

Course Title: Personal Injury for the 21st Century

Instructor: Dr. Michael Robertson, D.C. and Dr. Cyrus Laali, D.C.

Total Hours: 16 hours

Summary:

In this course you will learn the most common mechanisms of injury in motor vehicle collision cases. We will review the process of tissue healing and timeline of healing and relate this information to appropriate methods of care for these cases. You will review appropriate examination procedures with emphasis on special testing and follow up care including referrals to other providers. Dr. Robertson will also review a concise treatment protocol utilizing low tech rehab, consistent re-examination and special testing and appropriate documentation that will improve the medico-legal foundation for your care.

Learning Outcomes:

By the end of the seminar, participants will be better able to:

- Accurately and appropriately diagnose injuries related to motor vehicle collisions
- Identify key indicators for referral to other medical professionals
- Justify a course of care related to an MVC utilizing multiple accepted guidelines
- Document injuries and progression of improvement throughout care for MVC injuries
- Create individualized treatment plans for patients who were involved in MVC

Teaching Methods:

Lecture, slides, Q & A, Sample Cases/Case Studies

Course Outline:

<i>Hour</i>	<i>Content</i>	<i>Format</i>	<i>Topic</i>
<i>Saturday 9:00am- 9:50am Hour #1</i>	<ul style="list-style-type: none">• E/M Coding Selection Changes Effective Jan 1, 2021<ul style="list-style-type: none">○ History of why these changes are being made<ul style="list-style-type: none">▪ Review 2019 proposals to change by CMS and negotiations/feedback from AMA○ Summary of Changes<ul style="list-style-type: none">▪ E/M Scoring changed to Time or MDM▪ Deletion of 99201▪ Retention of individual code levels<ul style="list-style-type: none">• Review new compensation schedule▪ Addition of new prolonged services code• Review of NEW CPT code Descriptions<ul style="list-style-type: none">○ Current code descriptions for 99202-99215, & 99417• E/M Scoring changes – New ways to select your code level<ul style="list-style-type: none">○ Compare and contrast new vs old methods<ul style="list-style-type: none">▪ MDM vs 3 key components▪ Total time vs old Time method• E/M Coding according to Time<ul style="list-style-type: none">○ Elements addressed in new time code selection	<i>Lecture, Slides</i>	<i>Documentat ion/Record Keeping</i>

<p><i>Saturday</i> <i>9:50am-</i> <i>10:40am</i> <i>Hour #2</i></p>	<ul style="list-style-type: none"> ○ Differences between new E/M timed code selection and all other CPT code time selection processes ○ Specific criteria for time code selection ○ Face-to-Face and Non-face-to-face ○ Date of Service only ○ Pre/Post/Intra-service definitions changed ○ Portions of clinical encounter that can be counted toward time ○ No double dipping & exclusion of separate CPT services ○ Review correct coding for every probable time frame for E/M codes ○ The new Prolonged services code and how to implement ○ Compare new prolonged code to existing prolonged codes and differentiate appropriate usage of said codes ● E/M coding in 2021 according to Medical Decision Making <ul style="list-style-type: none"> ○ Compare/Contrast MDM vs 3 Key Components ○ Highlight documentation requirement of <u>only the history and examination they deem necessary for the encounter</u> and maintenance of standards of Problem Oriented Medical Record as per NCQA Guidelines for Record Keeping ○ 3 categories of MDM <ul style="list-style-type: none"> ▪ Number and complexity of problems addressed ▪ Amount and/or complexity of data to be reviewed and analyzed ▪ Risk of complications and/or morbidity or mortality of patient management ● Determining level of service <ul style="list-style-type: none"> ○ Selection of code level with respect to Number and complexity of Problems addressed ○ Selection of code level with respect to Amount and/or complexity of data to be reviewed and analyzed ○ Selection of code level with respect to Risk of complications and/or morbidity or mortality of patient management ○ Coding based on level of medical decision making <ul style="list-style-type: none"> ▪ Clinical scenarios outlined by the AMA and CMS that qualify for 99203 ▪ Scenarios that qualify for 99204 ● Review of probable code selection pathways for chiropractors given the new coding rules <ul style="list-style-type: none"> ○ Code Selection tips for: <ul style="list-style-type: none"> ▪ 99202/99212 ▪ 99203/99213 ▪ 99204/99214 ▪ 99205/99215 	<p><i>Lecture,</i> <i>Slides</i></p>	<p><i>Documentat</i> <i>ion</i></p>
<p><i>Saturday</i> <i>10:40am</i> <i>-</i> <i>11:30am</i> <i>Hour #3</i></p>	<p>Final Review of code changes and expectations for Payer policy updates</p> <ul style="list-style-type: none"> ● Discussion of ethical pitfalls and board complaints <ul style="list-style-type: none"> ○ Review of previous board actions for past year ● Introduction to medical ethics <ul style="list-style-type: none"> ○ Defining medical ethics <ul style="list-style-type: none"> ▪ Medical ethics vs common ethics ▪ The 6 primary tenets of medical ethics ○ Looking at common medical ethical issues <ul style="list-style-type: none"> ▪ Privacy and confidentiality 	<p><i>Lecture,</i> <i>Slides</i></p>	<p><i>Ethics</i></p>

