

HOW TO INCREASE THE SETTLEMENT VALUE OF PERSONAL INJURY CASES

PERSONAL INJURY PROGRAM

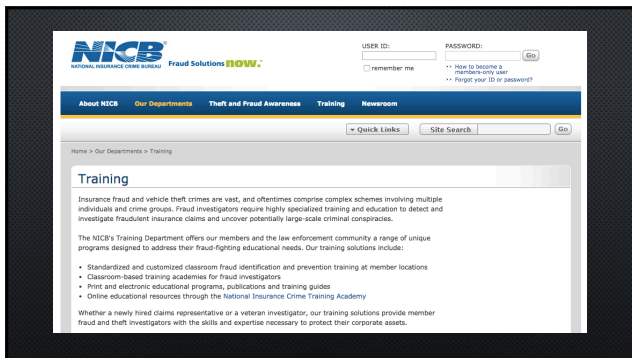


PROVIDER COMPLIANCE
SOLUTIONS, INC.
billing@pcsl.com

2633 McKinney Ave., Suite 120 MB 321, Dallas, TX 75204
Phone: 214.602.8344 | Fax: 214.279.8214

NEVER GIVE AWAY FREE EXAMS

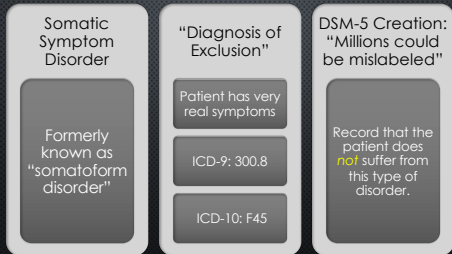
- SAME DAY APPOINTMENTS AVAILABLE
- NO MONEY REQUIRED ON THE FIRST VISIT
- NO CHARGE TO COMPLETE INSURANCE PAPERS
- ATTORNEY REFERRALS AVAILABLE UPON REQUEST
- WE WAIT TO GET PAID UNTIL SETTLEMENT



| | |
|---------------|--|
| 3:00-4:30pm | ICD-10 Codes & Classifications Dr. Lawrence Stolar, BS DC MCS-P, Medical Compliance & Insurance Consultants Grapevine, TX |
| 5:30 – 7:30pm | Welcome Reception – <u>Tuesday, June 2</u> |
| 8:00am | Medical Bill Review Kymberly McGhee, Special Agent, MFTF, Edison, NJ James Keith, Special Agent, MFTF, Chicago, IL |
| 10:00am | BREAK |
| 10:15am | Forensic & Compliance Case Review Dr. Lawrence Stolar, BS DC MCS-P, Medical Compliance & Insurance Consultants Grapevine, TX |

| | |
|---------|--|
| | <u>Thursday, June 4</u> |
| 8:00am | Chiropractic Made Simple Dr. Matt Kushner, DC, Medical Investigator, Travelers, Melville, NY |
| | Break as necessary |
| 12:00pm | Lunch |
| 1:00pm | Chiropractic Made Simple (continued) |

UNIVERSAL BOGUS DEFENSES



DEFENSE MYTH #1

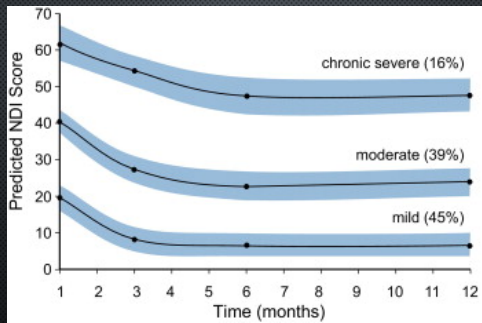
MYTH: THE FORCE OF THE IMPACT IS THE SAME AS SITTING IN A CHAIR, WAKING OFF A CURB OR A SNEEZE. (MURRAY ALLEN, MD ET AL – ACCELERATION PERTURBATIONS OF ACTIVITIES OF DAILY LIVING

TRUTH: SITTING IN A CHAIR DOES NOT TAKE INTO ACCOUNT THE EXCHANGE OF ENERGY FROM THE BULLET VEHICLE TO THE TARGET VEHICLE.

DEFENSE MYTH #2

MYTH: ALL SOFT TISSUE INJURIES RESOLVE IN 6-12 WEEKS.

TRUTH: THERE IS NO CREDIBLE STUDY TO SUPPORT THIS ASSERTION.



DEFENSE MYTH #3

MYTH: THE ACCIDENT RECONSTRUCTIONIST SAID THAT THERE IT IS IMPOSSIBLE TO BE INJURED IN A LOW SPEED CRASH.

TRUTH: ONLY THE TREATING DOCTOR CAN STATE WHETHER A PATIENT HAS BEEN HURT TO A REASONABLE DEGREE OF CERTAINTY.

DEFENSE MYTH #4

MYTH: AN ACCELERATION CHANGE OF 5 MPH IS NOT ENOUGH TO CAUSE INJURY.

TRUTH: A DELTA V OF 5 MPH IS MORE THAN ENOUGH TO CAUSE PERMANENT INJURY.

ONE CAN NOT RETROSPECTIVELY REVIEW AN INJURY.

DEFENSE MYTH #5

MYTH: 50% OF THE POPULATION OVER THE AGE OF 40 HAVE A HERNIATED DISC.

TRUTH: EVEN IF THIS WERE TRUE, HALF OF THE POPULATION OVER 40 DOES NOT WALK AROUND WITH CHRONIC BACK PAIN AND RADICULAR COMPLAINTS EVERY DAY.

DEFENSE MYTH #6

MYTH: THE INJURIES WERE PRE-EXISTING.

TRUTH: THE MAJORITY OF PEOPLE WHO HAVE DEGENERATION AND DISC BULGES DO NOT HAVE SYMPTOMS OF DECREASE IN STRENGTH AND SENSATION.

FACT: TRIAL ATTORNEY'S LOVE PATIENTS WITH DEGENERATION WHO WERE INJURED IN LOW SPEED CRASHES.

DEFENSE MYTH #7

MYTH: POSITIVE WADDELL'S SIGNS INDICATE MALINGERING.

TRUTH: WADDELL'S SIGNS ARE USED TO DETERMINE WHETHER A DISC HERNIATION IS CENTRALIZED OR LATERAL. THESE SIGNS ARE USED AS A PREDICTOR TO DETERMINE WHETHER SURGERY WILL HELP AN INDIVIDUAL OR NOT.

DEFENSE MYTH #8

MYTH: IT WAS AN ACCIDENT.

TRUTH: THE DEFENDANT WAS NEGLIGENT AND CAUSED AN INCIDENT CALLED A COLLISION. THE INCIDENT WAS COMPLETELY AVOIDABLE AND THEREFORE NOT AN ACCIDENT.

DEFENSE MYTH #9

MYTH: THERE WAS NO DAMAGE DONE TO THE VEHICLE SO THE OCCUPANT(S) COULD NOT HAVE BEEN INJURED.

TRUTH: THERE IS NO DIRECT CORRELATION BETWEEN THE DAMAGE OF THE VEHICLE AND THE INJURIES SUSTAINED BY THE OCCUPANT(S). SEE THE SAE STUDY.

DEFENSE MYTH #10

MYTH: PLAINTIFF'S AND DOCTORS AND LAWYERS ARE JUST TRYING TO RIP OFF THE SYSTEM.

TRUTH: 4 OUT OF 5 PROPERTY DAMAGE CASES DO NOT INVOLVE ANY BODILY INJURY. PEOPLE PAY INSURANCE TO INDEMNIFY THEM IN THE EVENT OF AN ACCIDENT. MORE THAN 9 OUT OF 10 CASES DO NOT INVOLVE ANY FRAUD.

DEFENSE MYTH #11

MYTH: THE PLAINTIFF WAITED FOR ___ WEEKS TO GO TO THE DOCTOR.

TRUTH: HONEST PEOPLE THINK THAT SYMPTOMS ARE GOING TO GO AWAY AND WHEN THEY DO NOT THEY SEEK OUT MEDICAL CARE.

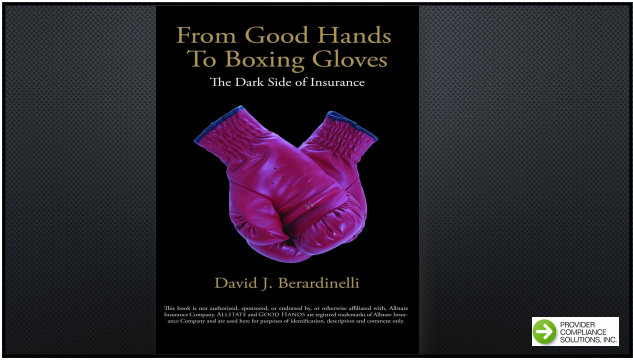
DEFENSE MYTH #12

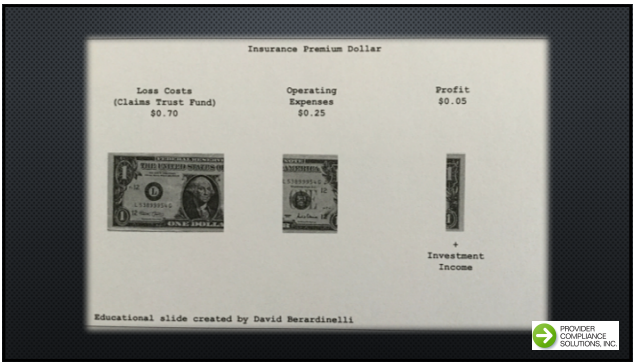
MYTH: THE LITHUANIAN STUDY SHOWED THAT THE SAME NUMBER OF PEOPLE WHO HAD NECK PAIN AND HEADACHES WAS THE SAME FOR PEOPLE WHO DID AND -- DID NOT -- HAVE A CAR ACCIDENT.

