

# Athletic Trainers in an Orthopedic Practice

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**A**THLETIC TRAINERS at the University of Wisconsin Hospital have assisted orthopedic and primary-care sports-medicine physicians in the clinic since 1981. At the core of our success is the long-standing relationship of the certified athletic trainer and the team physician. We have extended the traditional on-the-field athletic training room model to the sports-medicine orthopedic clinic. This model has produced excellent clinic efficiency and flow and increased revenue for our hospital and physicians.

Presently, the UW Health Sports Medicine Clinic has eight sports-medicine-fellowship-trained physicians. Four of these have specialties in orthopedics, two in family medicine, and two in pediatrics. They are also the team physicians for the University of Wisconsin Athletic Department. A total of a 4.0 FTE equivalent of athletic trainers staff these clinics along with nurses, physician assistants, medical assistant, residents, and fellows. The athletic trainers are all hospital employees and are not employed by the physician group. The responsibilities of the various support staff are described in the sidebar.

## Study

We undertook a study to determine the impact that athletic trainers have on our clinic volume and flow. It should be noted that at the time of the study only five attending physicians worked in our clinic as compared with the eight we currently have. The study determined the productivity of the athletic trainers, as well as assessing the percentage of patients seen by them.

Data were collected on 17 different half-day clinics during which the athletic trainers saw 97 patients with the attending physician staff. The

**Nurses, MAs:** chart preparation, patient check-in, diagnostic exam ordering, and phone-call triage.

**Athletic Trainers, Residents, Fellows:** history taking, systems review, thorough physical examination, completion of diagnostic exam forms, completion of rehabilitation referrals and surgery-scheduling forms, presenting cases to attending, medical-record dictation, patient education, and physician-extender services. Physician-extender services include instruction in therapeutic exercise, durable medical equipment fitting, and gait training/crutch fitting.

**Physician Assistants:** Presurgical work-ups.

athletic trainers, on average, spent 25.1 min per patient, including dictation. The average time spent on each task is shown in Table 1.

Three types of patients are seen in the clinic: new, follow-up, and postoperative. Athletic trainers spent an average of 33.3 min with new patients, 21.9 with follow-up patients, and 16.3 min with postoperative patients.

Productivity for the athletic trainers was calculated for each physician clinic, as well, defined as the amount of time accounted for by an athletic trainer in patient care divided by the time in his or her shift. The average productivity was 71.1%. The results for productivity differ primarily as the result of the number of residents or fellows present. Some clinics are staffed with more residents or fellows than others, in which case fewer patients are seen by the athletic trainers. The productivity results are shown in Table 2.

Finally, the percentage of patients seen by athletic trainers in the clinic was calculated. Throughout the course of the study, attending physicians saw 294 patients, of which the athletic trainers saw 97, or 33%.

## Discussion and Conclusions

Based on the data presented, our sports-medicine clinic throughput would suffer without the assistance of athletic trainers. This is especially true for our orthopedists, whose clinics have the highest athletic trainer productivity. The athletic trainers see approximately one third of the patients; without their help, additional staff such as a nurse practitioner or resident would be needed to accommodate the same number of patients.

The value of athletic trainers was also reinforced by interviews with physicians, who strongly believed that their clinics could not support current volume without the three assistants that include an athletic

trainer, resident/fellow, and physician assistant. Physicians also felt that the cost:benefit ratio of hiring an athletic trainer was very favorable and that the athletic trainers' skills and knowledge in regard to sports injuries and rehabilitation was irreplaceable.

To summarize, by employing athletic trainers in our sports-medicine clinic, our orthopedists see 15–30% more patients and our primary-care providers would see 10–20% more patients. This translates to an average additional throughput of 10 patients when athletic trainers staff a full-day physician clinic. In essence, athletic trainers provide many services for the physicians that enable them to see more patients and spend more time with each patient.

In addition to the positive effects athletic trainers have on clinic flow, our hospital also is able to capture revenue for the services provided by them in its facility charge. Similarly, our athletic trainers are providing physician-extender services and billing appropriate CPT codes for services rendered beyond the physician appointment, including instruction in therapeutic exercise; appliance, brace, and splint fitting; and gait training/crutch fitting.

The use of athletic trainers has proven very beneficial to our clinic for the obvious positive impact they have on volume and revenue, as well as patient education and overall patient satisfaction. An additional indirect benefit of this model is the increased communication it stimulates between the physicians and athletic training staff as they care for the many athletes and patients they have in common. At the UW Health Sports Medicine Clinic, we think that the broad skills of athletic trainers lend themselves very well to sports-medicine and orthopedic clinics.

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**TABLE 1. AVERAGE TIME SPENT PER TASK**

Task	Time on Task (min)
Evaluation	8.2
Presentation to physician	2.3
Assisting physician with patient	7.2
Follow-up and patient education	1.9
Dictation	4.3
Other	1.1
<b>Total</b>	<b>25.1</b>

**TABLE 2. ATHLETIC TRAINING PRODUCTIVITY RESULTS**

Physician	Productivity (%)
Orthoped 1	93.6
Orthoped 2	76.5
Orthoped 3	63.7
Pediatrician 1	50.7
Pediatrician 2	38.8