providing comprehensive health care services to a voluntarily enrolled population for whom periodic premiums are paid.

3) Managed Care - A growing concept in the insurance industry emphasizing cost control through the coordination of medical services.

4) Medical Director - A physician responsible for monitoring the medical practice in an HMO.

5) Out-of-Plan (OOP) – Services rendered out of the service area of the plan or by a non-plan physician.

6) Out-of-Pocket - Maximum amount an individual is responsible for in a benefit year after the deductible.

7) Premiums - The invoiced cost of an insurance policy.

8) Primary Care physician (PCP) - A physician selected by the HMO member who acts as the first source of medical service for the patient. Also referred to as the "gatekeeper".

9) Primary Insurance - a type of health, medical, or accidental insurance that begins to pay for covered expenses immediately after a deductible has been made.

10) Riders - A supplementary clause to an insurance contract that extends the terms of coverage beyond those associated with the standard coverage.

11) Secondary Insurance - a type of health insurance that that begins to pay for covered services only after all other sources of insurance coverage have been exhausted.

12) Subscriber - The actual employee who signs the HMO contract.

13) Third-Party Reimbursement - A process by which health care practitioners are reimbursed by a policyholder's insurance company for services they perform.

14) Usual, Customary, and Reasonable Fee (UCR) - The charge consistent with what other medical vendors would assess.

APPENDICES

APPENDIX A

APPENDIX A

Dear _____,

I am writing to ask you to participate in a research study that I am conducting in partial fulfillment of my Master of Science degree from Michigan State University. The purpose of this investigation is to determine how athletic training department insurance officers can work with the health insurance companies on insurance claims of out-of-network student-athletes.

Medical Technology is growing every day as well as the availability of this technology to the student-athlete. However, the time and type of services rendered may be limited by the policies and procedures mandated by the student-athlete's insurance company. In light of this, I am investigating how to increase communication between the insurance officer of the institution and the health insurance company to provide the best and most prompt care for the student-athlete. Therefore, this study will target Midwest Health Maintenance Organization (HMO) companies, as well as the Big Ten Insurance Officers.

Your participation in this study is essential. The samples of companies chosen to respond to the survey were indicated on the responses of the Big Ten Insurance Officers' surveys. The instrument being used has been devised based on research on the topic of health insurance and the athletic department. A minimal amount of time is required to complete the survey.

The design of the survey is in two parts. The first is a demographics section and the second is the actual policies and procedures portion of the survey. Please be as accurate as possible when responding to the questions and return as soon as you are able.

When the surveys are returned, they will be compiled for data analysis. A coding system is being used for postcard reminders. When your survey is returned, your code will be destroyed and all answers will be held confidential. Understand that this is purely voluntary and you indicate your voluntary agreement to participate in this study by completing and returning the survey in the provided self-addressed, stamped envelope.

Results of this study will be compiled by June 1, 1998. If you would like to receive results of the survey to make comparisons to other Midwestern insurance companies, please check the appropriate box at the end of the questionnaire and results will be forwarded as soon as they are available. Thank you in advance for your participation.

Sincerely,

Kari A. Langley, ATC
2621 Hopkins Ave.
Lansing, MI 48912

Dear Big Ten Insurance Officer,

I am writing to ask you to participate in a research study that I am conducting in partial fulfillment of my Master of Science degree from Michigan State University. The purpose of this investigation is to determine how insurance officers are trying to control out-of-pocket expenses for insurance claims on out-of-network student-athletes.

Medical Technology is growing every day as well as the availability of this technology to the student-athlete that can sometimes be limited by the policies and procedures mandated by the student-athlete's insurance company. In light of this, the athletic department's insurance must pay the bill or delay care until the insurance company can respond after a series of debates. Therefore, this study will target the Big Ten Insurance Officers as well as surrounding Health Maintenance Organization (HMO) companies in the Midwest to aid in providing the best and most prompt care for the student-athlete.

Your participation in this study is essential. Only the Big Ten Insurance Officers are being asked to respond to the survey that allows for a very limited sample. The instrument being used has been devised based on research on the topic of cost containment and the athletic department. A minimal amount of time is required to complete the survey.

The design of the survey is in two parts. The first is a demographics section and the second is the actual cost containment portion of the survey. Please be as accurate as possible when responding to the questions and return it by January 26, 1998.

When the surveys are returned, they will be compiled for data analysis. A coding system is being used for postcard reminders. When your survey is returned, your code will be destroyed and all answers will be held confidential. Understand that this is purely voluntary and you indicate your voluntary agreement to participate in this study by completing and returning the survey in the provided self-addressed, stamped envelope.