TRUTH: ARTHUR CROFT, DC AND MICHAEL FREEMAN, DC, PH.D. SAID THE STUDY WAS "FATALLY FLAWED".



LESSON 1: FROM GOOD HANDS TO BOXING GLOVES



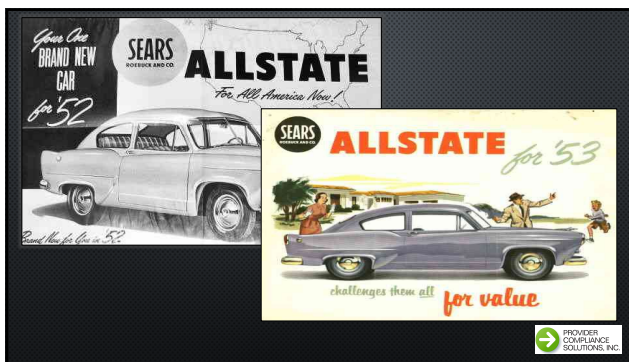




ALLSTATE

- FIRST TIRE SOLD BY SEARS IN 1925
- APRIL 17TH, 1931 – ALLSTATE INSURANCE CO.
- 1933 – BOOTH AT WORLD'S FAIR AND CATALOGS
- 1934 – FIRST ALLSTATE DESK APPEARS IN SEARS
- 1985 – AGENTS WERE MOVED OUT TO OFFICES
- 1993 – SPUN OFF 19.3% OF SHARES
- 1995 – SOLD THE REMAINING 80.7%
- LARGEST PUBLICLY HELD INSURANCE COMPANY

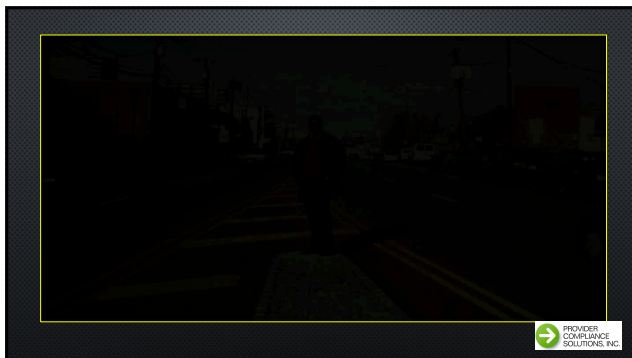




"YOU'RE IN GOOD HANDS..."

- THE PHRASE WAS USED BY A FAMILY PHYSICIAN OF THE GENERAL SALES MANAGER.
- AS OF 2000, IT IS THE MOST RECOGNIZABLE PHRASE IN THE UNITED STATES.
- IN 2003, POLICY GROWTH SLOWED SO THEY CAME UP WITH A NEW ADVERTISING CAMPAIGN.
- THE GOAL WAS SEPARATE THEIR IMAGE FROM GEICO AND PROGRESSIVE.







Bud Fox: Tell me Gordon, how much is enough?

Gordon Gekko: It's not a question of enough, pal. It's a **zero sum game**, somebody wins, somebody loses.

Zero-Sum Game

My Interests
"I Win"

Your Interests
"You Lose"

We are opponents - when I win, you lose

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Issues For Claims Redesign

Overall Objective: Redesign activities and core processes to significantly improve Allstate's competitive economics over the intermediate and longer time period

Claims Objective: Improve execution and optimize balance of severities and expenses to minimize total

How can Allstate reduce overpayment by better standardizing best practices in all phases of file execution across the 10,000 claim representatives?

Can Allstate improve its litigation management across the many different local markets and thousands of front-line decisions made daily (e.g., to limit retention of attorneys/filing of suit, build claim department litigation management skills and decision support, effectively deploy staff counsel and manage outside counsel)?

Do claims reps possess adequate technical expertise for effective medical management to ensure treatment appropriateness and exercise medical cost containment?

What opportunities exist to reduce expenses by automation/technology?

Are there economically justified opportunities for investment in expenses to drive greater reduction in severities?

McKinsey slide 10

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Improving Allstate's casualty economics will have a *negative economic impact on some medical providers, plaintiff attorneys, and claimants.*

Casualty Opportunity Identification

Dollars

Zero Sum Economic Game
--Allstate Gains
--Others must lose

Powerful opponents
--Plaintiffs' bar

| | | | |
|------------|-----------------------------------|---|-----------------------------------|
| Fair Value | Abusive Medical Testing Treatment | Unnecessary Plaintiff Attorney Payments | Current Payments Above Fair Value |
|------------|-----------------------------------|---|-----------------------------------|

McKinsey slide 1426

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CCPR Quiz

Question 2: In a "zero sum" game everybody wins.

Answer: False.

Competing in today's environment is a "zero sum" game - meaning someone must lose if we're to win

McKinsey Slide 2994



We Will Win the Economics Game

Senior management is highly committed to capturing the opportunity

Winning will be a zero sum game


We will win the game in two phases

Phase 1: Consistent execution of "better plays" and "new game plans"

Phase 2: "Change the rules" and play a "new game"

McKinsey slide 8077

February 11, 1994 - PP&C Update



By increasing the number of early unrepresented settlements while "holding the line" on represented cases, a new distribution of settlement times will likely emerge.

DISTRIBUTION OF SETTLEMENT TIMES

BI SUBJECTIVE CASES

CURRENT GAME

BI subjective cases

NEW GAME


BI subjective cases

80% "Good Bands"

15% "Biting Slaves"

Source: Closed File Survey

McKinsey slide 3372



CCFR Quiz

Question 12: We currently take over 10% of cases to verdict.

Answer: False

Comments:

- Because we are good at litigation, it may be easy to assume that we do it a lot; we don't
- Only about 4% of our represented files go to verdict
- Because verdicts appear to lead to better results than negotiating with plaintiff attorneys, we should consider enhancing our litigation strategies

McKinsey slide 3010

PROVIDER COMPLIANCE SOLUTIONS INC.

In addition, Allstate does not aggressively use litigation to maintain fair settlement values in the market

Pie chart showing 75% of cases are represented with side bar graph showing 55% with no case filed, 41% filed a case, only 4% of 517 represented cases went to verdict]

Plaintiff Attorney quotes:

"State Farm is terrible to deal with they are not afraid to go to trial."

"State Farm has driven values down in this market by going to court and winning some cases."

"State Farm has a clear strategy to drive down market values through going to trial... I don't like it and it will hurt them in the long run."

Source: Closed File Survey-13 MCOs, team analysis

McKinsey slide 1607

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Disciplined Capital Manager

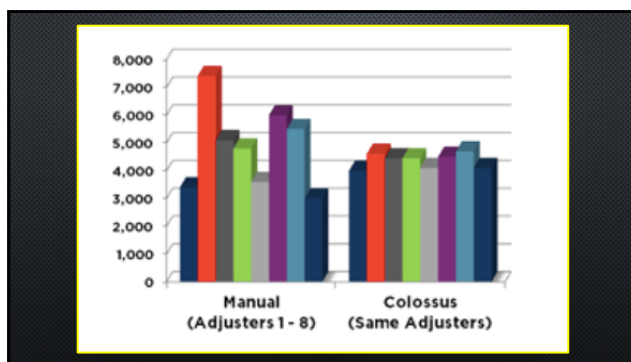
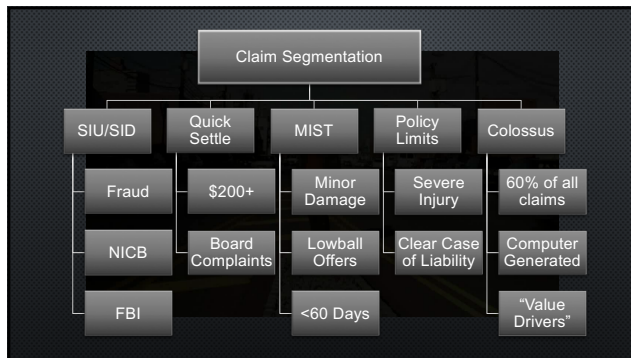
Share Repurchases
10+ Year Total = \$13.5 B

Dividends Per Share
11 Year CAGR = 12.3%

Returned 75% of net income to shareholders since 1995

ArgusVision 2007 - November 13, 2006

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[illegible]

02/02/2001

RECOMMENDATIONS:
Heat Ice
Exercises: Supine
Eds: 10
S: Hand
Referral: Wick
Stability: Wick
Her: Wick

US 3 mins
to LS
EMS 8 mins
to
TRX 5 mins
VM 5 mins
to LS

FB IS FW FFW

Wick - sample
D - 2nd 2nd A
Wick on D - 1st 2nd
D - 2nd 2nd A
Wick on D - 1st 2nd
D - 2nd 2nd A

Nov. 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th

| Date | # of Visits | 97004 97014 | 97010 | 97012 | 97014 | 97018 | 97025 | 97019 | 97035 | 97024 | 97040 | 98040 98041 98042 | |
|------|-------------|----------------|-------|------------|------------|-----------|-------|-------|--------|-------|-----------|-------------------------|-------|
| | | Exam | HC/CP | JMS JMS | JMS JMS | LA JMS | US | TR | Throat | Mouth | DTM /M | CNT | Other |
| 11 | 1 | 202 | | | | | | | | | | | |
| 12 | 2 | | | | | | | | | | | | |
| 13 | 3 | | | | | | | | | | 59 | 40 | |
| 14 | 4 | | | | | | | | | | 59 | 40 | |
| 17 | 5 | | | | | | | | | | | | |
| 20 | 6 | | | | | | | | | | | | |
| 21 | 7 | | | | | | | | | | 59 | 40 | |
| 24 | 8 | | | | | | | | | | 59 | 40 | |
| 27 | 9 | 215 | | | | | | | | | | | |
| 28 | 10 | | | | | | | | | | 59 | 40 | |
| 31 | 11 | | | | | | | | | | 59 | 43 | |
| 4/02 | 12 | | | | | | | | | | 59 | 43 | |
| 5 | 13 | | | | | | | | | | | | |
| 10 | 14 | | | | | | | | | | 59 | 40 | |
| 11 | 15 | | | | | | | | | | 59 | 40 | |
| 14 | 16 | | | | | | | | | | 59 | 40 | |
| 18 | 17 | | | | | | | | | | | | |
| 21 | 18 | 215 | | | | | | | | | | | |
| 24 | 19 | | | | | | | | | | 59 | 43 | |
| 28 | 20 | | | | | | | | | | 59 | 43 | |
| 29 | 21 | | | | | | | | | | | | |

05/12/02

Subjective: Today, the patient indicated that his pain in the right region of the neck which is increased by rotating the head left has not noticeably changed since his last visit. The patient also indicated his pain across the right shoulder remains unchanged since his prior visit. Additionally, Mr. [redacted] stated his dull headaches located in the temples is feeling about the same as his last visit. Furthermore, the patient reported his pain in the bilateral mid back has not noticeably changed since his previous visit.