- End-of-life issues
 - Access to care
- Ethical considerations of the provider-patient relationship
 - Fiduciary duty
 - Protecting patient privacy
 - Clear and ethical communication
 - Understanding full disclosure
 - Understanding appropriate referrals
 - Considering second opinions
 - Specialist referrals
 - Stark Regulations and anti-kickback regulations
- Running an ethical practice
 - Propriety in medical records
 - Modern managed care & today's office practice
- Ethical challenges in delivering basic healthcare
 - Ethics of healthcare distribution
 - Exploring concepts in health care rationing
 - Looking at healthcare delivery strategies in the US
- HIPAA and the adolescent patient
- Stroke
 - Review of evidence between chiropractic and stroke
 - Utilizing Informed Consent
 - Public Perception of chiropractic and stroke risk
 - Topics and research to discuss with patients
- Risk Management Tips
 - Screening patients for health risk and readiness for rehab
 - PAR-Q
 - Red Flags from history
 - Handling the upset patient
 - Insurance records requests
 - Community outreach
 - Patient reactions
 - Balancing philosophy
 - Updating patient records
- Risk Management and Social Media
 - Is it appropriate to text my patients?
 - The risks of expanding your practice's social media presence
 - Avoiding potential pitfalls of social media
 - Concerns with responding to a bad online review
 - Handling a negative social media comment
- Informed consent
 - Components
 - Examples-Case Study
- Impact Physics/Vector of Collision
 - Sample physics for frontal impact (with/without seatbelt)
 - G forces required for types of injuries-citations from European spine journal
 - No correlation between vehicle damage & human damage
 - Does not typically matter in terms of settlement

