

The Implementation of a Clinically-Based Electronic Medical Record in a Division I Sports Medicine Clinic: A Clinical Practice Report

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The Implementation of a Clinically-Based Electronic Medical Record in a Division I Athletic Medicine Clinic: A Clinical Practice Report

Abstract

Clinical Problem: Implementation and sustainability of a clinical electronic medical record (EMR) allowing for multiple billable encounters in an athletic medicine practice.

Environment: Division-I collegiate athletics clinic. **Variables:** For ATs to complete billable documentation clinicians must: use an electronic health record (EHR), understand and appropriately use Current Procedural Terminology (CPT) and International Classification of Diseases version 10 (ICD-10) codes, understand patient encounter types, Relative Value Units (RVUs), and the role of a service provider related to incident-to capability. **Strategy:** Proposed and implemented the use of a clinic based EMR which communicated within the entire medical system with all providers.

Proposed and implemented structural changes within the athletic medicine clinic to support athletic trainer billing in a traditional clinical atmosphere. Implementation resulted in the ability to bill incident-to but posed a challenge in compliance of adopting a new documentation strategy. **Findings:** ATs were able to be reimbursed by some

insurance companies. The use of the clinical EMR resulted in athletic trainers billing 13 CPT codes and insurance reimbursement as high as \$38,000 per fiscal year in the 5 years since implementation. **Outcome:** Documentation in a clinical-based record has

standardized communication between members of the athletic medicine team, generated revenue, and is used as a tool to measure productivity and demonstrate the fiscal value of the athletic trainer. **Lessons Learned:** ATs must buy-in to and understand the need to shift from an “athletic trainer specific EMR” to a clinical based

EMR. Although the quantity of documentation does not change, the quality and structure of the notes must meet CMS guidelines. This significant change requires policy updates and demands that ATs in this system re-structure documentation practices. Creating a culture of growth is critical, allowing others to see that while this method is different, ATs can complete this level of documentation. (298 words)

Key words: Billing and reimbursement, medical model, clinical revenue generation in the collegiate setting

Key points:

- With the appropriate training, compliance measures, EMR and oversight, athletic trainers can document and bill many insurance companies for their time.
- Reimbursement for services can be generated by athletic trainers.
- Implementation of the EMR and a supportive organizational structure helps measure productivity for athletic trainers as well as to demonstrate fiscal value.

Clinical Problem:

The electronic health record contains the most important written communication between a healthcare provider and patients, colleagues, and insurance companies. Traditionally, athletic trainers have not held themselves to the same documentation standards required of other healthcare providers.¹ There are many reasons for this deviation,^{2,3} however, as recognized healthcare providers, it is critical that athletic trainers standardize documentation to support communication that is legally defensible and able to be submitted as a medical claim. In doing so, athletic trainers will demonstrate their expertise and display the requirements needed for insurance reimbursement.

A Division 1 Athletic Medicine Department housed within a College of Medicine began utilizing EPIC Electronic Health Record (EHR). The implementation of this clinically based electronic health record has aided in resolving issues that arose from not utilizing standard and collaborative communication. In addition, the transition to EPIC has converted the athletic trainers' documentation into billable encounters. This clinical practice report addresses two main points within the clinical problem: (1) the question of how to implement an appropriate electronic health record that allows for multiple billable encounters daily by all providers, and (2) the sustainability of a revenue generating clinical operation within the athletic medicine environment.

Environment:

The University is a Division I institution with approximately 650 athletes and 19 varsity sports. In partnership with the university's college of medicine, the entire athletic medicine team, comprised of 22 athletic trainers, three dieticians, and two mental health

professionals, is employed and managed within the athletic medicine division which resides within the university's family medicine department. The family medicine department also employs the five physicians that support athletic medicine. This system, which started in 2021, allows a complete medical model autonomous of the athletic department administration. In addition, the implementation of this model has transitioned the "athletic training room" to the *athletic medicine clinic*, creating an inter-collaborative space for athletic trainers, physicians, chiropractors, mental health specialists, dietitians, and physical therapists to work together, documenting in the same record to support the best possible outcomes for their patients. At a glance, this is a typical collegiate sports medicine facility, however, having moved this entire department into the College of Medicine has allowed for the extension of the EPIC EHR into this space. With the commitment made to use the system and take ownership of the documentation, the athletic trainers are able to use EPIC to create standardized billable documentation of their patient encounters. This report reflects the billing only of the athletic trainers in the athletic medicine division.