Objective: The cervical region was found to have a mild-moderate level of discomfort when evaluated by palpation. The thoracic region was revealed to have a mild-moderate level of tenderness when evaluated by palpation. Examination of muscle tenderness and spasm revealed the following: Levator scapulae revealed moderate tenderness. Posterior cervical revealed mild-moderate tenderness. A trigger point was found with active pain in the posterior cervical muscle area with radiation to the upper back region. Evaluation of the levator scapulae muscle area revealed a trigger point with active pain with radiation to the head region. A posterior subluxation was found at the thoracic region.

Assessment: Today, the patient seems to be accepting the treatment well, but has shown little progress since the prior visit.

Plan: The cervical spinal levels through the thoracic spinal levels showed minimal segmental motion during today's technique. Therapy on the cervical, thoracic, lumbar and upper extremity regions will continue as planned with kinetic therapy to restore normal spinal biomechanics. To increase the effectiveness of Mr. [redacted] treatment, he will continue to perform specific stretches and use alternate heat and cold. Mr. [redacted] is a prolific smoker and this is impeding his ability to heal.

[illegible]

Source: *Human Factors*, 1994, Vol. 36, No. 1, 125-130.

Acceleration perturbations of daily living. A comparison to 'whiplash'.

Allen, M.C., West-Jones, J., Mohr, D.S., Flewitt, R.S., Goring, R.D., Kobetic, R., Broadhurst, A.

© Author information

Abstract

STUDY DESIGN: This study measured repeated human head accelerations (g) during daily activities.

OBJECTIVES: Perturbations of daily living were compared to similar data from low velocity rear-end motor vehicle accidents.

SUMMARY OF BACKGROUND DATA: Past assumptions suggest that motor vehicle accident severity does not correlate with the degree of sustained injury. Early engineering studies indicated that occupant disturbance in a low velocity motor vehicle accident is minor.

METHODS: Eight volunteers were perturbed with 13 daily activities. Helmets on the heads of volunteers were instrumented with bi-planar accelerometers with output sampling of 500 Hz, sensitivity of 0.02 g, and a range of +/- 20 g.

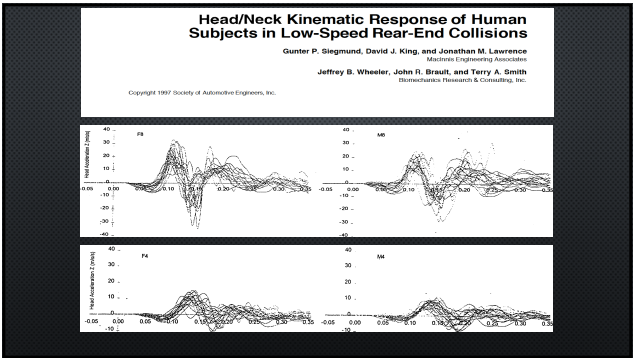
RESULTS: There was wide inter-subject response for various perturbations. Popping backward into a chair caused maximum peak acceleration horizontally at 5.8 g and vertically at 8.5 g, with force vector of 10.1 g at 54.9 degrees. Mean impulse duration was 0.19 sec. There was no hint of injury in any subject.

CONCLUSIONS: Perturbations of daily living compared similarly to the jostling expected in low velocity 'whiplash'-type motor vehicle accidents.

Compare to Dr. Allen's we have:

| | Jenny Hua | Matthew Grabczynski | Stephanie Ma | Average |
|--------------------|-----------|---------------------|--------------|---------|
| Sneeze | 2.189 | 1.800 | 0.957 | 1.649 |
| Cough | 1.790 | 0.899 | 0.957 | 1.215 |
| Slap on Back | 1.287 | 1.956 | 1.524 | 1.589 |
| Hop off step | 6.902 | 4.796 | 4.715 | 5.471 |
| Plop down on chair | 5.888 | 4.377 | 4.610 | 4.958 |
| Crowd jostle | N/A | N/A | N/A | N/A |

| | Dr. Allen's | Our Average Value | % of our value to Dr. Allen's |
|--------------------|-------------|-------------------|-------------------------------|
| Sneeze | 2.9 | 1.649 | 57% |
| Cough | 3.5 | 1.215 | 35% |
| Slap on back | 4.1 | 1.589 | 39% |
| Hop off step | 8.1 | 5.471 | 68% |
| Plop down on chair | 10.1 | 4.958 | 49% |



Evaluating the Uncertainty in Various
2002-01-0546 Measurement Tasks Common to
Accident Reconstruction

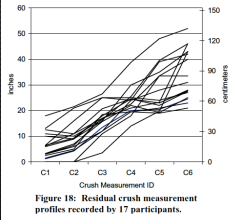


Figure 19: Single photograph used for speed/crush estimate.

| EBS, mph (kph) | # of responses |
|-----------------------|----------------|
| 6 - 10 (9.7 - 16.1) | 2 |
| 11 - 15 (17.7 - 24.2) | 12 |
| 16 - 20 (25.8 - 32.2) | 16 |
| 21 - 25 (33.8 - 40.3) | 14 |
| 26 - 30 (41.9 - 48.3) | 5 |

Table 6: Crush estimates from a single photograph.

Evaluating the Uncertainty in Various
2002-01-0546 Measurement Tasks Common to
Accident Reconstruction



Figures 20a and 20b: Two photographs used together for one crush estimation exercise.

In the two-photograph exercise, 52 participants provided 8 crush estimates and 51 EBS estimates. The average estimated crush was 15.1 inches with a standard deviation of 3.3 inches. The EBS results are given in Table 7.

| EBS, mph (kph) | # of responses |
|-----------------------|----------------|
| 11 - 15 (17.7 - 24.2) | 5 |
| 16 - 20 (25.8 - 32.2) | 12 |
| 21 - 25 (33.8 - 40.3) | 18 |
| 26 - 30 (41.9 - 48.3) | 12 |
| 31 - 35 (49.9 - 56.4) | 3 |
| 36 - 40 (58.0 - 64.4) | 0 |
| 41 - 45 (66.0 - 72.5) | 1 |

Table 7: Crush depth estimates from two photographs.

Evaluating the Uncertainty in Various
2002-01-0546 Measurement Tasks Common to
Accident Reconstruction

MEASURING VEHICLE CRUSH

The amount of deformation a vehicle sustains is often of interest to a reconstructionist conducting an energy-based accident analysis. While the vehicle itself is sometimes available for measurement, reconstructionists are occasionally asked to determine deformation depths from one or more photographs. Experiments examining the variation involved in each of these methods of crush measurement and estimation are described below.

Most of the participants in this exercise reported that they would not attempt to use information generated in this fashion in a reconstruction without additional details and analysis.

NEWTON'S FIRST LAW OF MOTION

I. EVERY OBJECT AT REST TENDS TO REMAIN AT REST AND EVERY OBJECT IN A STATE OF MOTION TENDS TO REMAIN IN THAT STATE OF MOTION UNLESS AN EXTERNAL FORCE IS APPLIED TO IT.

GALILEO'S *LAW OF INERTIA*

WE TREAT "INERTIAL INJURIES"

NEWTON'S SECOND LAW OF MOTION

II. THE RELATIONSHIP BETWEEN AN OBJECTS MASS (M), IT'S ACCELERATION (A) AND THE APPLIED FORCE (F) CAN BE STATED AS $F = MA$ ($N = KG \times M/S^2$)

ARISTOTLE STATED $F = MV$, MEANING THERE IS ONLY VELOCITY IF THERE IS FORCE. *THIS IS CONVENTIONAL WISDOM, HOWEVER, IT IS WRONG.*

ESTIMATE F OF COLLISION IN YOUR FINAL REPORT

NEWTON'S THIRD LAW OF MOTION

III. FOR EVERY ACTION, THERE IS AN EQUAL AND OPPOSITE REACTION.

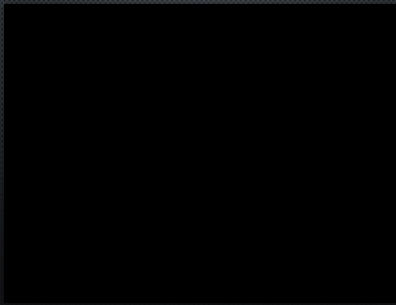
WHEN TWO VEHICLES COLLIDE, ALL VEHICLES ABSORB THE IMPACT OF THE COLLISION. THEREFORE, YOU NEED TO GET PICTURES OF THE OTHER VEHICLE(S) INVOLVED IN THE COLLISION. THIS IS NOT PROPORTIONAL.

