

CERTIFIED ATHLETIC TRAINERS

AN EVALUATION OF THEIR EFFECT ON PATIENT THROUGHPUT AND REVENUE GENERATION IN A PRIMARY CARE SPORTS MEDICINE PRACTICE

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COMPANY PROFILE

The Emory Sports Medicine Center is one of the country's leading centers for the treatment, diagnosis and prevention of sports injuries. The staff of the Emory Sports Medicine Center includes nationally recognized orthopaedic surgeons as well as other non-operative physicians in the highly focused field of sports injury treatment. In addition, the Sports Medicine Center's diverse staff includes certified athletic trainers, exercise specialists, physical therapists, radiologists, nurses and nurse practitioners who have been specifically trained in sports medicine. The Center provides a complete sports medicine program that encompasses treatment, diagnosis, prevention and rehabilitation for active individuals of all ages.

SUMMARY

While medical assistants (MAs), physician assistants (PAs) and nurses (RNs) are the "typical" clinical assistants used in physician practices, **certified athletic trainers (ATs)** — *highly educated health care professionals who specialize in the prevention, assessment and rehabilitation of musculoskeletal injuries and illnesses* — are gaining recognition as unique, skilled and valuable health care professionals in orthopaedic offices.

In an effort to evaluate the benefit of employing certified athletic trainer, Emory Sports Medicine Center implemented a study to determine the financial and clinical effectiveness of using them as the primary clinical assistant in the orthopaedic office. By comparing the number of patient encounters and financials (bill charges and collections) of two primary care physician practices — both before and during the introduction of a certified athletic trainer — it was shown that certified athletic trainers had a positive effect on patient throughput and revenue. Results showed that ATs can increase a physician's productivity up to 23% and increase revenue by up to 42%.

"At Emory Sports Medicine the use of certified athletic trainers has allowed us to better leverage our non-operative physicians, thus increasing productivity and professional billings. Over a six-month study period, we have seen improvements in provider productivity, as measured by encounters, on the order of 22 percent.

In addition, athletic trainers help enhance a [physician's] communication with patients by serving as another source of expert information that patients can absorb. ATs are a key part of our sports medicine service delivery model."

Mark Miller
Senior Clinical Administrator
Emory Orthopaedics
& Spine Center





THE STUDY

Two primary care, sports medicine, fellowship-trained physicians participated in this study. The practices for the two physicians see the same type of patients (most commonly individuals ages 14-65 with musculoskeletal orthopaedic injuries).

For this study, both physicians used a medical assistant for clinical support over a six-month period. After this period an athletic trainer replaced the MA as clinical support for both practices. Data was collected on patient encounters, billed charges and collections.

The clinics are open for 6.5 hrs per day to see patients. Physician "A" schedules patients from 7:30am -3:00pm with an hour for lunch. Physician "B" schedules patients from 8:00am -3:30pm with one hour for lunch. Each physician's master schedule allows for 26 patients, new or return visits, to be seen per day. (There are 13 return visit openings and 13 new patient openings, with 2 frozen slots for each practice.) There is also a 48-hour acute injury policy so the clinic athletic trainers have the option to add two more new patients per physician per clinic. When new patients call for appointments they are scheduled with either one of the physicians based on next available appointment.

Data was compiled for an average six (6) month period. Physician "A" used an MA from Jan '05 through June '05 and used an AT for clinical support from July '05 through Dec '05. Physician "B" used an MA from Nov '05 through May '06 and used an AT from June '06 through November '06. Data was collected for patient encounters, billed charges and revenue generated through collections. The total number of patient encounters was a total for the 6 month period. No time was taken away for holiday or time out of the office for either physician. These numbers do not include patient 'no shows' or cancellations—only patients that came into the office.

THE ATHLETIC TRAINER DIFFERENCE

Data was compared over the three parameters for both physicians while using an MA and while using an AT. The athletic trainers working with the physicians performed all the same duties as the MA, but because of their unique educational background, skills and clinical experience they were also assisting with:

- Obtaining patient histories
- Performing physical exams and special tests
- Educating patients and answering questions
- Organizing all notes and radiographic studies
- Presenting final case reviews to the physician
- Casting *
- Splinting *
- DME/Brace Fitting
- Perform Therapeutic Exercise
- Gait training
- Post-Operative patient follow-ups/instruction wound advice, etc

** Emory's athletic trainers are fellowship trained and this skill is a part of this special advanced education they receive.*



RESULTS– INCREASING EFFICIENCY WITH AN ATHLETIC TRAINER:

When setting up the schedule to see patients, the physicians were able to open eight more slots along with the two frozen slots, or 34 patient visits (18 return and 16 new) per day after the AT was introduced into the clinic. Additionally they saw an increase in the number of patient encounters, bill charges and collections as viewed in tables 1 & 2.

(Table 1) A breakdown of Physician “A” shows that while using an MA he saw a total of 1508 patients from Jan ‘05 – June ‘05, had billed charges of \$346,798.94, and collected \$219,989.86 in revenue. From July ‘05 through Dec ‘05 Physician “A” had clinical support from an athletic trainer and had 1,731 patient encounters or an increase of 229 encounters (+13%), billed charges of \$375,047.90 an increase of \$28,248.96 (+7.5%), and collections of \$239,539.39 an increase of \$22,549.53 (+9.4%)

