Optimizing the Athletic Trainer: Best Practices and New Developments

Joe Greene
University of Wisconsin
Department of Orthopedics and Rehabilitation
University of Wisconsin
Department of Orthopedics and Rehabilitation

• **UW Health Orthopedic Service Line**
  - 600 + Employees
  - Highly Profitable Service Line with UW Health

• **UW Department of Orthopedics and Rehabilitation**
  - 33 Orthopedic Faculty
  - 41 PA’s and APNP’s
  - 20 Primary Care Sports Medicine and Rehabilitation Providers

• **Research and Education**
  - 30 Residents and 5 Fellowship Opportunities
  - Robust Regenerative Medicine Research
  - Strong Clinical Research Programming
Presentation Background

- A Brief History of the Athletic Training
- The Evolution of Athletic Training in Orthopedic Practices
- Discuss Best Practices and Optimization
- Compliance and Regulatory Considerations
- Current and Future Priorities for the NATA
History and Evolution
Milestones

- 1950: The NATA Established

1968: NATABOC Established (Now Called the BOC)
- 1991: CAATE Established
Milestones

- 1991: AMA Recognition Achieved
- 1996: CMS NPI Taxonomy Code Assignment
- 2015: CAQH Credentialing Achieved
- 2017: NATA Third Party Reimbursement Initiative Initiated
- 2018: 45,000 Members
  - 55% Female, 45% Male
- 2022: Entry Level Masters Degree Requirement
Why Am I Talking To You?

Brad Sherman MEd ATC

Bill Clancy MD
UW Health Athletic Training (2019)

- ~45 Athletic Trainers
- Community Outreach
- Physician Clinics
- Outpatient Rehabilitation
- Management and Administration
- Triage
- Orthopedic Urgent Care
- Durable Medical Equipment
- Research and Education
- Athletic Training Residents (2)
Best Practices and Optimization
Why The Organic Growth?

- Athletic Trainer/Physician/Administration Interest
- The Athletic Trainer Skillset
- High Volume Nature of Orthopedics
- Cost Effectiveness and Versatility
- The Electronic Medical Record
- Lean Process Alignment
- Staffing Optimization
- Population Dynamics
Intangibles

- People Skills
- Work Ethic
- Versatility
- Problem-Solvers
- Multi-Tasking Specialists
- Cost-Effectiveness
- Can Improve APP Utilization
“The reason that athletic trainers work so well in the sports medicine and orthopedic clinic setting is because they are cost effective musculoskeletal specialists with an incredibly diverse skillset”

John Wilson MD
Primary Care Sports Medicine Provider
UW Department of Orthopedics and Rehabilitation
Physician Practice Setting

- Room Patient
- Patient History and Physical Examination
- Order Entry (Protocol or Standing Orders)
- Documentation/Scribing
- Procedure/Injection Preparation
- DME Fitting and Casting
- Suture Removal
- Patient Education
- Exercise Prescription
- ImPACT Testing
The Impact of Athletic Trainers in a Sports Medicine Clinic: Improving Efficiency and Productivity

Shari Khaja, MS, ATC; Joseph Greene, MS, ATC; John Wilson, MD, MS
University of Wisconsin Hospitals and Clinics, University of Wisconsin School of Medicine and Public Health, Department of Orthopedics and Rehabilitation, Madison, Wisconsin

Background
This quality improvement study objectively quantified time spent on tasks for physician extender staff. Physician extender types included athletic trainers (ATC), non-athletic trainers (physical therapists, orthopedists and primary care residents and fellows). The data was collected on a large cohort of 3,542 patient encounters (n=1,480 ATC, n=1,058 non-ATC) at the UW Health Sports Medicine Clinic in Madison, WI. The practice is a high volume academic sports medicine center comprised of 3 primary care sports medicine (PCSM) physicians and 6 orthopedic sports medicine (OSM) surgeons. The clinical model employed 3 PEs per surgeon clinic and 2 PEs per primary care physician clinic.

Specific Aims

- To determine the specific impact of physician extenders on a sports medicine practice.
- To determine the total time spent on various types of physician extenders on the complete range of tasks included within the delivery of patient care.
- To determine which type of physician extender provider delivered the most efficient and effective care in our delivery model.
- To identify opportunities to increase physician value added time. Value added time is defined as time with patients and the opportunity to see more patients.
- To establish baseline data for each portion of a standard physician visit.