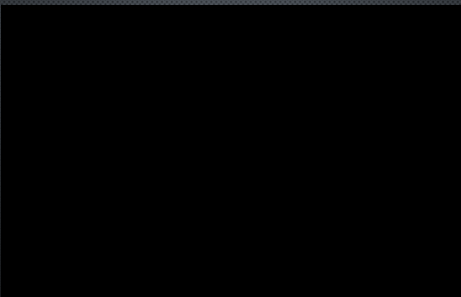
CONSERVATION OF ENERGY

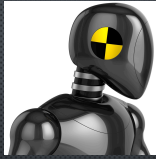
ENERGY CAN BE NEITHER CREATED NOR DESTROYED; RATHER, IT TRANSFORMS FROM ONE FORM TO ANOTHER.

THEREFORE, WHEN A COLLISION OCCURS, THERE IS A TRANSFER OF FORCE BETWEEN TWO VEHICLES EVEN WHEN THERE IS NO PROPERTY DAMAGE.

"CRUSHING CAN BE GOOD"

CONSERVATION OF ENERGY






**LESSON 2:
DOCUMENTATION REQUIRED
BEFORE THE FIRST VISIT**

VALUE DRIVERS IN COLOSSUS

1. INJURIES (DIAGNOSIS)
2. DUTIES UNDER DURESS
3. LOSS OF ENJOYMENT OF LIFE
4. PROGNOSIS
5. FUTURE MEDICAL TREATMENT
6. IMPAIRMENT RATING – PLACE AT STATIC MMI



TRIAL GUIDES
Trial Guides Author Contribution

Increasing Claim Value in Auto Cases
Aaron DeShaw

Auto insurers pay a variety of settlement amounts to claimants. In addition to medical bill costs, attorney and vehicle damage recovery programs, most insurers pay a variety of settlement amounts. These amounts are often based on the amount of the claimant's damages. The amount of the claimant's damages is often based on the amount of the claimant's damages. The amount of the claimant's damages is often based on the amount of the claimant's damages.

DETERMINING VALUES

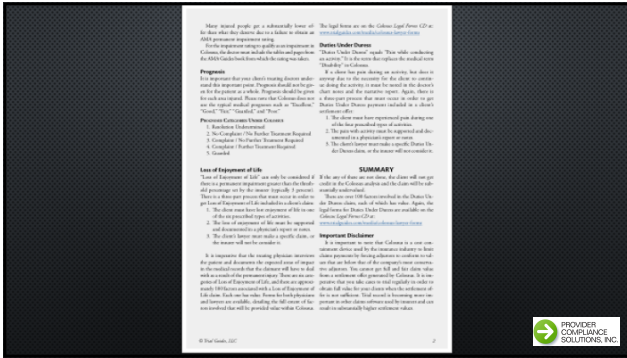
Colossus determines value based on appropriate diagnosis and history. The amount of the claimant's damages is often based on the amount of the claimant's damages. The amount of the claimant's damages is often based on the amount of the claimant's damages.

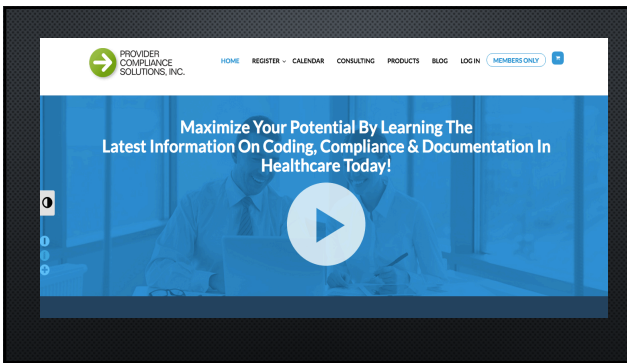
THE TOP FIVE FACTORS

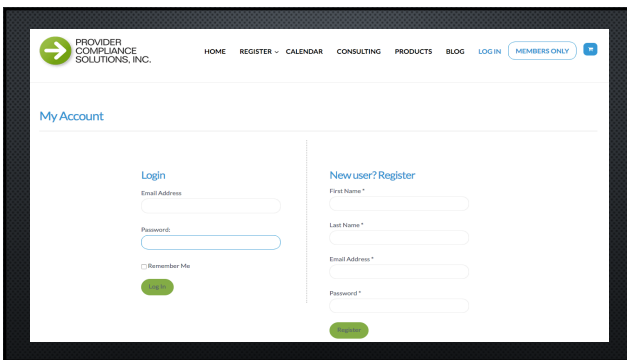
Injuries

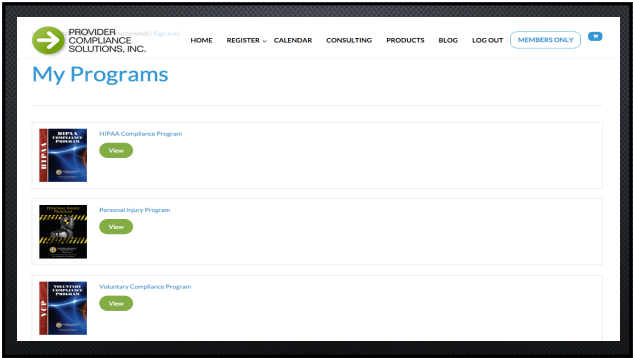
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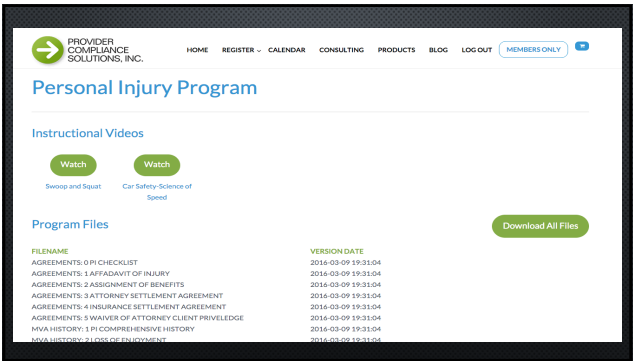
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[illegible]

[illegible]

[illegible]

[illegible][illegible]

OFFICE NAME

Patient: _____ Date: _____

Date of Injury: _____

PROGNOSIS

☐ The future prognosis for this patient is undetermined.

☐ There are no ongoing complaints and no additional treatment is being prescribed.

☐ The patient continues to complain of _____, but no additional treatment is being prescribed.

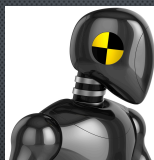
☐ The patient continues to complain of _____ and the following additional treatment has been:

- ☐ Therapeutic Procedures (i.e. exercise, rehabilitation)
- ☐ Manipulation/Manual Therapy
- ☐ Durable Medical Equipment
- ☐ Home Exercises
- ☐ Other _____

☐ The patient continues to complain of _____ and the future prognosis is guarded.

Doctor's Name (printed): _____

Doctor's Name (signature): _____

[illegible]

LESSON 3

DOCUMENTATION REQUIRED ON THE FIRST VISIT

[illegible]

EVALUATION & MANAGEMENT

NEW PATIENT:

- SOMEONE THAT **HAS NOT** RECEIVED PROFESSIONAL SERVICES
- IN AN OFFICE, OR
- BY ONE OF THE PROVIDERS
- IN THE PREVIOUS **THREE (3) YEARS.**

EVALUATION & MANAGEMENT

ESTABLISHED PATIENT:

- SOMEONE THAT **HAS** RECEIVED PROFESSIONAL SERVICES
- IN AN OFFICE, OR
- BY ONE OF THE PROVIDERS
- IN THE PREVIOUS **THREE (3) YEARS.**

EVALUATION & MANAGEMENT

- | | |
|--------|--------|
| •99201 | •99211 |
| •99202 | •99212 |
| •99203 | •99213 |
| •99204 | •99214 |
| •99205 | •99215 |

TIME

- IF THE MAJORITY OF TIME
- IS SPENT COORDINATING CARE WITH ANOTHER PROVIDER, OR
- COUNSELING THE PATIENT AND/OR IMMEDIATE FAMILY MEMBER ABOUT THE PATIENTS CONDITION
- THE TOTAL TIME OF THE VISIT IS CONSIDERED THE KEY FACTOR.