Saturday
11:30am
-
12:20pm
Hour #4

Lecture,
Slides,
Case
Study
Risk
Managemen
t

Saturday
12:50pm
-1:40pm
Hour #5

Lecture,
Slides
Clinical
Sciences:
Pathology &
Mechanism
of Injury

- Insurance carriers correlate \$ vehicle damage to value of care
 - Frontal impact – common injuries
 - Rear impact – common injuries
 - Introduction to facet injuries
 - Side impact – common injuries
 - Complex multi-vector impacts
 - Exploring 3 most common types of injuries
 - Facet joint injuries
 - Change in IAR from CAD events
 - Clinical presentations of facet joint pain
 - TBI
 - Common symptoms
 - Likely causes from collisions
 - Potential detriment to longevity-multiple studies (review & cite)
 - Ligament subfailure injuries
 - X-ray analysis techniques for detection
 - Griffith’s fanning technique
 - Posture Ray/software techniques
 - Functional evaluation via dynamic motion sEMG
 - More injuries not detectable by x-ray
 - Opportunities for other imaging techniques
 - Ligament subfailure injuries and their impact on long term outcomes
 - Panjabi’s model for subfailure injury
 - Review upper & lower cross syndromes
 - Long term outcomes for MVC patients
 - Pain probability
 - Degeneration
 - Susceptibility to injury
 - Working with Attorneys
 - What makes a strong case for your patient
 - Visits to other providers
 - Priority of doctors from insurance carrier perspective
 - Care from different perspectives
 - Patient’s perspective- Carriers – Doctors – Attorneys
 - Tips for working with attorneys
 - Points that weaken your patient’s case from Carriers perspective
 - Mistakes to avoid in your cases
 - Patient referrals
 - Re-examining the role of DC in care of PI patients
 - Referral coordinator to other providers when appropriate
 - We can be more than just another therapy
 - Referring to other providers
 - Common provider types who may need to help on your PI cases
 - Advantages of referring to other providers
 - Referring patient to attorney

Saturday
1:40pm-
2:30pm
Hour #6

Lecture,
Slides

Jurisprudence:
MedicoLegal
aspects of
PI

Saturday
3:20pm-
4:10pm
Hour #8

- Utilizing documentation to strengthen your patient's case
 - Documenting risk factors for poor outcome
 - Head turned, awareness, prior injuries, head restraint position problems, Mechanism of injury, ligament injury
 - How to document patient education regarding ligament injury so it can be used in court to strengthen your case
 - Picture of ligament injury with reference – sign and date
 - Using references from the A.A.O.S. (American Academy of Orthopedic Surgeons)
 - Healing time frames
 - Use to justify care protocols
 - Phase 1
 - Phase 2
 - Phase 3
 - Documenting potential complicating factors
 - Frequently missed injuries
 - TBI, TMJD, Shoulder impingement, 1st rib, anterior ribcage, talar injuries, wrist injuries, tooth fracture (review common mechanism of injuries for each)
 - The importance of photographic documentation
 - Pictures of vehicle damage, on scene if possible, use ruler for perspective
 - Patient in care for headrest position
 - Contusions – make sure you can tell it is patient
- Review of different Guidelines for care
 - Croft Guidelines (NGC-ACA guideline) vs ODG
 - Croft Guidelines
 - Grading Severity of injury (review table)
 - Treatment frequency and duration (review table)
 - Based on Grade for severity of injury
 - ODG Guidelines
 - Cervical Guidelines
 - Chiropractic
 - PT
 - Similarities/differences
 - Lumbar Guidelines
 - Chiropractic
 - PT
 - Similarities/differences

Lecture,
Slides

Record
Keeping:
Guidelines
for care

Sunday
9:00am-
9:50am
Hour #9

- Automobile Accident Summary
 - Patient Vehicle details – Type and size, patient location, what vehicle was doing, damage sustained
 - First vehicle to strike details – type and size, how it struck/impact vector, damage sustained
 - Conditions at time of accident – time of day, road conditions, visibility
 - Patient positioning at moment of impact – preparation for accident, brake pedal usage, use of restraints, body position/thrown, head & neck position/thrown & motion

