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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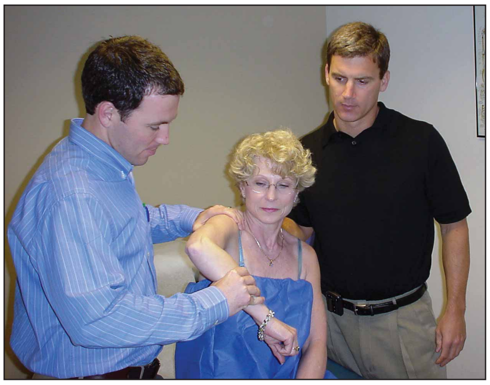

"At Emory Sports Medicine the use of certified athletic trainers has allowed us to better leverage our non-operative physicians, thus increasing productivity and professional billings. Over a six-month study period, we have seen improvements in provider productivity, as measured by encounters, on the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

In addition, athletic trainers help enhance [our physicians'] 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

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 and other non-operative physicians specializing in sports injury treatment. In addition, the Sports Medicine Center employs certified athletic trainers, exercise specialists, physical therapists, radiologists, nurses and nurse practitioners. The center provides a comprehensive sports medicine program that encompasses treatment, diagnosis, prevention and rehabilitation for active individuals of all ages.

Summary

While physician practices have typically utilized medical assistants (MAs), physician assistants (PAs) and nurses (RNs), 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.

To determine the effectiveness of employing certified athletic trainers, Emory Sports Medicine Center looked at the financial and clinical implications of using ATs as the primary clinical assistant in the primary care sports medicine office.

Results

The number of patient encounters and financials (bill charges and collections) of two primary care physician practices showed that certified athletic trainers had a positive effect on patient throughput and revenue. The analysis showed the use of a certified athletic trainer can increase a physician's productivity up to 22% and increase revenue by up to 42%. Patient outcomes and satisfaction scores were not measured.

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 half-year period. This information led Emory Sports Medicine to hire a second certified athletic trainer for clinical support. Today the clinics employ an athletic trainer for each physician. Working as a team, the partnership continues to pay off with enhanced revenue and productivity.

The Case

Two primary care, sports medicine, fellowship-trained physicians participated in this case. The practices for the two physicians serve the same patient base (most commonly individuals ages 14-65 with musculoskeletal orthopaedic injuries.) For this analysis the physicians used a MA for clinical support for at least six months. The following six months an athletic trainer replaced the MA as clinical support for both practices.

The clinics received patients 6.5 hours a day for roughly the same schedule. Each master schedule allowed for 26 patient slots, 13 for return visits and 13 for new patients. Two frozen slots were kept open for patients with acute injuries. These openings were given to new patients if no emergency arose. When new patients called for appointments they were scheduled with the physician with the next available appointment.

Data, collected for two half-year periods in 2005 and 2006, showed patient encounters, billed charges and revenue generated through collections. Time was not subtracted for holidays or occasions when the physicians were out of the office. Figures only reflect patients that came in to the office, not cancellations or no shows. Patient outcomes and satisfaction scores were not measured.

The Athletic Trainer Difference

Data was compared over the three parameters for each physician 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 comprehensive educational background, skills and clinical experience, the athletic trainers also assisted 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

— Administering Gait training

** 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:

These physicians were able to open eight more slots along with the two acute care slots, or 34 patient visits (18 return and 16 new) per day after the AT was introduced into the clinic. The number of patient encounters, bill charges and collections increased as seen in tables 1 & 2.

(Table 1) While using an MA, Physician A saw a total of 1508 patients from Jan '05 - June '05, billed charges of $346,798.94, and collected $219,989.86 in revenue. From July '05 through Dec '05, when Physician A had clinical support from an athletic trainer, he had 1,731 patient encounters - an increase of 229 encounters (+13%). Billed charges of $375,047.90 was an increase of $28,248.96 (+7.5%). Collections of $239,539.39 was an increase of $22,549.53 (+ 9.4%).

(Table 2) Over a seven-month period from Nov '05-May '06, Physician B 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 had 1651 patient encounters. Billed charges were $291,371.51. Collections were $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: With MA	# 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	$219,989.86	$346,798.94		Totals:	1731	$239,539.39	$375,047.90
						Difference between the MA & AT	**223+**	**$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: With MA	# 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	27	Totals:	2152	$311,854.90	$471,892.07
28	Totals:	1651	$181,135.28	$291,371.51		Difference between the MA & AT	**501+**	**$130,719.62+**	**$180,520.56+**

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.

Facts about certified athletic trainers

- **Certified athletic trainers know and practice the medical arts at the highest professional and ethical standards**. Athletic training is practiced by athletic trainers, health care professionals who collaborate with physicians to optimize the activity and participation of patients and clients. Athletic training encompasses the prevention, diagnosis and intervention of emergency, acute and chronic medical conditions involving impairment, functional limitations and disabilities.
- Members of the National Athletic Trainers' Association must agree to abide by the Association's **Code of Ethics**.
- **Athletic trainers are licensed or otherwise regulated in 46 states**. Licensure efforts are underway in the remaining four states.
- All certified or licensed athletic trainers **must have a bachelor's or master's degree** from an accredited college or university in order to practice athletic training. Bachelor's degrees are in pre-medical sciences, kinesiology, exercise physiology, biology, exercise science or physical education. Academic programs are accredited through an independent process by the Commission on Accreditation of Athletic Training Education (CAATE).
- **Basic and applied sciences courses** include: human anatomy, human physiology, chemistry, biology, physics, statistics and research design, exercise physiology and kinesiology/biomechanics.
- **Professional content** includes: risk management and injury prevention; pathology of injuries and illnesses; orthopedic clinical examination and diagnosis; medical conditions and disabilities; acute care of injuries and illnesses; therapeutic modalities; conditioning, rehabilitative exercise and referral; pharmacology; psychosocial intervention and referral; nutritional aspects of injuries and illnesses; and health care administration.
- The **national, independent Board of Certification Inc. (BOC) certifies athletic trainers**. Athletic Trainers, Certified (ATC) must obtain 75 hours of medically related continuing education every three years and adhere to Standards of Professional Practice. The BOC is accredited by the National Commission for Certifying Agencies.
- **Athletic trainers are qualified and capable physician extenders working in physician offices**, hospitals, clinics, commercial worksites, schools, colleges, military and other locations. Clinical reasoning skills are taught as part of their academic preparation.

To learn more about certified athletic trainers, contact the
National Athletic Trainers' Association
www.nata.org   info@nata.org
(800) 879-6282 – External Affairs Department
2952 Stemmons Freeway, Suite 200, Dallas, TX 75247

National Athletic Trainers' Association

To hire an athletic trainer visit: www.nata.org/careercenter

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