| Evaluation & Management Audit Tool (Based on the 1997 Documentation Guidelines) | | | | |
|--|--|---|--|--|
| History | Physical | Examination | Assessment | Recommendation |
| History 1. Chief Complaint 2. History of Present Illness 3. Past Medical History 4. Family History 5. Social History 6. Review of Systems | Physical 1. General 2. HEENT 3. Chest 4. Abdomen 5. Extremities 6. Skin 7. Neurological 8. Musculoskeletal 9. Genitourinary 10. Endocrine 11. Hematologic 12. Immunologic 13. Infectious 14. Neoplastic 15. Psychiatric 16. Reproductive 17. Other | Examination 1. General 2. HEENT 3. Chest 4. Abdomen 5. Extremities 6. Skin 7. Neurological 8. Musculoskeletal 9. Genitourinary 10. Endocrine 11. Hematologic 12. Immunologic 13. Infectious 14. Neoplastic 15. Psychiatric 16. Reproductive 17. Other | Assessment 1. Problem List 2. Differential Diagnosis 3. Plan 4. Prognosis 5. Discharge Instructions 6. Follow-up 7. Referral 8. Consultation 9. Medication 10. Laboratory 11. Imaging 12. Other | Recommendation 1. Problem List 2. Differential Diagnosis 3. Plan 4. Prognosis 5. Discharge Instructions 6. Follow-up 7. Referral 8. Consultation 9. Medication 10. Laboratory 11. Imaging 12. Other |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99201 | PF | PF | SF | 10 |
| 99202 | EPF | EPF | SF | 20 |
| 99203 | DET | DET | LOW | 30 |
| 99204 | COMP | COMP | MOD | 45 |
| 99205 | COMP | COMP | HIGH | 60 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99211 | PF | PF | SF | 5 |
| 99212 | PF | PF | SF | 10 |
| 99213 | EPF | EPF | LOW | 15 |
| 99214 | DET | DET | MOD | 25 |
| 99215 | COMP | COMP | HIGH | 40 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99211 | PF | PF | SF | 5 |
| 99212 | PF | PF | SF | 10 |
| 99213 | EPF | EPF | LOW | 15 |
| 99214 | DET | DET | MOD | 25 |
| 99215 | COMP | COMP | HIGH | 40 |

| CODE | HISTORY | EXAM | MDM | TIME |
|-------|---------|------|------|------|
| 99211 | PF | PF | SF | 5 |
| 99212 | PF | PF | SF | 10 |
| 99213 | EPF | EPF | LOW | 15 |
| 99214 | DET | DET | MOD | 25 |
| 99215 | COMP | COMP | HIGH | 40 |

HISTORY & EXAM

- PROPERTY DAMAGE – INDEPENDENT ESTIMATE, OEM PARTS
- AWARE OF THE ACCIDENT – #1 PREDICTOR OF LONG TERM PAIN
- POSITION IN VEHICLE, SEAT BELT, FOOT ON BRAKE, ETC.
- PRIOR TREATMENT – ER, HOSPITAL, MEDICATION, TENS, DME
- DOCUMENT ALL INJURIES – LOOK FOR TBI
- PAST TREATMENT IN YOUR OFFICE – WITHIN 3 YEARS?
- BILL THE ACCURATE E/M CODE – RARELY CAN BILL A 99204/99214

HISTORY & EXAM

- RANGE OF MOTION LOSS (THIS ONE IS HUGE)
- HEADACHES (NEED DURATION AND FREQUENCY)
- DIZZINESS (USUALLY EXPERIENCED RIGHT AFTER ACCIDENT; ALSO BIG, LINKED TO VISUAL DISTURBANCE; CAN BE RECOGNIZED AS FORM OF TINNITUS)
- ANXIETY (LINKED TO DEPRESSION AND SLEEP DISTURBANCE)
- RADIATING PAIN – MUST BE VALIDATED

DIAGNOSIS

- #2 "VALUE DRIVER" IN COLOSSUS
- USE ICD-10 – GOT TO ICD10DATA.COM
- DIAGNOSE TO THE HIGHEST SPECIFICITY – REVISE IF NECESSARY
- ESTIMATED THAT 40% OF PATIENTS HAVE LIGAMENTOUS LAXITY
- TAKE AP AND LATERAL FIRST – THEN FLEXION/EXTENSION
- IMPAIRMENT POTENTIAL – DRAMATICALLY INCREASE THE VALUE
- DIAGNOSTIC TESTING – MRI/CT, X-RAY, sEMG, DMX, DIGITIZING

OUTCOME ASSESSMENTS

- USED TO HELP DETERMINE TREATMENT EFFECTIVENESS
- COLOSSUS OUTCOME ASSESSMENTS – DUD, LOE
- CONDITION SPECIFIC QUESTIONNAIRES – OSWESTRY, NDI, HDI
- PAIN SCALES – MCGILL PAIN QUESTIONNAIRE
- RANGE OF MOTION – INCLINOMETER AND GONIOMETERS
- sEMG – DYNAROM BY MYOVISION, P. 45 AMA GUIDES TO ROM
- COMPUTERIZED DIGITIZATION

DUTIES UNDER DURESS AND LOSS OF ENJOYMENT OF LIFE

- COLOSSUS QUESTIONNAIRES
- SIGNIFICANT "VALUE DRIVERS"
 - DUD: OVER 100 QUESTIONS. EACH HAVE A VALUE
- PERFORM AT A MINIMUM EVERY 30 DAYS
- GIVE AT BEGINNING, DURING AND END OF TREATMENT

SOAP NOTES & PROGNOSIS

- SOAP NOTES — CHIEF DATA SOURCE
 - LEGIBLE AND COMPLETE; GAPS IN CARE
- PROGNOSIS — PERFORM EVERY 2 TO 4 WEEKS
- USE REGULAR TERMS AS WELL AS COLOSSUS TERMINOLOGY
- UNCERTAIN — LET THEM KNOW WHY
- PROPOSED TREATMENT
- EXPECTED OUTCOME — BE DETAILED. DICTATION IS BEST

S: The patient presented today with continuing complaints of neck pain which she rated as 3/10. She stated that treatment in out office has improved her condition. She can sleep longer at night and is able to do more daily activities without as much pain. She still can not play tennis.

O: Fixations were noted at C2, C4 and C7. There was tenderness noted in the cervical at C5 on the left. Muscle spasms were noted in the cervical spine bilaterally. Range of motion was limited in the cervical spine on L lateral flexion and L and R rotation.

A: The patient is continuing to improve but still has some functional limitations and pain.

P: The patient received a diversified manipulation to the cervical. The patient tolerated the treatment well. This service was performed by the undersigned provider. This was billed as 98940.

She also received ice massage to the cervical spine for 30 minutes. The calculated time included the intra-service only. This was provided by a licensed massage therapist under the supervision of the undersigned licensee. The purpose of the massage was to decrease swelling and reduce muscle spasm rather than increase the extensibility of the muscle fibers, therefore, it was billed as 97124 rather than 97140.

OFFICE NAME

Patient: _____ Date: _____
 Date of Injury: _____

PROGNOSIS

☐ The future prognosis for this patient is undetermined.

☐ There are no ongoing complaints and no additional treatment is being prescribed.

☐ The patient continues to complain of _____, but no additional treatment is being prescribed.

☐ The patient continues to complain of _____ and the following additional treatment has been:

☐ Therapeutic Procedures (i.e. exercise, rehabilitation)

☐ Manipulation/Manual Therapy

☐ Durable Medical Equipment

☐ Home Exercises

☐ Other _____

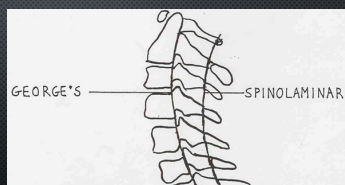
☐ The patient continues to complain of _____ and the future prognosis is guarded.

Doctor's Name (printed) _____
 Doctor's Name (signature) _____

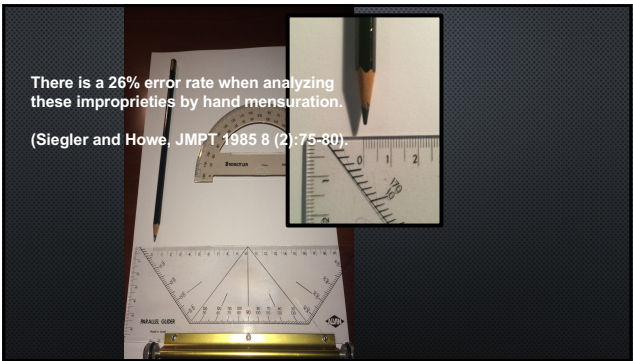
FUTURE MEDICAL TREATMENT

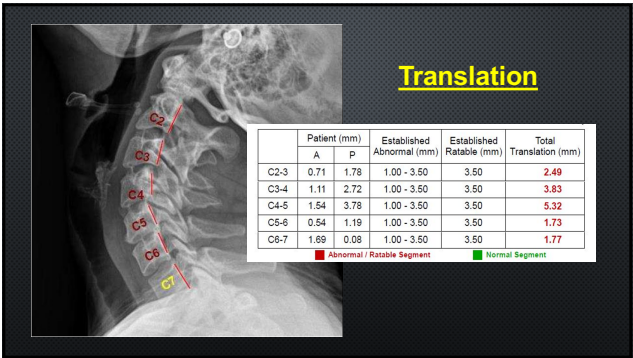
- PLACE PATIENT AT "STATIC MMI"
 - IF NOT, THERE WILL BE NO FUTURE MEDICAL ALLOWED
- BE SURE TO REFER TO AN MD/DO TO "BOOKEND" TREATMENT
- ESTIMATE ALL TREATMENT THAT THE PATIENT MAY LIKELY NEED
- THERAPY, COUNSELING FOR TBI, MANIPULATION, SURGERY
- MUST BE WITHIN 2 YEARS OF STATIC MMI DATE
- STATE "THIS IS TO A REASONABLE DEGREE OF MEDICAL CERTAINTY"

George's Line, since 1919, is relevant to ascertaining alignment in order to detect post-traumatic cervical injuries.