Variables:

The variables explained below are specific to the needs of the athletic trainer to complete billable documentation. The documentation specifically required for billing is not widely understood by the profession and, therefore, rarely taught or demonstrated in clinical practice.^{1,4} Moving toward this model has required both group and individual training.

- **EPIC:** The electronic medical record used by the health system in which the University participates. Implementing this system was extremely cost effective

once the athletic medicine division was put in place and became an operating clinic.

- **Current Procedural Terminology (CPT) Codes:** CPT codes are the nationally recognized coding set for healthcare professionals to accurately and efficiently document services provided to a patient.⁵ CPT codes are also used for claims processing for insurance companies. All billable encounters between healthcare provider and a patient must have a CPT code tied to them for reimbursement.
- **Patient Encounters:** Any clinical contact with a patient in EPIC, such as an office visit. Patient encounters can be both billable and non-billable, but the vast majority of these encounters are signed by the provider and closed for further documentation once the CPT codes are designated.
- **Relative Value Units (RVUs):** RVUs are a standardized system that assigns a value to a CPT code. RVUs define the value of a service or procedure relative to all services and procedures. This measure of value is based on the extent of physician work, clinical and non-clinical resources, and the expertise required to deliver the healthcare service to patients.⁶
- **ICD-10 Codes:** ICD-10 codes are the International Classification of Disease – 10th Revision which is a classification system of diagnosis codes representing conditions and diseases, related health problems, abnormal findings, signs and symptoms, injuries, and external causes of injuries and diseases. Used for medical claim reporting in all healthcare settings, ICD-10-CM codes are the primary means to establish medical necessity for payment of healthcare services and procedures.⁷

- **Service Provider:** Athletic trainers are not, yet, recognized by most insurance companies as autonomous billing providers. This means athletic trainers act as service providers, completing the healthcare service while the services are reimbursed under a billing provider. This system is commonly used in healthcare. As an example, once a patient is seen by a physician and a treatment plan is agreed upon, the athletic trainer may carry out and document that treatment plan as the service provider. Once complete, the documentation goes to the physician for co-signature and then is billing under the physician's name. The same can be used for a physical therapist and athletic trainer working together.
- **Incident-To:** Incident-to billing is a Centers for Medicare & Medicaid Services (CMS) billing rule that allows a supervising physician to bill for services that other healthcare team members provide to patients. The services must be an integral part of the physician's professional services and must be provided under their direct supervision.⁸ Billing incident-to a physician's oversight is the most Medicare compliant way for athletic trainers to bill for services provided to their patients, although some states or even health systems can and have put contractual arrangements that do not require incident-to billing rules to be followed. Further information regarding the state regulation on incident-to billing for athletic trainers can be found in the NATA's Resources for Professional Responsibility. (<https://www.nata.org/nata-now/articles/2020/03/resources-professional-responsibility>).

Strategy:

The strategy to initiate this plan began with a white paper document and presentation to the stakeholders. The intent of the white paper was to identify and outline the steps to improve access, accountability, collaboration, and safety in the medical care of the athletes at the University. The stakeholders identified were the Dean of the College of Medicine and the Athletic Director of the university's athletics department. Both individuals serve in Vice President roles at this institution, and their buy-in is considered essential for success. Once the white paper was delivered and discussed, the leadership agreed that this change would allow the medical team to provide the safest and most advanced care possible for the student-athlete population.

A by-product of this change is the opportunity for athletic trainers to bill incident-to the other health care providers in the clinic such as physicians or physical therapists. The shift of the athletic training room to the athletic medicine clinic allowed this space to become a regular clinical site for the providers, meaning they were able to have meaningful billable clinical time in this location when this was previously not an option. The most impactful change in this strategy was the addition of EPIC as the EMR in this location for all providers.

One of the key strategies following implementation was training. Adapting a hospital or clinic based EHR to the practice of athletic training requires training, attention to detail and effort on behalf of the user. The initial training requirement to access and utilize the system is a 5-hour course conducted by the hospital partner who owns the EHR license. Following this formal training, informal daily utilization of the EHR alongside other seasoned clinical users such as physicians and physical therapists provided the daily on-the-job training needed for the clinicians. Additionally, templated

notes and phrases for the athletic trainers to use were created to assist in the time it takes to document patient encounters (See Figure 1). While formal (classroom-based) and informal (on the job) training were critical to initial implementation, the opportunity for improving the documentation remains a priority for the department, as it does for most health care organizations.