Methods
For a total of eight weeks - March 7th through April 28th, 2011, each physician extender was required to fill out an informational clinic flow assessment for every patient encounter (Figure 1).

PEs completed a self-reported work diary (Figure 3) in which they recorded time on-task (TOT) for 8 common tasks across 3 categories: (a) rooming patients, (b) performing history and physical examination, (c) radiology, (d) waiting for physician, (e) presenting case to physician, (f) time spent with physician in the room, (g) time spent on patient education without physician in the room, (h) fitting durable medical equipment, (i) dictating/scribing. Clinic visit type was categorized as "new," "resist," or "post-operative." Average TOT was determined for each task category for each of the PE types. Descriptive statistical analyses were performed.

Results
The mean total clinic visit length was 34.41±17.33 minutes (m) for PCSM and 44.72±15.16 m for OSM, and the mean TTO was 23.87±28.77m and 30.40±33.25m respectively. "New" encounters had the greatest mean TOT (33.39±10.73m) followed by "resist" (23.26±17.66m) and "post-operative" (17.98±12.98m). Average physician essential activity (review of records, case presentation, and direct patient care) was similar between PCSM (11.45±5.25m, 33% total clinic visit) and OSM (10.37±4.36m, 24.6% total clinic visit) surgeons. (Chart 1) ATC PEs had lower mean TOT per visit (25.78±11.32m) compared to non-ATC PEs (52.06±4.71m), a difference of 6.28±3.9 m per visit. (Chart 2) ATC PEs have lower average TOT on all patient care tasks, except on patient education where they spend an average of 2.40m compared to 1.11m for non-ATC PEs (Chart 3).

Figure 1.

Figure 2.

Conclusions
A sports medicine patient care delivery model that effectively employs PEs resulted in improved physician efficiency, by reducing time spent in physician non-essential activity during each patient visit. This time savings could be used to improve patient throughput, thereby increasing patient access to physicians and revenue generated. Our findings indicate that the athletic trainer is the most efficient physician extender provider in our clinic setting.

Significance
The importance of efficient and effective delivery of care cannot be underestimated in high volume specialties like orthopedics and sub-specialties like sports medicine. Understanding the tasks that physicians and support staff should perform is critical as more and more demands are placed upon the care delivery team. Physician added value activity must be agreed upon and maximized. Non-value added activity must be minimized or eliminated.

Future quality improvement studies should center upon the measurement of both patient satisfaction and physician satisfaction in models that utilize physician extenders to support patient care. These results could be compared to practices that utilize physician extenders in more limited roles. Additionally, future work in this area should also continue to evaluate opportunities to use extenders in capacities that maximize patient access and patient throughput in not only sports medicine, but in other subspecialties like orthopedics as well.
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**Physician Satisfaction with Athletic Trainers in the Physician Practice**

**Esther C. Nolton, MEd, ATC; Forrest Q. Pecha, MS, ATC; Joseph J. Greene, MS, ATC; Elizabeth L. Young, MS ATC; Jessica A. Wertz, DO; Robin V. West, MD**

George Mason University, Manassas, VA; St. Luke's Sports Medicine, Boise, ID; University of Wisconsin, Madison WI; Inova Sports Medicine, Fairfax, VA

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**BACKGROUND**

- Some physicians utilize athletic trainers (ATs) in physician practice settings
- Efficiency
- Productivity
- Patient satisfaction
- Previous literature showed increased patient satisfaction with ATs in the practice setting, but physician satisfaction unknown
- Hypothesized that satisfaction among physicians is predictably high
- Purpose of this study was to understand physician satisfaction with employing ATs in the practice setting

**METHODS**

- Web-based, anonymous survey administered to active members of:
  - American Orthopaedic Society for Sports Medicine (AOSSM)
  - American Medical Society for Sports Medicine (AMSSM)
- Manually sent to other physicians using a convenient, snowball sampling method
- Survey items vetted by an interdisciplinary team of experts through multiple iterations
- Aligned CAAATE/IOM core competencies

**RESULTS**

- 519 physicians participated in the survey
- 70% currently employ ATs in their clinics
- 74.6% prefer to work with ATs
- 93.4% physicians “extremely satisfied”
- Common reasons for preference were:
  - Sports Medicine or MSK expertise
  - Experience with athletes/coaches/parents
  - Skills in patient education regarding pre- and post-operative instructions/exercise
  - Experience fitting and instructing use of assistive devices
- Open-ended responses revealed physicians felt that:
  - Including ATs should be standard
  - ATs were invaluable assets
  - Legislative or administrative constraints prevented a desired infrastructure
  - ATs most cost-effective mid-level option

**ACKNOWLEDGEMENTS**

The research team would like to thank DJO Global for funding part of this study.