Results of this study will be compiled by May 1, 1998. You may obtain the results of the study from the investigator under a separate cover to the address below.

Thank you in advance for your participation.

Sincerely,

Kari A. Langley, ATC
2621 Hopkins Ave.
Lansing, MI 48912

APPENDIX B

APPENDIX B

Code___

Student-Athlete Health Care - Insurance Officer Questionnaire

Section 1 Demographics and Insurance Administration:

1. The number of intercollegiate sports sponsored by the university:
   Men's _____ Women's _____

2. The approximate number of intercollegiate athletes at the university:
   Men _____ Women _____ Total _____

3. The person directly responsible for the daily operation of athletic insurance (please circle):

   Head Athletic Trainer — Assistant Athletic Trainer
   Department Secretary/Clerical — Athletic Director
   Asst. Athletic Director — Risk Manager
   Other (please specify): _____

4. Has the insurance officer had any special training in medical insurance policies, claims processing, etc. If so, please describe.
   Yes ___ No ___

   Comments: _____

   _____

5. How does your athletic department cover the student-athletes? Please check all that apply.

   ___ Primary (pays regardless of athlete's personal insurance)
   ___ Secondary (pays after students' or parents' insurance policy has been billed)
   ___ No coverage, balance becomes the responsibility of the student-athlete and/or parent(s).
   ___ Other (please explain): _____

6. Does your athletic department have any self-insurance? If so, what is the annual premium of the insurance company coverage? _____

7. Does your university insurance policy have a pre-established deductible?
   No ___ Yes ___ If yes, what is the amount? _____

8. Does your insurance have specific riders? If so, please check all that apply:
   ___ Athletic Injuries Only
   ___ Other: _____
   _____

9. Your approximate yearly expense for student-athlete health care (expenses not covered by insurance and are considered out-of-pocket):

$0 - $9,999	$30,000 - $39,999	$60,000 - $69,999
$10,000 - $19,999	$40,000 - $49,999	$70,000 - $79,999
$20,000 - $29,999	$50,000 - $59,999	$80,000 - over

Section 2 Cost Containment Policies:

10. Are you currently contacting those insurance companies that provide coverage to those student-athletes that fall out of the network?

    If yes, please specify by circling all that apply:
    For Pre-authorization — For an Explanation of Benefits
    To Explain Necessity of Treatment — Other: _____

    If not, please specify why by circling all that apply:
    Not Enough Time — Will Pay Bill Regardless
    Expect Physician's Office to Contact Insurance — Other: _____

11. Do you request that the insurance company temporarily appoint a primary care physician for the duration of the student-athlete's career at your university?
    ___Yes ___No ___Sometimes

    If yes, please record the approximate percentage of times you are successful: _____

12. Do you request that the student-athlete's insurance pay a certain percentage of the their established amount for certain procedures in exchange for free follow-up visits and rehabilitation after deductible is met?
    ___Yes ___No ___Sometimes, please explain. _____

    If yes, please record the approximate percentage of times you are successful: _____

13. Do you request benefit information and/or literature from student-athletes' insurance providers that could help you to decrease costs from out-of-pocket expenses?
    ___Yes ___No

    If yes, please check all that apply:
    ___ All Insurance Companies
    ___ Unfamiliar Insurance Companies Only
    ___ International Insurance Companies Only
    ___ Concerning Possible Dental or Optical Coverage
    ___ Other: _____

Please record the approximate percentage of times your are successful acquiring information: ____

If not, please indicate why by circling all that apply:
Not Enough Time Will Not Read Literature Will Pay Bill Regardless
Other: _____

14. For what procedures do you consistently call for pre-authorization? Circle all that apply:

All Medical Procedures	All Surgeries Only	Laboratory
Major Diagnostic Testing (MRI, CT, Bone Scan)	Dental Coverage	Pharmacy
Alternative Medicine (Acupuncture, Chiropractic)	Psychiatry	Psychiatry
Other: _____		

Please record the percentage of time you are successful: _____

15. Please list the major HMO's in your area that you deal with on a regular basis.
_____
_____

16. Does the team physician facilitate payment by the student-athlete's insurance by contacting the insurance company to help provide additional information concerning any of the following (please circle all that apply):

All Medical Procedures	All Surgeries Only	Laboratory
Diagnostic Testing (MRI, CT, Bone Scans)	Dental Coverage	Pharmacy
Alternative Medicine (Acupuncture, Chiropractic)		Psychiatry
Optical Coverage	Other: _____	

17. When local student-athletes (those within their established network) are injured, are you ever unable to acquire a referral to your athletic department's team physician from the student-athletes' chosen primary care physician?
Yes _____ No _____ Sometimes _____

Comment(s): _____
_____

18. Other comments about your experiences dealing with insurance coverage and its availability to the out-of-network student-athlete(s).
_____
_____

Please indicate whether or not you wish to receive results of the study.