Once implementation and training were complete, the opportunity for data collection was embedded in the daily workflow of the clinicians by nature of the EMR utilization. Physician clinics that were always scheduled within the athletic medicine facility were transitioned from paper documentation and billing to EPIC, and documented and billed as they would have been in any other clinical location. Additionally, the athletic training staff became trained and credentialed billing providers, allowing them to bill for the services they provide to their patients using appropriate codes specific to evaluations completed by an athletic trainer and physical medicine and rehabilitation (PM&R) codes. Credentialing for billing entails a separate application process to the managed care payors through the billing organization once a provider is licensed in their state. The athletic medicine clinical productivity could now be measured for all providers using the same data and measures as any other clinical entity.

As a part of the annual budgeting process, clinical output is, in part, measured through data available to the health care administrator. The data is available through a database called Qlik, which is populated with data from EPIC once every 24 hours. The most common data points measured for athletic trainers are the number of documented patient encounters, RVUs, charges, and payments.

At the point of transition to the billable clinical record, it was determined that a clinical manager role would be key to the success of this mission. An athletic trainer position was transitioned to execute scheduling, clinical support, insurance authorization, and billing for all providers in the athletic medicine clinic. This position is partially supported by patient service revenue generated by athletic trainers. The implementation of a billing model requires multiple levels of documentation and compliance, which this role of the clinical manager was specifically designed to address.

Findings:

The transition to the EMR has certainly changed several things for athletic trainers in this department. It has been found, through the implementation of a clinical practice based documentation system, that clinicians in the Division I setting can document and be reimbursed by insurance when the appropriate training, policies and procedures are in place. The summary below outlines the data that has been produced by documenting and billing through the EMR.

Clinical Notes: The athletic trainers have standardized the note templates, allowing for clear communication to the athletic medicine care team and the insurance company. The note templates for evaluations, re-evaluations, and treatments allow for the appropriate objective and non-objective points of the evaluation to be clearly communicated. These notes replicate what all billable encounters look like when they are sent to an insurance company for reimbursement (Figure 1). The implementation of this documentation system addresses the clinical problem of having an EHR that will communicate with other providers in the sports medicine umbrella and the opportunity

to generate a billable encounter within the necessary and legally defensible documentation.

CPT Distribution: Over the course of the last five fiscal years, athletic trainers have billed for an array of different CPT codes within the PM&R realm. Table 1 represents the code, description and volume billed over the past five fiscal years.

Payment: All CPT codes are reimbursed based on the contractual arrangements the billing organization has with the insurance companies. In this clinical practice report, the athletic medicine clinic has become a part of the physician practice plan, which has a wide array of payor contracts. While each of these codes is reimbursed differently, Table 2 represents the total payments of the codes billed by the athletic trainers' incident-to a physician and/or a physical therapist, following CMS guidelines. It is worth noting how the difference between billable encounters and non-billable encounters was determined. Please see Figure 2 for a flow chart of how this is determined. Athletic trainers in the Division I setting will always have non-billable athlete encounters which include most preventative services, clinical activities performed not in a billing location, and encounters which do not have authorization from insurance. In this clinic, the athletic trainers bill only for authorized visits which are rehabilitation based. The codes billed to insurance are directly linked to the services performed and are familiar to the insurance payers because they are common PM&R codes. Whether billing under a PT or a physician, the provider only needs to be credentialed to provide that service and document appropriately in order to be eligible for reimbursement.

Outcome:

This clinical practice report outlines the need for athletic trainers to participate in a clinical model alongside the rest of the athletic medicine care team, inclusive of the clinical EHR. Clinical athletic trainers in a Division I setting, and many other athletic settings, will always have non-billable services. It is not feasible to apply a billable encounter to every interaction between a patient and an athletic trainer because many of those encounters do not include the components of a billable encounter (ex: taping, on site emergency care, etc). What is critical to the development of athletic trainers as medical providers is the utilization of a clinical based EHR, which most importantly allows for the documentation of all the clinical work in one record and maximum collaboration amongst the team. Secondary to that, the implementation of this model allows for third party reimbursement for the work completed by athletic trainers daily.