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**CONCLUSION**

- Physicians generally prefer to include ATs in the physician practice setting
- Feel ATs are uniquely qualified and ideal team members
- Highlighted significance of residency training to prepare ATs for this role
- ATs helped improve physician job satisfaction reducing risk of burnout
- ATs contribute to overall practice efficiency and productivity
- Some systematic barriers should be addressed by administrators and policymakers

**REFERENCES**

Physician Satisfaction with Athletic Trainers in the Physician Practice Setting

Esther C. Nolton, MEd, LAT, ATC, CSCS,* Forrest Q. Pecha, MS, ATC,*
Joseph J. Greene, MS, ATC,* Elizabeth L. Young, MS, ATC,*
Jessica A. Wertz, DO,† and Robin V. West, MD‡

Physicians use collaborative teams of allied health professionals to increase practice productivity and promote better patient outcomes. Athletic trainers (ATs) are an integral part of this team. A web-based survey administered to physicians found 93.8% of respondents were “extremely satisfied” with ATs. ATs are most cost-effective as an add-on service, as they are cost-effective and widely accepted. Despite 85.5% of physicians stating that they prefer to work with ATs, physicians express a need for increased educational programming within the physician practice setting (PPS), including preparation to assist in the operating room. This has greatly facilitated physician acceptance and led to increased hiring of ATs in physician practices.

KEY WORDS: Ancillary staff; collaboration; clinical management; job satisfaction; allied health; healthcare delivery; value-based care; team-based care.

Patients view athletic trainers as positive and personable healthcare providers within the clinical setting.

Previous studies show that patients view ATs as positive and personable healthcare providers within the clinical setting. Furthermore, ATs had a higher rating in overall patient satisfaction during visits to an orthopedic clinic, and were perceived as having comparable skills and knowledge to third- and fourth-year orthopedic medical residents. Although ATs have unique knowledge, skills, and abilities that are instrumental in the orthopedic/sports medicine PPS, ATs are often excluded from educational programming within the physician practice setting, thereby limiting their role in patient care.
Physicians generally prefer to include ATs in the physician practice setting
Feel ATs are uniquely qualified and ideal team members
Highlighted significance of residency training to prepare ATs for this role
ATs helped improve physician job satisfaction reducing risk of burnout
ATs contribute to overall practice efficiency and productivity
Some systematic barriers should be addressed by administrators and policymakers
## Athletic Training Residencies

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Community Outreach

- 20 Contracted Schools
- 75 Clubs and Organizations
- 5000 Hours of Emergent Medical Coverage
- 25 Community Speaking Engagements
- 50 Professional Education Lectures
- Large Scale Athletic Event Coordination
- 60,000 Athlete Contacts Annually
- Annual Uninsured Athletic Physicals
- 18,000 Contracted Coverage Hours
Outpatient Rehabilitation

- Emerging Area of Opportunity
- Payor Considerations
- Scope of Practice Considerations
- Implementation Considerations
- Athletic Training CPT Evaluation Codes
  - 97169, 97170, 97171 and 97172
- Revenue Code
  - 951
Barriers to Anticipate

• The Status Quo
• Change Resistant Cultures
• Turf-Battles
• Financial Justification
• Compliance and Regulatory Concerns
Compliance and Regulatory Topics
Compliance and Regulatory

- CMS Status
- State Scope of Practice Considerations
- Documentation and Scribing
- Autonomous Athletic Training Billing Opportunities
  - Alignment with CMS Policy and Process
- Physician Practice Billing: “incident-to” process
  - Recommendation: Alignment with CMS Policy and Process
  - Priority: Productivity Enhancement over Billing in Physician Practice
- OIC Considerations and Outreach
Current and Future Priorities
What is Next?

• Educational Evolution
  – Masters Entry Level Degree Requirement
  – Post-Professional Training
    • Residencies, Specialty Certifications
• Relationship Development
• Payor Recognition Opportunities
• Regulatory Affairs Investments
The UChicago Medicine Experience

Amy M. Burklund, M.S.
Executive Administrator
Department of Orthopaedic Surgery and Rehabilitation Medicine

October 2019
Department of Orthopaedic Surgery and Rehabilitation Medicine

• Formed as a Department in 2013
  • 23 faculty
  • 25 residents
  • 10 APPs
  • 1 employed Athletic Trainer
    • Covers WNBA contract)
We started using Athletic Trainers to fill a gap in our staffing.