Lecture,
Slides

Documentat
ion:
History
taking

- Results of impact – what body parts struck against
- Accident Injury summary
 - Date & time of accident/injury
 - Description of accident/injury
 - Immediately after accident/injury – LoC, patient felt, immediate pain, other significant injuries, emergency care at site of impact, destination after accident, transportation after accident (self, spouse, ambulance)
 - Following accident injury – when did additional symptoms develop, what additional symptoms (document appropriately), Other affects since accident not listed (difficulty with ADLs, sleeping, etc.), work restrictions, self treatment, other treatment
- Initial Patient history
 - Patient complaints
 - Headaches – description, onset, frequency, aggravating factors, ameliorating factors, VAS, sleep interruptions, brought on by:, duration, sequelae, imaging
 - Spine symptoms – Neck left/right, UBP left/right, MBP left/right, LBP left/right
 - Severity, quality, aggravating;relieving, changes in intensity
 - Spine related information – VAS, onset, sleep/ADL affects, timing (when worse), aggravating/relieving factors, previous treatment (details for each provider-records request for every provider listed), pre-existing conditions
 - Extremity complainst – which extremity, which part of that extremity, quality of pain, onset of symptom, previous care, aggravating/relieving factors, previous care/records
- Medical, Family, Social History & ROS
 - Medical History
 - Medical care details for this condition, hospitalizations, surgeries, previous accidents, conditions/illnesses, medications (prescribed by)
 - Family History – unchanged from typical exam
 - Diabetes, heart disease, hbp
 - Social History – unchanged from typical exam
 - Dob, sec, marital status, children, resides with, dexterity
 - Activities/habits
 - Exercise, alcohol, smoking
 - Occupational information
 - Employment – status, time at work per day, length of employment, complaints from accident and how they affect ability to perform job duties
 - Job involves – lifting, movements, location, computer hours
 - Work – stress level, affect on complaints (aggravates which symptoms with which specific activities)

- ROS – unchanged from typical exam

Sunday
9:50am-
10:40am
Hour
#10

- Overview of Exam
 - The Foundation of your justification of care
 - CPRs put greatest emphasis on examinations vs daily treatment notes
 - Look for referral opportunities when necessary – spasm/trigger points (PCP)
 - PCP involvement creates referral opportunity and goodwill for profession
 - Always get all medical records from referrals
 - Avoid ordering negative tests (unnecessary MRIs) decrease case value and may compromise patient’s ability to continue necessary care due to finances
 - Document clinical rationale for ordering additional test/imaging
- Neurological exam
 - Cranial Nerves – review tests and nerves associated with tests
 - Cerebellar functional tests – finger-to-finger, finger-to-nose, rapidly alternating movements, point-to-point movement, Romberg’s, heel-to-shin, tandem walk
 - ULE, LLE reflexes, motor strength, sensation
 - Heel walk, toe walk
- Orthopedic Exam
 - Go through each test to ensure it is done properly
 - Correlate each test with possible diagnosis codes
 - Cervical Ortho Exam
 - Active ROM, Passive ROM, Compression tests – neutral, LLF, RLF, Max compression, valsalva, shoulder depression, Soto Hall, distraction
 - Lumbar Ortho Exam
 - Active ROM, Valsalva, Kemp’s, Yeoman’s, Hibb’s, Nachlas, Sitting leg raise, Ely’s, Slump test
- Positive Ortho/Neuro findings are foundation for future special testing, referrals, and necessity for continued care

Lecture,
Slides

Orthopedics
:
Initial
examination

Sunday
10:40am
-
11:30am
Hour
#11

- Most prevalent outcome Assessments in PI Cases (review each OA)
 - R36
 - NDI
 - Revised Oswestry
 - Rivermead Post Concussion Questionnaire
 - PSFS
 - FABQ
 - UEFI/UEFS
 - LEFI/LEFS

Lecture,
Slides

Documentation:
Outcome
assessments
Radiographic
Interpretation:
X-Ray
analysis

- Repeat all previous OAs at least every re-examination
- Imaging considerations
 - In-office vs Referral to facility
 - Review by radiologist much stronger in court
 - Often radiologists do not document ligament subfailure injury (double edged sword)
 - Cervical Views –minimum 5 views
 - Additional views – swimmer when can't visualize lower c/s
 - Obliques-must have documented evidence of radiculopathy
 - APOM lateral flexion – stability of upper cervical ligament complex
 - Thoracic – 2 views
 - Check for rib fracture
 - Lumbar – 2/3 views
 - Flex/ext – not very often needed
- Analysis methods for identifying whiplash/ligament subfailure injuries
 - Griffiths Analysis-Musculoskeletal Radiology by Harry Griffiths
 - Embraced by DO/DC communities to determine whiplash injury
 - Demonstrates change in IAR
 - Explanation from Griffiths book of his methods
 - Illustrations of drawings from Griffiths book
 - Go through sample x-ray and practice this method
 - Posture Ray instability Analysis
 - Better documented references in the literature than Griffiths
 - Indicates areas of ligament subfailure
 - These injuries may allow permanent impairment ratings of 25%
 - Go through sample analysis with this method
 - Compare/contrast the 2 methods (advantage/disadvantages and strength in court)
- Review other analysis options – online spinemetrics.us