The known outcomes are as follows:

- With the appropriate training, EMR and oversight, athletic trainers can document and bill for their time.
- Documentation in a clinical-based record standardizes the communication between athletic trainers, physicians, and all other members of the athletic medicine team.
- A clinical based EMR provides legally defensible documentation for athletic trainers.
- Revenue can be generated by athletic trainers with the appropriate clinical set up and maintenance.
- The EMR can be a tool to measure productivity for athletic trainers as well as to demonstrate fiscal value.

Lessons Learned:

Change, specifically in the medical field, is a constant.⁹ There are many challenges in the medical field, and the application of athletic training to the standard practice of documentation and billing is certainly not immune to these challenges. Any major shift in policies and procedures requires a large upfront educational component and constant re-education and re-evaluation to assess outcomes and determine future success. Ultimately, athletic trainers must buy-in to such change and understand why the shift to a hospital or clinical based EMR, such as EPIC, that will allow for billed encounters is critical for athletic trainers to be viewed nationally as health care professionals. The NATA continues to make strides toward professional recognition by insurance companies that is consistent with other services rendered (<https://www.nata.org/practice-patient-care/revenue-reimbursement/third-party-reimbursement>). Although the quantity of documentation should not change, the quality and structure of the notes will change to meet CMS guidelines.

Continual training is needed to help clinicians distinguish the differences between billable and non-billable encounters and ensure that the notes are compliant for billing. The data in Table 2 highlights the need for education and training for athletic trainers in a billing model. Staff turnover remains a barrier to consistency, and there is a significant learning curve when entering a new documentation model. In this example, the balance between formal training with EPIC superusers, and individualized training with users within the same clinical roles, is what has worked best. Annual reporting back to the staff on the metrics such as revenue, patient encounters, and RVUs has helped with internal knowledge of the outcomes. Additionally, we have been able to financially reward the highest revenue producing athletic trainer within this clinic. That has added

internal incentive for our group to not just document what is necessary, but to understand and execute the billable opportunities. When compliance to the documentation model and training are not valued, revenue is affected. Education and training must be efficient, understandable, and relatable to allow staff to implement these systems without significant complications due to the busy and demanding schedules of the athletic trainer.

The greatest lesson has been that a working model exists that allows for the best possible healthcare for Division I student-athletes and can continuously highlight the financial value and importance of athletic trainers employed as healthcare professionals working at the top of their training. Alongside this comes increased access to healthcare and multiple resources for student athletes. Athletic trainer buy-in consists of each clinician completing the initial training, documentation, and billing for patient encounters. It is a significant change which requires implementing workflow updates related to documentation which results in athletic trainers developing and reorganizing how they utilize the EMR in their clinical practice.

An additional strategy worth discussing amongst administrative leadership is partnership with local health care systems. As athletic departments continue to grow into business entities, partnership with health care systems has become more common. A strategic partnership that supports student-athlete well-being may also allow for more conversation regarding resources such as a billing EMR, on-site physician time, or financial investment, which are all critical to the success of the athletic medicine department.

A final strategy that is essential to success is to support the early adopters within the athletic medicine team. The athletic trainers who have embraced documentation and billing require support from the leadership as to why their documentation practices matter. While the strategies for how to support the early adopters varies due to resources, it is important that these team members are highlighted to their peers. Annual reporting, bonus potential and internal recognition have all been a part of the support strategies that have been employed. There has also been significant education on the billing codes that have reimbursed, payment per unit, and frequency of use within the clinic. This helps the athletic trainers know what their peers are billing and supports collaborative practice. Creating a culture of growth is critical, and this allows others to see that, while this system is different, athletic trainers can complete this level of documentation alongside the daily duties of being an athletic trainer.

Documentation in athletic training is a skill that, while formally taught in curriculum education, has been molded by a lack of standard practice. As athletic trainers continue to learn new skills and help patients across a vast number of settings, the one skill that will bring athletic trainers into the fold of billing medical professionals is standard documentation. There are very few, if any, other medical professions in which there is such little standard requirement in documentation.