_____ Yes, I would like to receive the results of this study. Please send the results to the following (please exclude your name to ensure confidentiality, forms are coded):

_____

_____

_____

_____ No, I would not like to receive the results of this study.

APPENDIX C

APPENDIX C

Code___

Insurance Company Questionnaire

Section 1 Demographics:

1. Approximately how many physicians provide services under your health insurance plan? _____

2. What types of medical care are covered under your plan? Circle all that apply.

Allergy	Cardiology	Dentistry	Dermatology
Endocrinology	Exercise Physiology	Gastroenterology	General Surgery
Hand Surgery	Hematology	Internal Medicine	Manipulative Therapy
Neurology	Nutrition	OB-GYN	Oncology
Ophthalmology	Optometry	Psychiatry	Pulmonology
Orthotics	Radiology	Rheumatology	Sports Psychology
Substance Abuse	Urology	Other:	

Specialized Surgery (please specify): _____

_____

_____

3. How is a policyholder considered out-of-network? _____

_____

4. Up to what age does your company cover dependents of a policyholder? _____

5. Do you provide rider options for your policyholders that have children attending college out-of-network?
   NO_____ YES_____

6. If you answered yes to question #5, how are your policyholders eligible for such A rider? _____

7. If you answered yes to question #5, how are your policyholders made aware of such a rider? _____

8. Would you consider developing a rider for those families who anticipate furthering education
   out of state?
   NO_____ YES_____

Section 2 Policies specific to Out-of-Network

- **Please note**: All questions refer to student-athletes, covered by their parent's policy, who attend a university that is considered out-of-network, established by your policies and procedures.

1. Would you consider allowing a physician under your plan to temporarily appoint a primary care physician for a subscriber while he or she attends a college that is deemed out-of-network established by your policy?

   ____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

2. Have you ever allowed a temporary primary care physician appointment?

   ____ NO ____ YES

3. After the deductible is met as described in the subscriber's policy, would you consider agreeing to pay a certain percentage of your established rate for certain surgical procedures including, but not limited to, ligament reconstruction, fractured bone setting, arthroscopic surgeries, etc. in exchange for free rehabilitation and follow up visits? (Assume all procedures are out patient procedures.)

   ____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

4. If athletic trainers in the education setting continue to pursue third party reimbursement, would your answer to question # 3 change? If yes, what would your new response be?

   ____ NO ____YES (Please comment): _____

5. After the deductible is met as described in the subscriber's policy, would you consider agreeing to pay a certain percentage of your established rate for certain diagnostic testing including, but not limited to, Magnetic Resonance Imaging, CT Scans, Bone Scans, etc.? (Assume all diagnostic testing procedures are outpatient procedures.)

   ____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

6. Would you consider paying the deductible for the university's secondary insurance carrier for a student-athlete who has their claim denied in order for that student-athlete to remain at school for the ordered procedure?

   ___Never ____Rarely ____Occasionally _____Frequently _____Very Frequently

7. Does distance to home matter when deciding on whether or not to rule in favor of the patient on a particular claim when services were rendered out-of-network?

____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

8. Does the ruling on a claim, in favor of the patient, matter if he or she is out of state attending a college or university?

____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

9. Does the ruling on a claim, in favor of the patient, matter if he or she is out of state attending a college or university on an athletic scholarship?

_____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

10. Does your company provide, or would you consider transportability of coverage for those young adults that attend college out-of-network?

____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

11. Are there any sports medicine specialists on the decision making board for a particular claim at any point in time when deciding on the necessity of a diagnostic service, procedure, brace, etc. for a sports related incident?

____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

12. Would you agree to place a sports medicine specialist on the decision making board for claims involving student-athletes?

____Never ____Rarely ____Occasionally ____Frequently ____Very Frequently

13. Would you be interested in sending out literature that might help insurance officers in the university and collegiate setting to aid in dealing with these sensitive issues regarding student-athletes? Why or why not?

_____

14. Any other suggestions you or your company may have to help decrease the time and cost investment athletic insurance officers, as well as your insurance officers, and to hasten the most efficient care given to the student-athletes within the limitations of your policies and procedures?

_____

_____

_____

Thank you again, for taking time out to respond to this survey. In closing, please indicate whether or not you wish to receive results from this study and where you would like to have the results sent.

