Optimizing the Athletic Trainer: Best Practices and New Developments

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

- **UW Health Orthopedic Service Line**
  - 600 + Employees
  - Highly Profitable Service Line with UW Health
  - Comprehensive Sub-Specialty Providers

- **UW Department of Orthopedics and Rehabilitation**
  - 39 Orthopedic Faculty and 17 Rehabilitation Providers
  - 30+ PA’s and APNP’s
  - 5 Primary Care Sports Medicine Providers

- **Research and Education**
  - 38 Residents and 6 Fellows
  - Robust Regenerative Medicine Research
  - Strong Clinical Research Programming
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
- 1996: CMS NPI Taxonomy Code
- 2015: CAQH Credentialing
- 2017: NATA Third Party Reimbursement Initiative
- 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
- Outpatient Rehabilitation
- Management and Administration
- Orthopedic Urgent Care
- Durable Medical Equipment
- Research and Education
- Physician Practice
  - Sports, Hand, Total Joint, Pediatric Ortho, Foot and Ankle
- 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
• Attention to Lean Processes and Staffing Optimization
• Population Dynamics
• Intangibles
“The reason that athletic trainers work so well in the sports medicine and orthopedic clinic setting is because they are musculoskeletal specialists with a diverse set of skills that are unique to other midlevel provider options.”

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 of 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), and non-athletic trainers (physical therapists, orthopedic and primary care resident and follow physicians). The data was collected on a large cohort of 5342 patient encounters in 14 ATC, n=38 non-ATC at the UW Health Sports Medicine Clinic in Madison, WI. The practice is a high volume academic sports medicine center comprised of 5 primary care sports medicine (PCSM) physicians and 6 orthopedic sports medicine (OSM) surgeons. The clinical model employed 3 PAEs per surgeon-clinic and 2 PAEs per primary care physician clinic.

Specific Aims

- To determine the specific impact of physician extenders on a sports medicine practice.
- To determine the time associated with 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 provided the most efficient and effective care in our delivery model.
- To identify opportunities to increase physician value added time. Value added time is defined to be 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 29th, 2011, each physician extender was required to fill out an informational clinic flow assessment for every patient encounter (Figure #1).

PEs completed a self-report work diary (Figure #1) in which they recorded time on task (TOT) for 8 common task categories: 1) rooming patients, 2) performing history and physical examination, 3) radiology, 4) waiting for physician, 5) presenting case to physician, 6) time spent with physician in the room, 7) time spent on patient education without physician in the room, 8) fitting durable medical equipment, 9) dictating/copying. Clinic visit type was categorized as "new", "revise", 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 $34.41\pm17.23\text{ minutes}$ for PCSM and $44.72\pm15.16\text{ minutes}$ for OSM, and the mean TOT was $23.87\pm29.77\text{ minutes}$ and $33.60\pm33.25\text{ minutes}$ respectively. "New" encounters had the greatest mean TOT ($33.94\pm10.73\text{ minutes}$) followed by "revise" ($23.83\pm1.67\text{ minutes}$) and "post-operative" ($17.90\pm8.29\text{ minutes}$). Average physician essential activity (review of records, case presentation, and direct patient care) was similar between PCSM (11.45, 65%, 33% total clinic visit) and OSM (10.57, 63.6%, 24% total clinic visit) surgeons.

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 valued added activity must be agreed upon and maximized. Non value added activity must be minimized or eliminated.

Future research into high volume specialties like orthopedics and sub-specialties like sports medicine should further assess how physician extenders can be optimally utilized to improve patient access and care. Additional studies should also continue to evaluate opportunities to use extenders in capacities that maximize patients access and patient throughput not only in sports medicine, but in other subspecialties of orthopedics as well.
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Physician Satisfaction with Athletic Trainers in the Physician Practice

Esther C. Nolton, MD, 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

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 CAATE/OM core competencies

ACKNOWLEDGEMENTS

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

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

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

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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Other Opportunities

- Management and Administration
- DME Programming
- Triage Coordination
- Orthopedic Urgent Care
- Operating Room Assist

- Billing: “incident-to” process
  - Recommendation: Follow CMS Policy and Process
- Priority: Productivity Enhancement over Billing
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
Athletic Trainer System Value Report
Activity and Revenue Summary