Athletic medicine departments should invest in documentation practices as much as the department invests in any other skill needed to be a successful athletic trainer. Adaptability is a key characteristic of an athletic trainer, and when presented with the opportunity to adapt and grow documentation practices, most athletic trainers will step up to the plate. There is no risk to standardizing documentation for the services

309 provided. In fact, most legal representatives would likely agree that the single most
310 important practice in mitigating risk in healthcare is appropriate, comprehensive, and
311 standard documentation.¹⁰
312

Online First

313 Reference

- 314 1. Devenney JS, Drescher MJ, Rivera MJ, Neil ER, Eberman LE. Organizational
315 Expectations Regarding Documentation Practices in Athletic Training. *J Athl*
316 *Train*. 2024;59(2):212-222.
- 317 2. Bacon CEW, Eppelheimer BL, Kasamatsu TM, Lam KC, Nottingham SL. Athletic
318 Trainers' Perceptions of and Barriers to Patient Care Documentation: A Report
319 From the Athletic Training Practice-Based Research Network. *J Athl Train*.
320 2017;52(7):667-675.
- 321 3. Kasamatsu TM, Nottingham SL, Eberman LE, Neil ER, Welch Bacon CE. Patient
322 Care Documentation in the Secondary School Setting: Unique Challenges and
323 Needs. *J Athl Train*. 2020;55(10):1089-1097.
- 324 4. Eberman LE, Neil ER, Nottingham SL, Kasamatsu TM, Bacon CEW. Athletic
325 Trainers' Practice Patterns Regarding Medical Documentation. *J Athl Train*.
326 2019;54(7):822-830.
- 327 5. American Medical Association. [https://www.ama-assn.org/practice-](https://www.ama-assn.org/practice-management/cpt/cpt-overview-and-code-approval)
328 [management/cpt/cpt-overview-and-code-approval](https://www.ama-assn.org/practice-management/cpt/cpt-overview-and-code-approval). Accessed September 27,
329 2024.
- 330 6. AAPC. <https://www.aapc.com/resources/what-are-relative-value-units-rvus>.
331 Accessed October 26, 2024.
- 332 7. AAPC. <https://www.aapc.com/codes/icd-10-codes-range>. Accessed October 26,
333 2024.
- 334 8. Centers for Medicare and Medicaid Services.
335 [https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-](https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-schedule/advanced-practice-providers/incident-services-supplies)
336 [schedule/advanced-practice-providers/incident-services-supplies](https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-schedule/advanced-practice-providers/incident-services-supplies). Accessed
337 October 26, 2024.
- 338 9. Ferrari A, Manotti P, Balestrino A, Fabi M. The ethics of organizational change in
339 healthcare. *Acta Biomed*. 2018;89(1):27-30.
- 340 10. Ghaith S, Moore GR, Colbenson KM, Lindor RA. Charting Practices to Protect
341 Against Malpractice: Case Reviews and Learning Points. *West J Emerg Med*.
342 2022;23(3):412-417.

343 Tables and Figures

- 344 Table 1. Units billed by CPT Code Each Year Since Start of Athletic Medicine
- 345 Table 2. Collections by CPT Code Each Year Since Start of Athletic Medicine
- 346 Figure 1. Supplemental Content: Sample Progress Note
- 347 Figure 2. Billable Encounter Decision Making Work Flow

Evaluation

USF HEALTH
ATHLETICS CENTER

Provider: ATC (Sports Medicine)
Cosigner: MD (Sports Medicine)
Primary diagnosis: Complete tear of ulnar collateral ligament of right elbow
Reason for Visit: Elbow Injury; Referred by MD

Progress Notes

ATC (Athletic Trainer) • Sports Medicine

USF Athletic Medicine Outpatient Rehabilitation Services Physical Therapy Evaluation

Today's Date:

Visit#: 1/IE

Patient:

DOB: XX/XX/2005 MR#:

Referring Provider: Dr. [follow-up appointment scheduled XX/XX]

Referring Diagnosis: UCL Reconstruction, Elbow Injury

Precautions/Contraindications/Restrictions: Restricted to 90° elbow flexion locked in brace, no running or jogging

SUBJECTIVE

Patient Subjective:

Mr. is a 18 year old NCAA D1 baseball player with chief complaint of elbow pain following Ulnar Collateral Ligament reconstructive surgery. He presents in clinic today 5 days post surgery day on XX/XX. He underwent UCL reconstruction surgery of his right elbow. He will be immobile in his brace at 90° for the first 10 days with gradual increases in ROM while in brace post operatively and presents in great spirits today and ready to begin therapeutic rehabilitation.

Injury Sequelae:

Symptoms began: Date of Injury: Sx on XX/XX
Mechanism of Injury: Pitching/throwing baseball

Initial Evaluation:

1) Date: XX/XX

Referred for further evaluation, medical necessity to return to PLOF, including including reaching for items on high shelves, driving, opening doors, showering and elite level of NCAA Division 1 baseball pitching.