- Need to increase Resident Case Exposure = uncovered clinics
- Growing Faculty
- Inability to hire new FTES
- So, we looked for a creative solution – Athletic Trainers
  - Highly motivated employees
  - Interested in MSK
  - Scope of practice makes them flexible and great utility players
- But, we had a problem. UChicago Medicine tended to be very conservative and did not have experience using ATCs.
Contracting with a Physical Therapy Company provided us with a flexible option to ease our way into using ATCs

• Contracted with a PT provider to lease Athletic Trainers
  – Allowed us the opportunity to pilot the use of ATCs
  – Eased the path for the organization in using ATCs in our clinical environment
  – Scaleable option
  – Allows the ATCs to participate in other activities with the PT company while still having a physician extender experience.
Our Results

Overall, our results were positive

• Increased clinic visits and increased case exposure for our residents
• Increases in billing with ATC activities
• Increased provider engagement
  – Greater satisfaction in clinics where ATCs are deployed
  – Better work-life balance
• Increases in Patient Experience
• Greater acceptance from Organization

Some challenges along the way

• Still only leasing – physician practices are still largely staffed by RNs/MAs
• Conservative organization still puts barriers up with scope
• Physician education to continue to use ATCs to their fullest potential
The Future of ATCs at UChicago Medicine

- Residency
- Employed ATCs in Physician Practices
- ATCs involved in Outreach
Greg Lehmann
Health Services Manager
Assistant Department Director

University of Iowa Hospital and Clinics
Department of Orthopedics Overview

- Approximately 190 employees
- 39 Faculty
- 27 APPs
- 4 Primary Care Sports Medicine (non-op)
- 30 Residents and 3 Fellows
Athletic Training Utilization/Summary

• Physician Practice Setting
  • 3 clinical ATs
  • 2 residents

• Outreach – 3 ATs
  • Contracted schools, clubs/organizations, community speaking, lectures, athletic event coverage, etc
  • 3 PRN ATs

• Athletics – 19 employees (ATs, Assistant ATs, and Grad AT’s)
  • First and only school in the Big 10

• Entry level master program
Benefits

• Better clinical engagement

• Physician satisfaction

• Improved patient satisfaction

• Improved employee satisfaction

• Higher retention rates

• Cost effectiveness versus a nurse or APP
Compliance/Barriers

• Organizational issues with what is an AT?
  • Roles, scope of practice, job classification, Epic access, protocols, etc

• Can they scribe and provide patient care?

• Expanded Evening Clinic
  • First trial without an MA
  • Metrics
Future Direction

• Expanded Outreach
  • 6 additional high schools and community outreach events

• Accredited Residency Program

• Expanding AT utilization outside of Sports Med
  • Hand, Trauma, and Spine

• OR Billing – surgical assist

• Independent post op clinics

• Compensation
Heather Schmidt
Clinic Lead
Emory Orthopaedic, Sports Medicine and Spine
• Orthopaedic Service Line
  ➢ 400+ Employees
  ➢ Comprehensive Sub-Specialty Providers
    ➢ Foot and ankle, General Orthopaedics, Hand & Upper Extremity, Joint Replacement, MSK Oncology, Podiatry, Spine, Sports Medicine and Trauma

• Department of Orthopaedics and Rehabilitation
  ➢ 57 Orthopaedic Faculty
  ➢ 17 PA’s and NP’s

• Research and Education
EMORY HEALTHCARE
ATHLETIC TRAINING

• 47 Clinical Athletic Trainers
• Community Coverage
  ➢ 27 High Schools
  ➢ 28 Full time ATC’s
  ➢ 48 PRN ATC’s
• Physician Practice
• Management and Administration (6)
• Athletic Training Residency (5)
BENEFITS: SUBJECTIVE AND OBJECTIVE

- MSK and Evaluation Knowledge
- Provider/Clinic efficiency
- Independent post op clinics
- Patient satisfaction
- Cost effectiveness
COMPLIANCE AND REGULATORY BARRIERS

- Government payers
- Procedure protocols
- Realignment of job description
- Compensation/retention
- Metrics
LOOKING INTO THE FUTURE...

• OR Billing
• Compensation
• Professional Development
• Work/life balance