UW Health Athletic Training Program Affiliations

**Abundant Life Christian High School**
- All City Swim Meet (grades 3-12)

**Belleville High School**
- Capital Ice Arena Gold Medal Classic (grades 7-12)
- Capital Volleyball Academy (grades 5-12)

**DeForest Area High School**
- DeForest Area Youth Football (grades 4-8)
- Edgewood Campus School (grades K-8)
- Edgewood High School
- Edgewood College
- Galaxy Spirit Gymnastics (grades K-12)

**Iowa-Grant High School**
- Kromrey Middle School Special Events (grades 6-8)

**Madison Area Technical College (MATC)**
- Madison Area Youth Soccer Association (grades K-12)

**Madison East High School**
- Madison Ice Inc. Culvers Hockey Tournament (grades 9-12)

**Madison LaFollette High School**
- Madison LaFollette Lancer Youth Football Camp (grades 4-8)
- Madison LaFollette Youth Wrestling
- Madison Mallards
- Madison 56ers Soccer Club (grades 6-12)

**Madison Memorial High School**
- Madison Memorial Spartan Football Camp (grades 4-8)
- Madison Memorial Ultimate Frisbee Club (grades 9-12)
- Ultimate Frisbee Madison Memorial (grades 9-12)
- Madison School Community Recreation (grades K-12)

**Madison West High School**
- Magic Soccer Club (grades K-8)
- Maranatha Baptist Bible College & Academy Special Events

**Marshall High School**
- McFarland Football Camp (grades 5-8)
- McFarland High School

**Middleton High School**
- Middleton Yahara Soccer Club (grades 5-12)
- Middleton Youth Wrestling (grades K-12)
- Midwest Conference Tennis Tournaments (collegiate)

**Monona Grove High School**
- Mineral Point High School Conference Tournament (grades 9-12)
- Mount Horeb High School
- Monona Grove High School Special Events (grades 9-12)

**Mount Horeb High School**
- Offense-Defense Sports Football Camp (grades 2-12)

**Oregon High School**
- Oregon High School Special Events (grades 9-12)
- Oregon International Soccer Tournament (grades 4-12)

**Pecatonica High School**
- Princeton 56ers Soccer Club (adult)

**Randolph High School**
- Reedsburg Area Medical Center/Reedsburg High School (grades 9-12)
- Rotary Club Track Meet (grades 3-12)
- Sauk Prairie High School Special Events (grades 9-12)

**Sun Prairie High School**
- University of Wisconsin Fencing Club
- University of Wisconsin La Crosse Club
- University of Wisconsin Rugby Club
- University of Wisconsin Track Club (grades 1 to adult)

**Verona Area High School**
- Verona Youth Wrestling Club (grades K-8)

**Waterloo High School**
- Wisconsin Intercollegiate Athletic Conference Tennis Tournament
- Wisconsin Interscholastic Athletic Association (grades 9-12)
- Wisconsin Wolves
- Wisconsin Wrestling Federation
- Wisconsin Youth Soccer Association (grades K-12)
Community Outreach

- OIC Considerations
- Contracting Considerations
Outpatient Rehabilitation

- Emerging Area of Opportunity
- Payor Considerations
- Scope of Practice Considerations
- Implementation Considerations
- Athletic Training 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
Intangibles

- People Skills
- Work Ethic
- Versatility
- Problem-Solvers
- Multi-Tasking Specialists
- Cost-Effectiveness
- Empathy
Compliance and Regulatory Topics
Compliance and Regulatory

- CMS Status
- State Scope of Practice Considerations
- Documentation and Scribing
- Athletic Training Billing Opportunities
- Emerging or Less Common Opportunities
  - Operating Room Assist, Dry Needling, Casting, Medications, Injection Preparation, etc.
Current and Future Priorities
What is Next?

• Educational Evolution
  – Masters Entry Level Degree Requirement
  – Post-Professional Training
    • Residencies, Specialty Certifications
• Relationship Development: APTA, etc.
• Payor Recognition Opportunities
• Regulatory Affairs Investments
QUESTIONS?

Student: “Dr. Einstein, Aren’t these the same questions as last year’s physics final exam?”

Dr. Einstein: “Yes, but this year the answers are different.”