Pain:

Aggravating Factors: **PROM/AROM/RROM** of r elbow
Relieving Factors: immobilization at 90° in elbow brace
Reports: Highly consistent with HEP, R hand dominant

Patient's Chief Complaint: medial elbow pain over right elbow

Patient's goal: regain full **ROM**, strength, and function of right elbow/arm. Return to driving with both arms, showering, reaching for items with right arm, and comfortably writing using right hand; all of which are severely impacted and limited due to surgery and pain 8/10.

Functional: UNABLE TO PARTICIPATE

Pertinent Past/Current Medical/Surgical History:

No past medical history on file.

Pertinent Past/Current Medical/Surgical History: N/A

No past medical history on file.

No past surgical history on file.

Medications:

Current Outpatient Medications:

- docusate sodium (COLACE) 250 mg capsule, Take 250 mg total (1 capsule) by mouth daily., Disp: 21 capsule, Rfl: 0
- oxyCODONE-acetaminophen (PERCOCET) 5-325 mg per tablet, Take 1 tablet by mouth every 4 (four) hours as needed for Pain., Disp: 18 tablet, Rfl: 0
- promethazine (PHENERGAN) 25 mg tablet, Take 25 mg total (1 tablet) by mouth every 4 (four) hours., Disp: 30 tablet, Rfl: 0

OBJECTIVE

Appearance/Posture/Observations:

right Elbow Exam:

Obvious Deformity: present

Ecchymosis: absent

Effusion: yes

Soft Tissue Swelling: present

Tenderness: Medial epicondyle, Flexor mass, Olecranon, and Triceps insertion

ROM:

Passive ROM: diminished range with pain

Active ROM: diminished range with pain

Resistive Range of Motion: diminished range with pain

Specific ROM

Flexion: 90 degrees

Extension: N/A degrees

Pronation: 30 degrees

Supination ROM: 40 degrees

Strength:

Flexion Strength: 3 / 5

Extension Strength: 3 / 5

Supination Strength: 3 / 5

Pronation Strength: 3 / 5

Joint mobility:

No laxity

Special Tests:

Milking Test: Negative

Varus Stress: Negative

Valgus Stress: Positive: Pain

Resisted wrist extension: Positive: Pain

Resisted wrist flexion: Positive: Pain

Resisted elbow extension: Deferred

Resisted elbow flexion: Positive: Pain

Resisted supination: Positive: Pain

Resisted pronation: Positive: Pain

Pinch Grip: Positive: Pain

Distal Neurovascular Exam: intact

Palpation: Swelling

TODAY'S TREATMENT INTERVENTIONS

Completed in the clinic under the direction of the athletic trainer/physician to increase patient's function and performance for progression towards therapeutic goals.

Therapeutic Exercise	Sets x Reps	Time
6 way wrist (flex/ext/pronation/supination/uln & rad deviation)	3x20 ea way	8min
Wrist Figure 8 pattern	3x20	8min
Shoulder Abduction Finger	3x10	8min
Flexion isometric Wrist	3x10 sec hold	8min
FLEX/EXT (1 lb. DB)	3x10 each way	8min

FUNCTIONAL GOALS AND PROGRESS

Time Frame: Short Term Goals: x 2 weeks

Athlete will be compliant with current POC recommendations including rehab/ther exs/managed graded exposure and strengthening in order to facilitate improve mobility, NMC, and overall movement tolerance for improved loading of right elbow in order to tolerate functional goals, including full full/partial PROM and AROM, return to driving with both arms, showering, reaching for items with right arm, and comfortably writing using right hand; all of which are severely impacted and limited due to surgery and pain 8/10.

Short Term Goal 1: Pt with gradually increase passive elbow ROM to 15° of extension and 125° of flexion with 5/10 pain and difficulty

Time Frame: Long Term Goals: x 8-10 weeks

Pt will demonstrate grossly equal ROM in 8 weeks in order to carry out sport related acts including resistance training of the upper body and upper extremity w/out s/s at right medial elbow

Pt will demonstrate 5/5 MMT of right elbow compared to left side in 10 weeks in order to prevent further injury and/or recurrence of right elbow pain and injury. MMT will be measured using Vaid Systems Dynamo grip strength dynamometer.