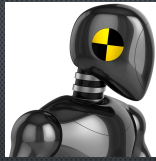




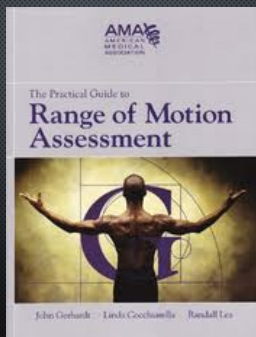


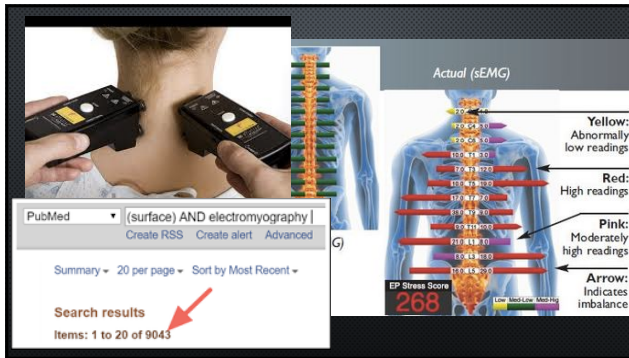
DRE CATEGORY IV

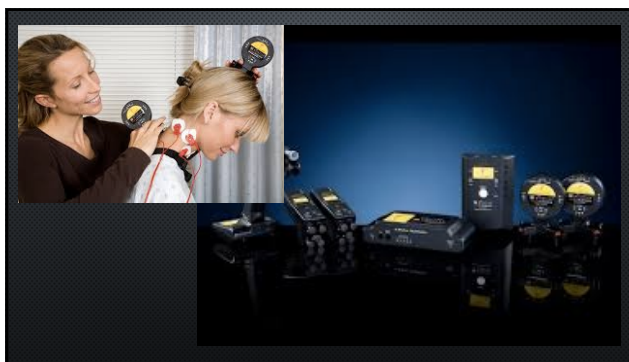
- 5TH EDITION OF AMA GUIDES
- CATEGORY IV 25-28%
- AOMSI EVIDENCE ABOVE THE THRESHOLD OF TRANSLATION GREATER THAN:
- CERVICAL: 3.5 MM OR ANGULATION > 11 DEGREES.
- THORACIC: > 2.5 (NO ANGULATION)
- LUMBAR: > 4.5 MM TRANSLATION (ANGULATION VARIES)

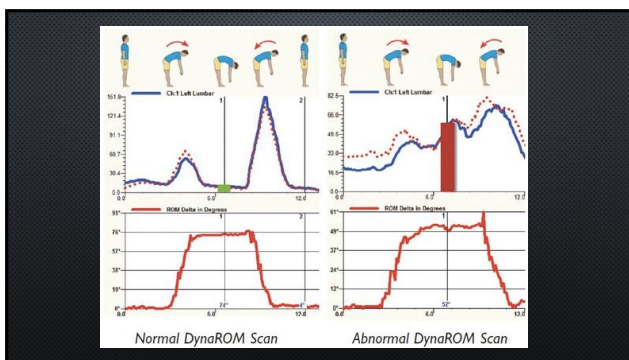


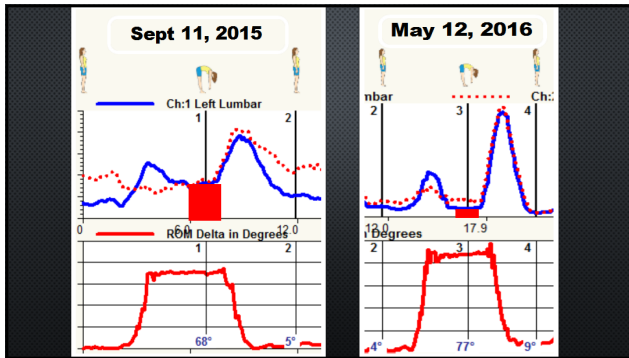
LESSON 4 MEASURING BASELINE FUNCTION UTILIZING OUTCOME ASSESSMENTS











| Date Of Service(s) From Thru | Procedure/Revenue/NDC Code/Modifier Description | Units | Billed Amount | Covered Amount |
|---------------------------------|--|---------|------------------|-------------------|
| 02/27/15 02/27/15 98940 | Chiropractic manipulative | 1.00 \$ | 60.00 \$ | 60.00 \$ |
| 02/27/15 02/27/15 96002 | Dynamic surface electromyography | 1.00 \$ | 41.05 \$ | 41.05 \$ |
| 02/27/15 02/27/15 96004 | Review and interpretation of | 1.00 \$ | 216.51 \$ | 216.51 \$ |
| Total: | | | \$ 317.56 | \$ 317.56 |

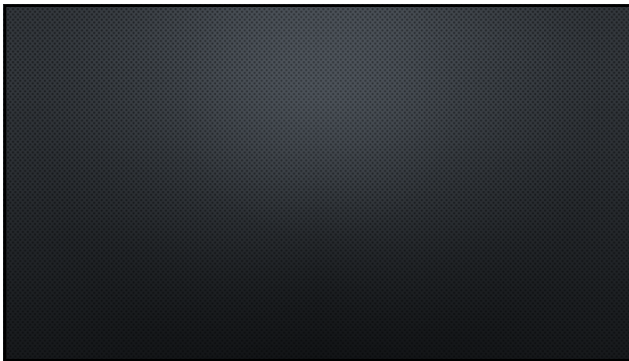
FIRST VISIT

- LETTER OF PROTECTION (LIEN)
- ASSIGNMENT OF BENEFITS (PIP/MED PAY)
- ATTORNEY SETTLEMENT AGREEMENT
- AFFIDAVIT OF INJURY
- PATIENT HISTORY
- EXAM (NEUROMUSCULOSKELETAL)
- MDM
- EM CODES FOR EXAM, X-RAYS AND TREATMENT

SECOND VISIT

PHYSICAL PERFORMANCE TESTING

- MEASURE BASELINE FUNCTION (97750 — EACH 15 MIN)
- DYNAMIC SEMG (96002 AND 96004)
- RANGE OF MOTION
- MUSCLE TESTING
- DUTIES UNDER DURESS
- LOSS OF ENJOYMENT OF LIFE
- PAIN QUESTIONNAIRE
- CONDITION SPECIFIC QUESTIONNAIRE





LESSON 5 MANIPULATION AND THERAPEUTIC PROCEDURES

Chiropractic Manipulative Treatment

Chiropractic manipulative treatment (CMT) is a form of manual treatment to influence joint and neurophysiological function. This treatment may be accomplished using a variety of techniques.

The chiropractic manipulative treatment codes include a pre-manipulation patient assessment. Additional Evaluation and Management services may be reported separately using modifier 25, if the patient's condition requires a significant separately identifiable E/M service, above and beyond the usual preservice and postservice work associated with the procedure. The E/M service may be caused or prompted by the same symptoms or

98940 Chiropractic manipulative treatment (CMT); spinal, 1-2 regions

➔ CPT Assistant Jan 97:7, 11, Feb 99:10, Dec 00:15, Mar 06:15, Dec 07:16, 17, Oct 09:10

98941 spinal, 3-4 regions

➔ CPT Assistant Jan 97:7, 11, Mar 97:10, Feb 99:10, Dec 00:15, Mar 06:15, Dec 07:16, 17, Oct 09:10

98942 spinal, 5 regions

➔ CPT Assistant Jan 97:7, 11, Feb 99:10, Dec 00:15, Mar 06:15, Dec 07:16, 17, Oct 09:10

98943 extraspinal, 1 or more regions

➔ CPT Assistant Jan 97:7, 11, Mar 97:10, Feb 99:10, Dec 00:15, Mar 06:15, Dec 07:16, 17, Oct 09:10

In the January 1997 edition of the CPT Assistant on page 11 the following is included:

"Who can report the Osteopathic Manipulative Treatment codes (98925-98929) and the Chiropractic Manipulative Treatment codes (98940-98943)? Are the OMT codes restricted for use by osteopathic physicians and the CMT codes restricted for use by chiropractic physicians?

AMA Comment

It is important to recognize that the listing of a service or procedure and its code number in a specific section of the CPT code book does not restrict its use to a specific specialty group. Any procedure or service in any section of the CPT coding manual may be used to designate the services rendered by any qualified physician. Therefore, the osteopathic manipulative treatment codes and the chiropractic manipulative treatment codes can be reported by any physician who is qualified to perform these types of manipulation. No distinction is made concerning the physician's licensure or professional credential. Licensure and credentialing vary on a state-by-state and institutional basis."

Osteopathic Manipulative Treatment

Osteopathic manipulative treatment (OMT) is a form of manual treatment applied by a physician to eliminate or alleviate somatic dysfunction and related disorders. This treatment may be accomplished by a variety of techniques.

Body regions referred to are: head region; cervical region; thoracic region; lumbar region; sacral region; pelvic region; lower extremities; upper extremities; rib cage region; abdomen and viscera region.

➔ CPT Assistant Nov 98-37-38

98925 Osteopathic manipulative treatment (OMT), 1-2 body regions involved

➔ CPT Assistant May 96-10, Jan 97-8, 10, Jul 98-10, Aug 00-11, Dec 00-15, Oct 09-10

98926 3-4 body regions involved

➔ CPT Assistant May 96-10, Jan 97-8, Aug 00-11, Dec 00-15, Oct 09-10

98927 5-6 body regions involved

➔ CPT Assistant May 96-10, Jan 97-8, Aug 00-11, Dec 00-15, Oct 09-10

98928 7-8 body regions involved

➔ CPT Assistant May 96-10, Jan 97-8, Aug 00-11, Dec 00-15, Oct 09-10

98929 9-10 body regions involved

➔ CPT Assistant May 96-10, Jan 97-8, 10, Aug 00-11, Oct 09-10



LESSON 5 MANIPULATION AND THERAPEUTIC PROCEDURES

CPT INTRODUCTION

- PROVIDERS ARE TO BILL THE SERVICE OR PROCEDURE THAT MOST ACCURATELY DESCRIBES THE LEVEL OF SERVICE PROVIDED.
- Do NOT APPROXIMATE
- USE UNLISTED CODE IN EACH SECTION
 - 97039 UNLISTED MODALITY

CPT USAGE IN PERSONAL INJURY

- USE THE CODES AS THEY ARE DEFINED IN THE CPT CODE BOOK.
- IF YOU ARE AN IN-NETWORK PROVIDER FOR ANY INSURANCE PLAN YOU MAY END UP TAKING A REDUCTION IN YOUR PIP AND MED-PAY BILLS.
- IF PATIENT USES COMMERCIAL INSURANCE OR MEDICARE YOU CAN NOT BALANCE BILL

"ONE ON ONE" DEFINITION

- THE PROVIDER MUST MAINTAIN:
 - VERBAL
 - VISUAL, AND OR
 - ACTUAL CONTACT
- WITH THE PATIENT THROUGHOUT THE PROCEDURE

THERAPEUTIC MODALITIES

SUPERVISED MODALITIES

- NO ONE-ON-ONE
- MUST BE ONSITE
- MAY BE DELEGATED
 - ICE/HEAT
 - UNATTENDED EMS
- CODES ARE NOT TIMED
- CAN ONLY BILL 1 UNIT

CONSTANT ATTENDANCE

- ONE-ON-ONE
- MUST BE ONSITE
- MAY BE DELEGATED
 - ULTRASOUND
 - ATTENDED EMS
- THESE CODES ARE TIMED
- ONE UNIT 8 PLUS MIN

Therapeutic Procedures

A manner of effecting change through the application of clinical skills and/or services that attempt to improve function.