____Yes, I would like to receive results of this study. Please send the results to the following (please exclude your name to ensure confidentiality, forms are coded):

_____
_____
_____

____No, I would not like to receive results of this study.

LIST OF REFERENCES

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Albohm, M. (1996, May). Health care delivery and the athletic trainer. NATA News, 28.

American Managed Care and Review Association. (1994). 1994-1995 Managed Health Care Directory. Washington, DC: The AMCRA Foundation: Author.

Anderson, E. (1995, September). Managed care terminology. NATA News, 12.

Arnett, R.H., Cowell, C.S., Davidoff, L.M., & Freeland, M.S. (1985). Health spending trends in the 1980s: adjusting to financial incentives. Health Care Review, 6 (3), 1-25.

Brown, M. & McCool, B.P. (1990). Health care systems: predictions for the future. Health Care Management Review, 15 (3), 87-94.

Bushee, S. (1996, Fall). Playing the insurance game. College Athletic Trainers' Association Society, 1 (2), 7-8.

Campbell, D. (1997, April). Managed care cost reduction methods. NATA News, 6-9.

Capell, K.Y. (1997). When your HMO says 'no way'. Business Week, May 19, 140-141.

Carter, B. (1997). Evolution of Managed Health Care [On-line]. Available: http://www.iha.org/evolve.htm.

Census Bureau. (1997). Proportion of 18-to-24 year-olds enrolled in college by high-school-graduation status and race, 1985-1995. The Chronicle of Higher Education Almanac, 44 (1), 19.

Chambers, R.L., Ross, N.V. & Kozubowski, J. (1986). Insurance types and coverages: knowledge to plan for the future (with a focus on motor skill activities and athletics). Physical Educator, 44 (1), 233-240.

Clark, J.B. (1993). Health insurance 101: filling the gaps at college. Kiplinger's Personal Finance Magazine, 47 (9), 136-137.

Clark, J.B. (1997, January). Managed care? What the heck is that? Kiplinger's Personal Finance Magazine,51 (1), 140-141.

DelPizzo, L. (1996). Managed Care Glossary [On-line]. Available: http://www.cmhc.com/articles/glossary.htm.

Ellwood, P.M. & Lundburg, G.D. (1996). Managed care a work in progress. Journal of American Medical Association, 276 (13), 1083-1086. Editorial.

Emanuel, E.J. & Brett, A.J. (1993). Sounding board: managed competition and the physician-patient relationship. The New England Journal of Medicine, 329 (12), 879-882.

Emanuel, E.J. & Dubler, N.N. (1995). Preserving the physician-patient relationship in the era of managed care. Journal of the American Medical Association, 273 (4), 323-329.

Evenson, A.J. (1997, May 25). Health study probes Lansing: project will compare plans among locations and within each city. Lansing State Journal, pp. B7, B8.

Frankel, E. (1991). Handle with care. College Athletic Management, 3 (3), 11-13.

Friedman, E. (1986). 50 years of U.S. health care policy. Hospitals, 60 (6), 95-104.

Ginzberg, E. (1995). The long view. Society, 16 (6), 16-21.

Gold, M.R., Hurley, R., Lake, T., Ensor, T., & Berenson, R. (1995). A national survey of the arrangements managed-care plans make with physicians. The New England Journal of Medicine, 333 (25), 1678-1683.

Gordon, G.H., Baker, L. & Levinson, W. (1995). Physician-patient communication in managed care. West Journal of Medicine, 163 (6), 527-531.

Greene, J. (1997). Has managed care lost its soul? Hospitals & Health Network, 71 (10), 36-42.

Hart, P.M. & Cole, S.L. (1992). Subtracting insult from injury. Athletic Business, 16 (5), 39-42.

Henehan, M. & Jones, R. (1996). Primary care sports medicine in the managed care environment: coping in today's culture. The Physician and Sportsmedicine, 25 (6), 96-106.

Hennelly, V.D. & Boxerman, S.B. (1983). Out-of-plan use and disenrollment: outgrowths of dissatisfaction with a prepaid group plan. Medical Care, 21 (3), 348-359.

Hillman, A.L., Welch, W.P., & Pauly, M.V. (1992). Contractual arrangements between HMOs and primary care physicians: three tiered HMOs and risk pools. Medical Care, 30 (2), 136-148.

Hunt, K. (1995). Original HMO Celebrates Its 50th Anniversary [On-line]. Available: http://sddt.com/files/librarywire/DS95_10_30/DS95_10_30_fd.html.

Hunt, V. (1997, November). ATCs work to with insurance companies to keep injured students in college community care. NATA News, 9-10.