Pt will elicit pain free PROM and AROM, ability to forcefully extend elbow without pain, and regain grip strength compared to baseline measurement in order to progress to resistance training and more complex exercises w/out any s/s in 10 to 12 weeks

Pt will demonstrate independence and compliance with advanced HEP including knowledge of self-progression by MD and ATC

ASSESSMENT

Assessment/Clinical Impression:

Patient is a 18year old NCAA D1 baseball player presenting in clinic 5-day post-operative following right ulnar collateral ligament reconstruction. He presents in clinic today in great spirits and ready to take on the day. He will be immobile in his brace at 90° for the first 10 days with gradual increases in ROM while in brace post operatively and presents in great spirits today and ready to begin therapeutic rehabilitation.

Upon examination today, patient demonstrates moderate PROM abilities due to post-operative restrictions but is not apprehensive to beginning PROM. He has obvious swelling around elbow and swelling pooling in distal hand and wrist.

Based on patient's current findings, presentation, motivation, and functional deficits, Mr.

has

an excellent prognosis to achieve established goals and return to PLOF.

Pt was educated on diagnosis, proposed interventions, and initial HEP. Mr. has excellent potential for improvement and I expect him to attain improvement with specialized rehabilitation. Specific rehabilitation is needed to gather data by observation, hands-on assessment, and patient inquiry. The treating clinician's skill is required to make clinical decisions regarding the response to treatment and to determine the appropriate and safe progression of the patient's home exercise program and functional activities.

Rehab Potential: GOOD/EXCELLENT based on Intact comprehension, high motivation, ability to participate, support environment and physical capacity to achieve goals

Barriers: other: nil at this time

Evaluation Justification:

History: No personal factors and/or comorbidities

Examination: Addressing a total of 3 or more elements including body structures and functions, activity limitations, and/or participation restrictions

Clinical presentation: Stable

Clinical decision making: low

Eval complexity: low

TREATMENT PLAN

Plan of Care

Treatment may include, but not limited to, any combination of the following skilled interventions:

Treatments: therapeutic exercise, therapeutic activity, neuromuscular re-education, manual therapy, therapeutic modalities as indicated.

Plan for Next Visit:

The goals listed above will reduce the current impairments creating disability.

Mr. will return for formal rehabilitation 2x/week for 4 weeks, HEP for maintenance of current, improving condition of right ulnar collateral ligament reconstruction

Goals and Plan of Care were discussed with the patient and agreed upon. Patient's questions were answered. Overall findings during IE were communicated to athlete.

,ATC

These services were provided by Athletic Trainer, , under the supervision of Dr.