Physician or therapist required to have direct (one-on-one) patient contact.

Rehabilitation

CPT 2015

Therapeutic Procedures

A manner of effecting change through the application of clinical skills and/or services that attempt to improve function.

Physician or other qualified health care professional (ie, therapist) required to have direct (one-on-one) patient contact.

Identification of Users for the Physical Medicine and Rehabilitation Codes

As with other sections of CPT, the codes in the physical medicine section are designed to identify physical medicine services. These codes are not restricted to use by a specific specialty group. Instead, these codes may be used by any provider who is qualified to perform the service represented by the specific code.

No distinction is made concerning the licensure or professional credentials of the provider. Licensure and credentialing vary on a state-by-state and institutional basis. Appropriate state and institutional authorities should be consulted regarding the appropriate provision of these services by health care professionals.

CALCULATING THE TIME OF THERAPEUTIC PROCEDURES

AS OF MARCH 2014, YOU CAN NO LONGER USE THE 52 MODIFIER WHEN BILLING FOR TIMED THERAPY SERVICES.

EXAMPLE: 20 MINUTES OF A THERAPEUTIC EXERCISE IS BILLED AS 97110 RATHER THAN 97110 – 52

TIMING THERAPEUTIC PROCEDURES

- MUST PERFORM 8 MINUTES OF EACH UNIT TO QUALIFY FOR THE UNIT OF THERAPY BILLED
 - I.E. ONE UNIT IS NOW 8 TO 22 MINUTES OF TOTAL TIME
- TIME INCLUDES THE PRE, INTRA AND POST SERVICE
- COMBINE TOTAL TIME WHEN BILLING >1 TIMED THERAPY
 - EX: 5 MIN OF ULTRASOUND AND 20 MIN OF THER EX = 2 UNITS

MUST PASS MID-POINT

- 1 UNIT - 8 TO 22 MINUTES
- 2 UNITS - 23 TO 37 MINUTES
- 3 UNITS - 38 TO 52 MINUTES
- 4 UNITS - 53 TO 60 MINUTES

INCLUDES PRE-, INTRA- AND POST- SERVICE



ATTENDED ELECTRIC STIM

- CPT CODE - 97032
 - CHANGE THE SETTINGS OF THE MACHINE AT PERIODIC INTERVALS.
- 97014 — ATTENDED E-STIM IS A FIXED POSITION FOR A FIXED AMOUNT OF TIME.

THERAPEUTIC EXERCISES

- CPT CODE 97110
- INCREASE STRENGTH, ENDURANCE AND/OR FLEXIBILITY
 - MUST HAVE MEASURABLE LOSS OF FUNCTION
 - CAN NOT COMPLETE WITHOUT ASSISTANCE
- MUST LIST A REASON WHY DONE IN OFFICE
 - COMORBIDITY
 - DO NOT STATE THE PATIENT DOESN'T HAVE REQUIRED EQUIPMENT

NEUROMUSCULAR RE-EDUCATION

- CPT CODE - 97112
- THERAPEUTIC EXERCISE TO REGAIN SOME FUNCTION OF A MUSCLE THAT HAS BEEN LOST
 - MUST HAVE SIGNIFICANT LOSS OF FUNCTION
- NOT JUST FOR STROKE VICTIMS

THERAPEUTIC ACTIVITIES

- CPT CODE - 97530
- THERAPEUTIC EXERCISES USING DYNAMIC ACTIVITIES TO INCREASE FUNCTION
- MULTIPLE PARAMETERS
 - BALANCE, STRENGTH, COORDINATION
 - WALKING, RUNNING, JUMPING, THROWING

MASSAGE THERAPY

- CPT Code - 97124
- MASSAGE THAT ATTEMPTS TO INCREASE CIRCULATION AND PROMOTE TISSUE RELAXATION.
- THIS CODE CAN BE BILLED WITH CMT/OMT
- USE ICE MASSAGE IN ACUTE PHASE OF CARE

MANUAL THERAPY

- CPT Code 97140
 - MASSAGE THAT IS INTENDED TO INCREASE THE EXTENSIBILITY OF THE MUSCLE FIBERS OR BREAK UP ADHESIONS
 - CAN NOT BILL IN THE SAME REGION OF A CMT
 - MUST USE THE 59 MODIFIER WHEN DONE IN DIFFERENT REGION OF THE BODY THAN A CMT
- | | |
|----------|-----------------------|
| 98940 | CERVICAL MANIPULATION |
| 97140 52 | LUMBAR MANUAL THERAPY |

GROUP THERAPY

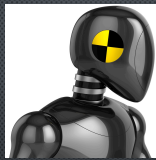
- CPT Code 97150
- TWO OR MORE PEOPLE BEING SUPERVISED AT THE SAME TIME WITH SAME PROVIDER.
- DOES NOT REQUIRE DIRECT ONE-ON-ONE CONTACT

CODING MODIFIERS

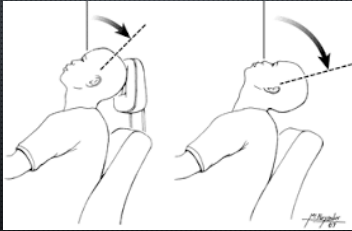
25 - APPENDED TO E/M SERVICE WHEN CMT/OMT IS PERFORMED ON SAME VISIT.

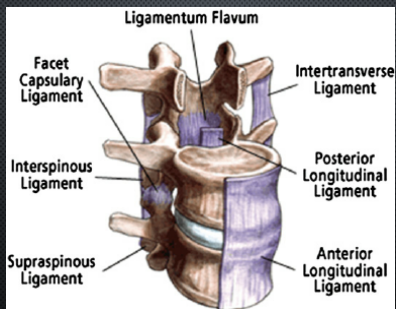
59 - APPENDED TO 97140 WHEN MANUAL THERAPY IS PERFORMED TO A DIFFERENT REGION OF THE BODY THAT A MANIPULATION.

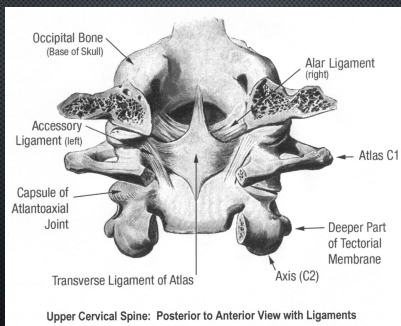
52 - CAN NO LONGER USE FOR TIMED THERAPY.

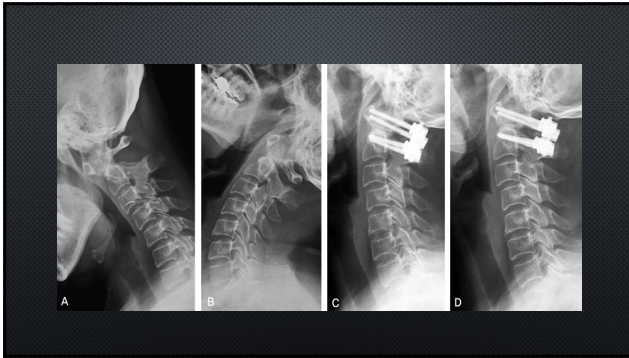


LESSON 6 DIAGNOSING LIGAMENT LAXITY AND TRAUMATIC BRAIN INJURY

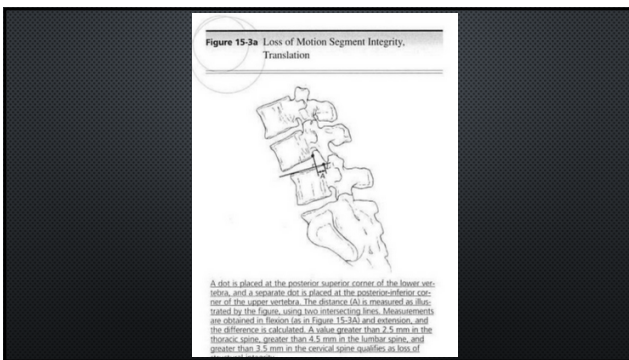


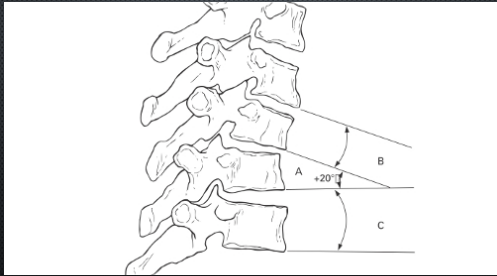


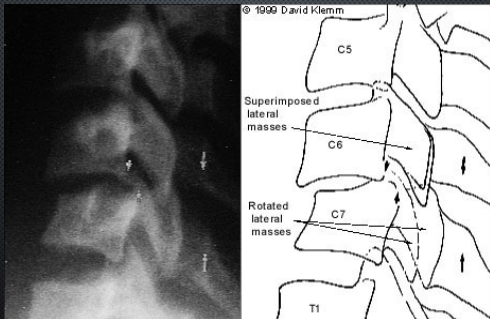














LIGAMENT LAXITY

ESSENTIALS OF SKELETAL RADIOLOGY, 2ND ED.
YOKUM AND ROWE (1996)