(Table 2) Physician “B,” over a seven-month period from Nov ‘05-May ‘06, used an MA for clinical support and saw patients for four days a week. (Total of 28 {116 possible clinic days} patient visit days). Physician “B” had 1651 patient encounters, billed charges of \$291,371.51, and collections of \$181,135.28. From June ‘06 through Nov ‘06 Physician “B” saw patients 4.5 days per week (total of 27 {112 possible clinic days} patient visit days) and utilized an AT for his clinical support. Patient encounters increased to 2152 an increase of 501 (23.2%), billed charges to \$471,892.07 an increase of \$180,520.56 (38%), and collections to \$311,854.90 an increase of \$130,719.62 (42%)

| CLINIC DAYS | DR A: NO AT | # ENCOUNTER | \$ COLLECTIONS | \$ BILL CHARGES | CLINIC DAYS | DR A: WITH AT | # ENCOUNTER | \$ COLLECTIONS | \$ BILL CHARGES |
|-------------|----------------|-------------|----------------|-----------------|-------------|---------------|-------------|----------------|-----------------|
| 5 | Jan '05 | 272 | 32,461.52 | 57,832.40 | 5 | July '05 | 281 | 37,146.52 | 64,672.52 |
| 5 | Feb '05 | 238 | 37,033.35 | 53,776.00 | 5 | Aug '05 | 300 | 50,646.19 | 66,322.02 |
| 5 | Mar '05 | 209 | 32,044.82 | 45,188.81 | 5 | Sept '05 | 343 | 36,278.83 | 67,530.04 |
| 5 | April '05 | 273 | 36,213.23 | 67,441.14 | 5 | Oct '05 | 256 | 43,080.04 | 49,865.50 |
| 5 | May '05 | 259 | 39,391.55 | 64,601.09 | 5 | Nov '05 | 280 | 32,436.24 | 59,649.52 |
| 5 | June '05 | 257 | 39,845.39 | 57,959.50 | 5 | Dec '05 | 271 | 39,951.57 | 67,008.30 |
| | TOTALS: | 1508 | 216,989.86 | 346,798.94 | | | 1731 | 239,539.39 | 375,047.90 |
| | | | | | | | 229+ | 22,549.53+ | 28,248.96+ |

Table 1: Total patient encounters and collections for a primary care sports medicine, fellowship trained, physician (physician “A”). Six months using a certified athletic trainer for clinical support and the other six months using a medical assistant.

| CLINIC DAYS | DR B: NO AT | # ENCOUNTER | \$ COLLECTIONS | \$ BILL CHARGES | CLINIC DAYS | DR B: WITH AT | # ENCOUNTER | \$ COLLECTIONS | \$ BILL CHARGES |
|-------------|--------------------------------------|-------------|----------------|-----------------|-------------|---------------|-------------|----------------|-----------------|
| 4 | Nov '05 | 218 | 21,728.98 | 39,997.99 | 4.5 | June '06 | 334 | 39,623.34 | 70,209.00 |
| 4 | Dec '05 | 223 | 27,932.30 | 39,904.00 | 4.5 | July '06 | 294 | 43,602.30 | 60,216.00 |
| 4 | Jan '06 | 243 | 19,694.50 | 41,449.00 | 4.5 | Aug '06 | 384 | 55,940.65 | 90,453.52 |
| 4 | Feb '06 | 255 | 25,658.48 | 46,947.00 | 4.5 | Sept '06 | 311 | 43,740.45 | 69,917.52 |
| 4 | Mar '06 | 234 | 28,256.07 | 41,811.52 | 4.5 | Oct '06 | 436 | 63,049.46 | 92,996.04 |
| 4 | April '06 | 265 | 27,941.94 | 43,746.00 | 4.5 | Nov '06 | 393 | 65,898.70 | 88,099.99 |
| 4 | May '06 | 213 | 29,923.01 | 37,519.00 | | | | | |
| 28 | TOTALS: | 1651 | 181,135.28 | 291,371.51 | 27 | | 2152 | 311,854.90 | 471,892.07 |
| | | | | | | | 501+ | 130,719.62+ | 180,520.56+ |
| | AVERAGE PATIENTS MONTH/VISITS | 235.86 | | | | | 318.80 | | |

Table 2: Total patient encounters and collections for a primary care sports medicine, fellowship trained, physician (physician “B”). Six months using a certified athletic trainer for clinical support and the other six months using a medical assistant.

CONCLUSIONS

Emory's evaluation indicates that athletic trainers can improve efficiency and revenue generated in a primary care sports medicine practice. The introduction of athletic trainers as clinical support staff in the Emory Sports Medicine Clinic markedly improved billings, collections and the number of patients seen over a six-month period. This information led Emory Sports Medicine to hire a second certified athletic trainer for clinical support. Each physician now has his/her own AT working in the clinic on a daily basis.

FACTS ABOUT CERTIFIED ATHLETIC TRAINERS

- Certified athletic trainers are unique health care providers who specialize in the prevention, assessment, treatment and rehabilitation of injuries and illnesses.
- All athletic trainers have a bachelor's degree with a major in athletic training from an accredited college or university
- Certified athletic trainers are academically and clinically prepared to work in physical medicine and rehabilitation. Almost 70% of athletic trainers hold a master's or PhD.
- Athletic trainers are regulated and licensed health care workers in 44 states. Licensure efforts are ongoing remaining six states.
- An independent national board certifies athletic trainers. It is called the Board of Certification, Inc.
- Certified athletic trainers must obtain 75 hours of medically-related continuing education credits every three years.
- Athletic training students are qualified and capable as physician extenders working in physician offices, clinics, hospitals, workplaces and schools. Clinical reasoning skills are taught as part of their academic preparation.
- Accredited programs include formal instruction in areas such as injury/illness prevention, first aid and emergency care, assessment of injury/illness, human anatomy and physiology, therapeutic modalities and nutrition.

**TO LEARN MORE ABOUT CERTIFIED ATHLETIC TRAINERS,
CONTACT THE NATIONAL ATHLETIC TRAINERS' ASSOCIATION
AT 800-879-6282 X112 OR VISIT WWW.NATA.ORG**