Figure 2: Billable Encounter Decision Making Flow Chart

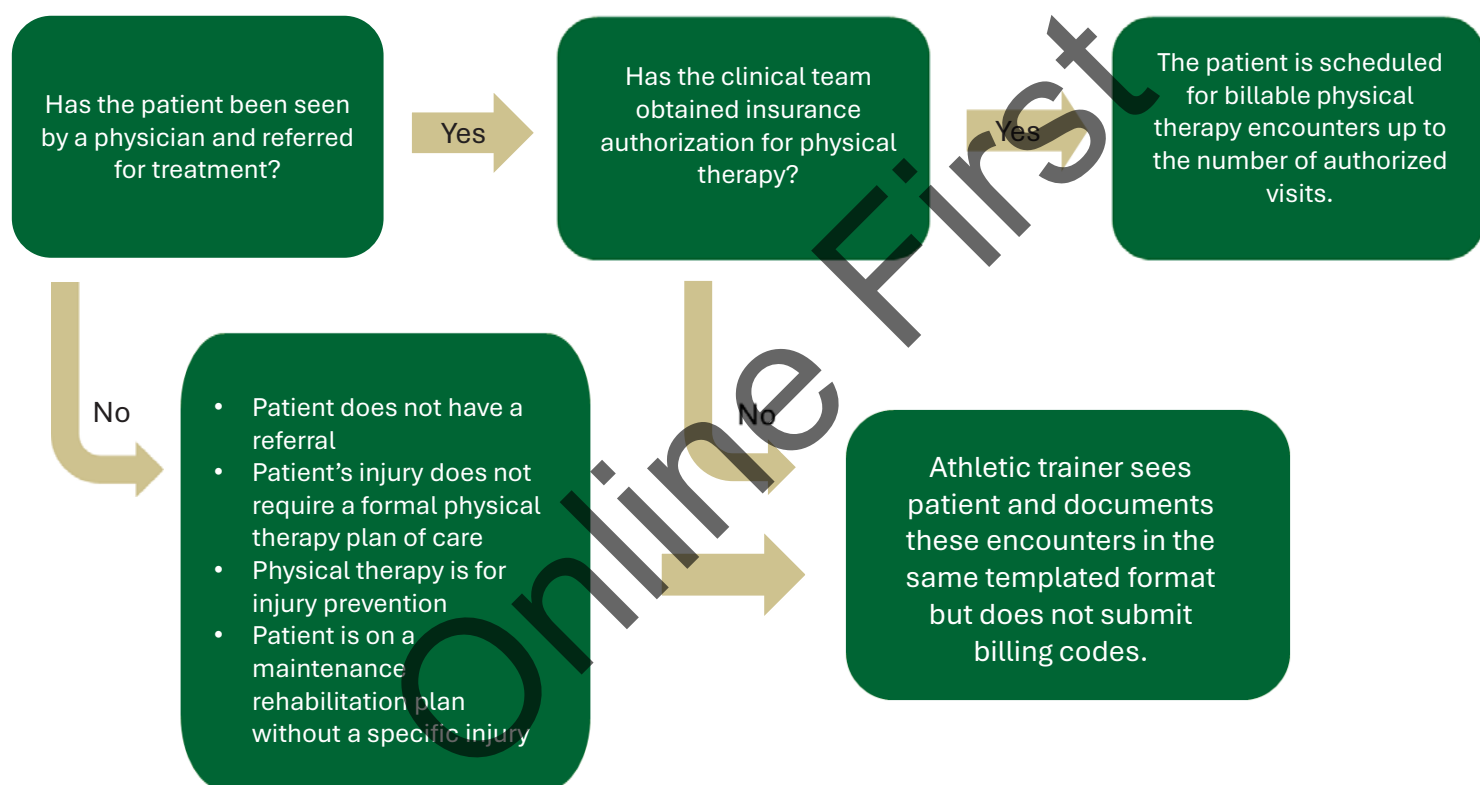


Table 1. Units billed in EMR by CPT Code Annually

CPT Code	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Aquatic therapy/exercises (97113)				2		2
Athletic training eval low complexity (97169)				10	18	28
Athletic training eval moderate complexity (97170)	1	8	6	1	1	17
Athletic training re-eval (97172)		2	1	3	3	9
Electric stimulation therapy unattended (97014)		41	6	11	10	68
Electrical stimulation (97032)		1	6	88	11	106
Gait training therapy (97116)		18	15	67		100
Manual therapy technique (97140)	1	55	51	353	58	518
Neuromuscular reeducation (97112)	1	79	16	10	12	118
Paraffin bath therapy (97018)				12		12
Therapeutic activity direct patient contact (97530)				81	70	151
Therapeutic exercises (97110)	2	152	390	1455	672	2671
Vasopneumatic device therapy (97016)				14	14	28
Total	5	356	491	2108	869	3829

Abbreviation: CPT, current procedural terminology; FY, Fiscal Year

Table 2. EMR Generated Collections by CPT Code Annually

CPT Code	FY2020 (\$)	FY2021 (\$)	FY2022 (\$)	FY2023 (\$)	FY2024 (\$)	Total (\$)
Aquatic therapy/exercises (97113)				44.48	13.94	58.42
Athletic training eval low complexity (97169)				118.50	125.99	244.49
Athletic training eval moderate complexity (97170)		311.71	411.26	49.52		772.49
Athletic training re-eval (97172)		6.34		22.54		28.88
Electric stimulation therapy unattended (97014)		238.11	56.98	183.06	2.15	480.30
Electrical stimulation (97032)		14.49	28.19	673.59	62.02	778.29
Gait training therapy (97116)		374.67	113.52	1,045.33	130.25	1,663.77
Manual therapy technique (97140)		701.36	667.91	6,324.73	1,009.38	8,703.38
Neuromuscular reeducation (97112)		1,458.55	266.90	258.65	249.67	2,233.77
Paraffin bath therapy (97018)				73.50		73.50
Therapeutic activity direct patient contact (97530)				1,739.15	1,243.24	2,982.39
Therapeutic exercises (97110)		1,419.68	5,359.57	28,008.63	11,336.89	46,124.77
Vasopneumatic device therapy (97016)				48.64	69.18	117.82
Total (\$)		4,524.91	6,904.33	38,590.32	14,242.71	64,262.27

Abbreviation: CPT, current procedural terminology; FY, Fiscal Year July 1 – June 30