Iglehart, J.K. (1982). The future of HMOs. The New England Journal of Medicine, 307 (7), 451-456.

Iglehart, J.K. (1992). American health care system managed care. The New England Journal of Medicine, 327 (10), 742-747.

Iglehart, J.K. (1994a). Physicians and the growth of managed care. The New England Journal of Medicine, 331 (17), 1167-1171.

Iglehart, J.K. (1994b). The struggle between managed care and the fee-for-service practice. The New England Journal of Medicine, 331 (1), 63-67.

Kassirer, J.P. (1994). Access to specialty care. The New England Journal of Medicine, 331 (17), 115-1152.

Kongstvedt, P.R. (1989). Elements of management control structure. In P.R. Kongstvedt (Ed.), The Managed Care Health Book (pp.19-23). Pittsburg, Pennsylvania: Aspen Publishers, Inc.

Kongstvedt, P.R. (1989). Authorization systems. In P.R. Kongstvedt (Ed.), The Managed Care Health Book (pp.143-149). Pittsburg, Pennsylvania: Aspen Publishers, Inc.

Lehr, C. (1992). Status of medical insurance provided to student athletes as NCAA schools. Journal of Legal Aspects of Sport, 2 (1), 12-22.

Luft, H.S. (1981). Health Maintenance Organizations, Dimensions of Performance. New York: John Wiley & Sons, Inc.

MacLeod, G.K. (1989). An overview of managed medical care. In P.R. Kongstvedt (Ed.), The Managed Care Health Book (pp. 3-9). Pittsburg, Pennsylvania: Aspen Publishers, Inc.

Martin, D.P., Diehr, P, Price, K.F., & Richardson, W.C. (1989). Effect of gatekeeper plan on health services use and charges: a randomized trial. American Journal of Public Health, 79 (12), 1628-1632.

Miller R.H.& Luft, H.S. (1994a) Managed care plan performance since 1980: a literature analysis. Journal of American Medical Association, 271 (19), 1512-1519.

Miller, R.H. & Luft, H.S. (1994b). Managed care plans: characteristics, growth, and premium performance. Annual Review of Public Health, 15, 437-459.

Petr, T. (1998). Percent of student body that are student-athletes. National Collegiate Athletic Association. Available E-mail: tpetr@ncaa.org.

Pope, C.R., Freeborn, D.K., & Greenlick, M.R. (1972, November). Use of Outside Physicians by Members of a Group Practice Prepayment Plan. Presented at A.P.H.A. Annual Meeting.

Ray, R. (1994). Helping athletic trainers pay the bills: athletic injury insurance. In R. Ray (Ed.), Management Strategies in Athletic Training (pp. 177-203). Champaign, IL: Human Kinetics Publishers.

Richardson, W.C., Boscha, M.V., Weaver, B.L., Drucker, W.L., & Diehr, P.K. (1997, November). The Seattle Prepaid Health Care Project: Comparison of Health Delivery Services. University of Washington: Department of Health Services, School of Public Health & Community Medicine: Author.

Roemer, M.I. & Shonick, W. (1973). HMO performance: the recent evidence. Milbank Memorial Fund Quarterly,51 (3), 271-317.

Rogers, K. (1993). Managed care and insurance terminology. Unpublished.

Sallis, R.E. & Massimino, F. (1995). Sports medicine and managed care a positive partnership. The Physician and Sportsmedicine, 23 (4), 33-35.

Scitovsky, A.A., Benham, L. & McCall, N. (1981). Out-of-plan use under two prepaid plans. Medical Care, 19 (12), 1165-1193.

Shea, C. (1995). Rx for student health. The Chronicle of Higher Education, 41 (30), A35-A36.

Shouldice, R.G. (1991). Introduction to Managed Care. Virginia: Information Resources Press.

Swartz, K. & Brennan, T.A. (1996). Integrated health care, capitated payment, and quality: the role of regulation. Journal of American Medical Association, 276 (13), 1010. Abstract

U.S. Department of Education. (1997). College enrollment by age of student. The Chronicle of Higher Education Almanac, 44 (1), 18.

Vadakin, C.E. & Lipton, Z. (1986). The Health Insurance Answer Book. New York: Panel Publishers, Inc.

Wagner, E.R. (1989). Types of managed care organizations. In P.R. Kongstevdt (Ed.), The Managed Care Health Book (pp. 11-18). Pittsburg, Pennsylvania: Aspen Publishers, Inc.

Walters, R. (1994). Trends in managed care and potential impacts on athletics administration. Unpublished.