Sunday
11:30am
-
12:20pm
Hour
#12

- General Principles of rehabilitation programs
 - Phase 1 treatment summary
 - Up to 30 days post-injury
 - Adjust and reduce inflammation to support growth of Type II collagen
 - Therapies need to make sense based on patient's phase of healing
 - Rehabilitation demonstrates progression
 - Protocols in place simplify this process for staff
- Phase 1 Rehabilitation possibilities
 - For each modality discuss clinical rationale, times, codes
 - Passive ROM/traction/axial traction
 - Massage modalities

Lecture,
Slides

Clinical
Sciences:
Treatment
Protocol 1st
30 days

- Cold laser
 - Ultrasound
 - IF
- Home exercise program Phase 1 Care
 - Discuss rationale and coding for HEP protocols
 - Range of motion exercises
 - 15 reps each direction b.i.d.
 - Hot/Cold Therapies
 - Ice for acute inflammatory phase
 - 15 minutes following ROM exercises
 - Switch to contrast therapy after 72 hours
 - 4 min intervals cold-hot-cold-hot-cold
 - Heat
 - PRN for strained/spamming muscles
 - Brace
 - Rare-only for lumbar disc injuries
 - DME opportunity
- TBI Home Care Protocol
 - Special considerations for concussion patients
 - Helping the patient understand symptoms of concussion
 - Mood, fatigue, headache, personality, irritability, forgetfulness
 - Review ACE protocols per CDC
 - Healing time frame for mTBI
 - Nutritional support
 - Supplementation and dietary considerations
 - Home activities to promote dendritic growth
 - Discussion of possible activities patient can do at home for low cost
 - Phone apps, music, ambidexterity exercises

*Sunday
12:50pm
-1:40pm
Hour
#13*

- History components
 - Key points to follow up from initial history
 - Neuro findings and progression
 - Mood/demeanor
 - Level of fatigue
 - ADLs/work difficulties
 - FUNCTIONAL CHANGES-massive importance for justification of continued care
 - What constitutes functional improvement
 - Samples
- Examination components
 - Repeat previous positive tests
 - Determine necessity of additional exam components based on lack of improvement or worsening of symptoms or development of new symptoms sets
- OA components
 - Which tests should be better and which could get worse
 - Relate these results to phase of healing timeline from AAOS
- Special tests in office
 - GOAL=demonstrate proprioceptive loss

*Lecture,
Slides*

*Clinical
Science:
30 day
Examination
and
Treatment
Protocols*

- Clinical objective evidence of injury as per Punjabi model of sub failure of ligaments
 - CROM
 - Review test procedure
 - Rationale-most cases this is appropriate at 30 days
 - Single leg stance test
 - Review test procedure
 - Rationale for test
- Key decision points for co-management
 - MRI
 - If any neuro signs persist @ this point
 - 30 days gives tissues chance to heal & inflammation time to reduce
 - Reduces incidence of negative MRIs
 - Review ODG guidelines for MRI
 - Cervical
 - Lumbar
 - ODG guidelines for CT and other imaging
 - Orthopedic Consultation
 - Pain present in any extremity 30 days after DOI
 - Huge value driver for case
 - Neuro surgical consultation
 - IF MRI findings come back positive
 - Disc bulge, stenosis, encroachment
 - Disc reduction surgery guidelines from ODG
- General Principles of rehabilitation programs
 - Phase 2 and early phase 3 treatment summary
 - Care appropriate at 30-60 days post injury
 - Adjust, support growth of Type II collagen, begin active therapy to restructure Type II collagen fibers
 - Transitioning to active therapies is necessary to demonstrates patient progressing as expected
 - Protocols in place simplify this process for staff
 - Rehabilitative protocols should progress in difficulty as patient improves
 - Every 2-3 weeks therapies should change
- Phase 2 and early phase 3 Rehabilitation possibilities
 - For each modality discuss clinical rationale, times, codes
 - Traction (sagittal plane for collagen alignment)/axial traction (if confirmed disc bulge on MRI)
 - Therapeutic Exercises /NMR/Therapeutic activities
 - Pros/cons of the different codes-audit flags
 - Vibration plate
 - Rocker board
 - Wobble board, exercise ball therapy, wobble chair
 - Cold laser-justifiable because of healing cascade as tissues restructure
- Home exercise program Phase 2 and early phase 3 Care

- Discuss rationale and coding for HEP protocols
 - Range of motion exercises transitions to stretching
 - Stiffness is expected around this point in care due to new type II collagen alignment limiting normal range of motion
 - 15 reps each direction b.i.d.
- Posture based home exercises to reduce loss of cervical lordosis/anterior head translation from neck injuries
- Heat
 - PRN for continued muscle pain

*Sunday
1:40pm-
2:30pm
Hour
#14*

- History components
 - Should have significant improvement in symptoms by now
 - Key points to follow up from 30 day history
 - Neuro findings and progression
 - Mood/demeanor
 - Level of fatigue
 - ADLs/work difficulties
 - FUNCTIONAL CHANGES-massive importance for justification of continued care
 - What constitutes functional improvement
 - Samples
- Examination components
 - Repeat previous positive tests
 - Determine necessity of additional exam components based on lack of improvement or worsening of symptoms or development of new symptoms sets
- OA components
 - Repeat previous OAs
 - If there is no improvement in OAs at this point a referral is expected or discontinuation of care due to patient plateau
 - Any point where patient progress is static for 2 weeks is plateau and rationale for discontinuation of care
 - At minimum therapies performed (including cmt) should be reassessed and altered
- Special tests in office
 - GOAL=demonstrate failure/weakness of deep stabilization muscles of spine
 - As inflammation has passed and collagen is mostly laid down the function of deep stabilization muscles may now be accurately assessed for injury
 - Cervical: Jules test vs craniocervical flexion test
 - Jules Test

*Lecture,
Slides*

*Clinical
Sciences:
60 day
Examination*

- procedure
- Therapies appropriate to correct this weakness
 - Blue halo band head weights while performing cervical ROM
 - Wearing head weights while standing on vibration plate
 - Head weights while performing ROM on vibration plate
- Craniocervical flexion test
 - Procedure
 - Therapies to resolve positive findings same as for Jules test
- These 2 tests give same clinical information regarding cervical deep stabilizers
- Lumbar tests: Side bridge endurance test vs Sorensen's test
 - Side bridge endurance test (easier to administer)
 - Procedure
 - Therapies to correct positive finding
 - ½ side bridge exercises for 2 weeks progressing to full side bridge
 - Planking
 - Burpees for exceptionally rapidly progressing patients
 - Sorensen's test (harder to administer)
 - Procedure
 - Same therapies as side bridge
- Key decision points for co-management
 - Chiropractic Referral/Consultation
 - Lack of improvement/progression
 - Make some change in treatment of patient
 - Neurologist consultation
 - If TBI signs are persistent and not improving (not time for neuropsych consult yet)
 - Rule out other significant and not yet documented brain injuries and get appropriate treatment outside of office when needed
- General Principles of rehabilitation programs
 - Phase 3 treatment summary
 - Care appropriate at 60+ days post injury
 - Adjust, direct therapy to restructure Type II collagen fibers allowing for greater long term range of motion and tissue more similar to original undamaged structure
 - Active therapies are expected
 - Protocols in place simplify this process for staff
 - Rehabilitative protocols should progress in difficulty as patient improves
 - Every 2-3 weeks therapies should change

*Sunday
2:30pm-
3:20pm
Hour
#15*

*Lecture,
Slides*

*Clinical
Sciences:
Treatment
Protocol 3rd
30 days*

- Care should be focused on moving the patient to home exercise program and preparing for release from care
- Phase 3 Rehabilitation possibilities
 - For each modality discuss clinical rationale, times, codes
 - Traction (sagittal plane for collagen alignment)/axial traction (if confirmed disc bulge on MRI is still symptomatic and surgical consult has been performed)
 - Therapeutic Exercises /NMR/Therapeutic activities
 - Focus of therapies should be on strengthening protocol for deep neck flexors and lumbar intrinsic musculature
 - Pros/cons of the different codes-audit flags
 - C-Spine
 - ROM with head weights
 - Pro lordotic active traction bands
 - L-Spine
 - Wobble Chair – Pettibon exercises
- Home exercise program Phase 3 Care
 - Discuss rationale and coding for HEP protocols
 - Strengthening exercises
 - Handouts from your software
 - Web Exercise programs
 - Posture based home exercises to reduce loss of cervical lordosis/anterior head translation from neck injuries
- History components
 - Should have near complete resolution of symptoms at this point
 - Key points to follow up from 60 day history
 - Neuro findings and progression
 - ADLs/work difficulties
 - FUNCTIONAL CHANGES-massive importance for justification of continued care
 - What constitutes functional improvement
 - Samples
- Examination components
 - Repeat previous positive tests
 - Determine necessity of additional exam components based on lack of improvement or worsening of symptoms or development of new symptoms sets
- OA components
 - Repeat previous abnormal OAs
 - If there is no significant improvement in OAs at this point a referral is expected at minimum, discontinuation of care due to patient plateau is more likely

Sunday
3:20pm-
4:10pm
16

Lecture,
Slides

Clinical
Sciences:
90 day
Examination
and care
beyond 90
days

- These will be the most useful indicators for patient's success with care and completion of care
- Special tests in office
 - Repeat any previously abnormal tests and document percent improvement
 - GOAL=demonstrate resolution of symptoms and return to pre-accident status

CARE BEYOND 90 DAYS

- Vast majority of cases should be done treating with you at this point
 - Croft guidelines support care beyond this – Unfortunately it is harder to win settlements with care extending beyond 90 days. Argument for continued care as part of settlement is an option.
 - AAOS says it takes 1 year to complete restructuring – these exercises can be performed at home
 - All of this can go in exit report
 - Still in pain at 90 days referral to pain management is standard of care
- May continue to see a few extreme cases beyond 90 days
 - Role of primary provider at this point is making sure home exercise program is being utilized
 - performing re-examinations to determine progress and plateau for release of care
 - Coordinating referrals and continued care with other providers
- Exception to 90 days of care
 - Cases which have resulted in surgery
 - Continue treatment for surgical rehabilitation using physical medicine/rehab and following the ODG guidelines for post-surgical rehab
- IF TBI/concussion signs persist without significant improvement at 120 days referral to neuropsych is appropriate
- Components of a complete patient file
 - Document Summary
 - Police Report
 - Records from any other provider who has treated patient
 - Photographs
 - Your complete file
 - Exam notes
 - Chart notes
 - OAs
 - Letters (work restrictions, accommodations, etc.)
 - Exit report
 - X-ray analysis

Recommended/Background Readings

- Whiplash Injuries: The Cervical Acceleration/Deceleration Syndrome: Third Edition, Publisher: LWW; Third edition (December 15, 2001)
- Official Disability Guidelines: <http://www.odgbymcg.com/>
- Frontal impact causes ligamentous cervical spine injury: Pearson AM, Panjabi MM, Ivancic PC, Ito S, Cunningham BW, Rubin W, Gimenez SE; Spine (Phila Pa 1976). 2005 Aug 15;30(16):1852-8.
- Kellett J. Acute soft tissue injuries—a review of the literature. Med Sci Sports Exerc. 1986 Oct;18(5):489-500.
- Woo S, Buckwalter JA. Injury and repair of the musculoskeletal soft tissues. American Academy of Orthopedic Surgeons. 1988. Pg. 106.