GEORGE'S LINE - P. 149

"...MAY BE RADIOLOGIC SIGN OF INSTABILITY
DUE TO FRACTURE, DISLOCATION,
LIGAMENOUS LAXITY, OR DJD"

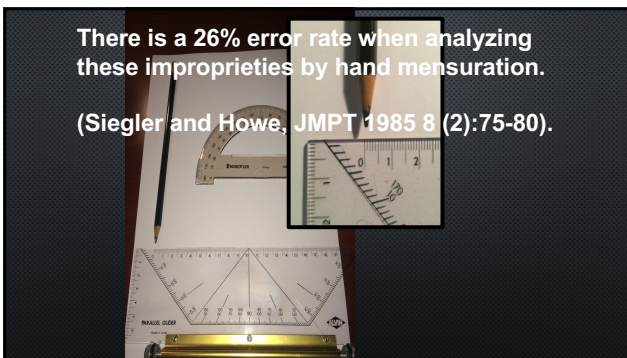
DRE category IV Impairment *

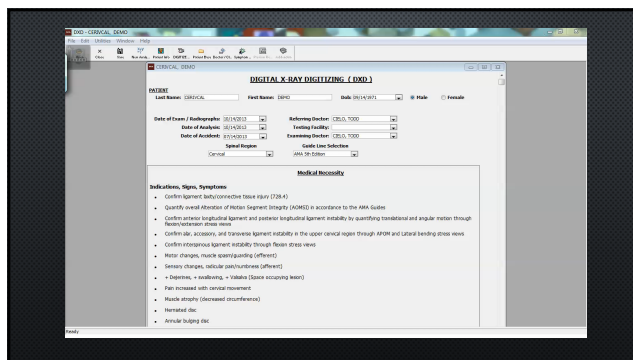
| | Cervical | Thoracic | Lumbar |
|---|---|----------------|--|
| Translation * | 3.5mm | >2.5mm | 4.5mm |
| Angular change | More than 11° greater range of motion than that of adjacent spinal levels | not applicable | 15° or more at L1, L2 and L3 20° or more at L4 25° or more at L5 |
| DRE category IV Whole person impairment + | 25 to 28% | 20 to 23% | 20 to 23% |
| Tables * | 15-5 | 15-4 | 15-3 |

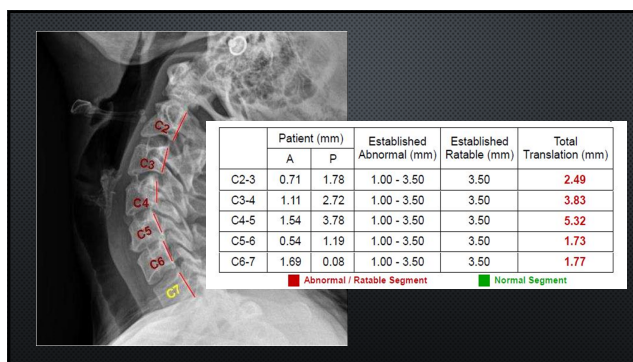
* Translation is a gliding motion where one bone of a joint glides over its neighbour.
+ If multiple levels are involved, these are NOT simply added together. Leave this task to a trained health care professional.
* AMA Guides to the Evaluation of Permanent Impairment 5th edition

There is a 26% error rate when analyzing these improprieties by hand mensuration.

(Siegler and Howe, JMPT 1985 8 (2):75-80).

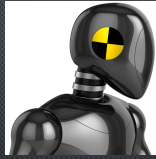






LIGAMENTOUS LAXITY

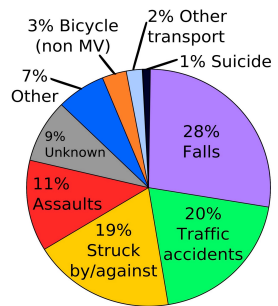
- LMSI IS HUGE IMPAIRMENT RATING FOR CERVICAL AND LUMBAR SPINE
- 25% IN CERVICAL
- 20% IN LUMBAR
- THIS IS WHY FLEX/EXT. X-RAYS ARE ALWAYS NECESSARY FOR EVERY WHIPLASH INJURY!
- EVERY PI CLAIM SHOULD ASSUME POSSIBLE LMSI AS A MATTER OF PRACTICE!



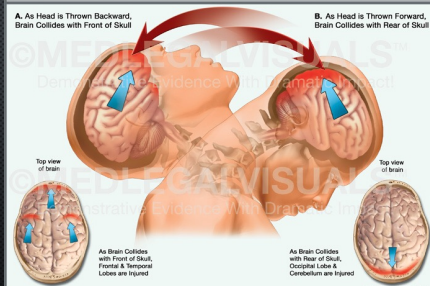
LESSON 6

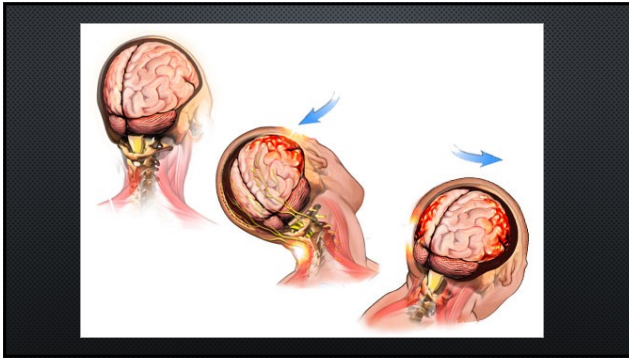
DIAGNOSING LIGAMENT LAXITY AND TRAUMATIC BRAIN INJURY

Traumatic brain injury causes



MECHANISM OF WHIPLASH INJURY OF THE BRAIN







- Confused, dazed, or disoriented state
- Losing consciousness for a few seconds or minutes
- Headache
- Loss of balance or dizziness
- Drowsiness or fatigue
- Nausea or vomiting
- Trouble sleeping
- Sleeping more than usual
- Light or sound sensitivity
- Ringing in the ears
- Blurred vision
- Bad taste in the mouth
- Changes in sense of smell
- Mood swings or changes


King-Devick Test

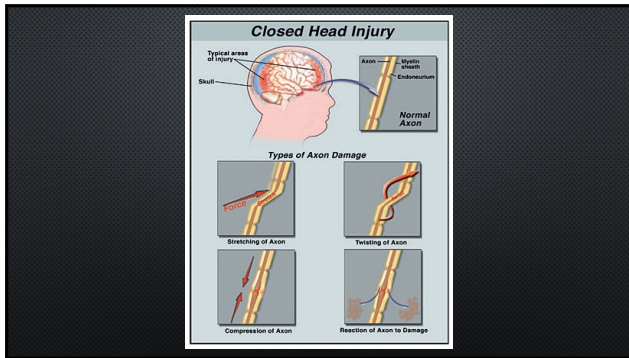
http://en.wikipedia.org/wiki/King-Devick_Test

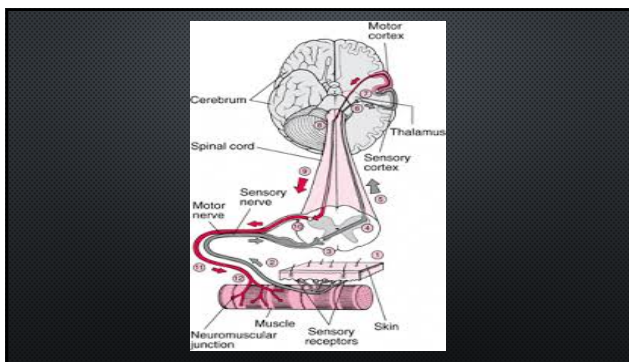
- The **King-Devick Test (K-D Test)** is defined by Mosby's Medical Dictionary as a tool for evaluation of **saccade**, consisting of a series of test cards of numbers. The test cards become progressively more difficult to read due to variability of spacing between the numbers. Both errors in reading and speed of reading are included in deriving a score.^[1] Saccades are quick, simultaneous movements of both eyes.
- In 2011, researchers discovered a link between King-Devick Test and sideline remove-from-play **concussion** screening.

J Neurol Sci. 2011 Oct 15;309(1-2):34-9. doi: 10.1016/j.jns.2011.07.014. Epub 2011 Sep 14.

The King-Devick test and sports-related concussion: study of in a collegiate cohort.

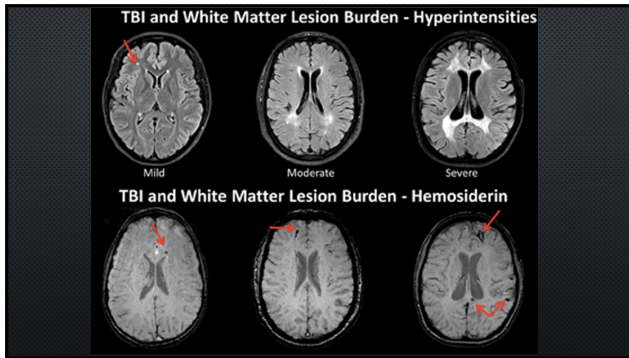


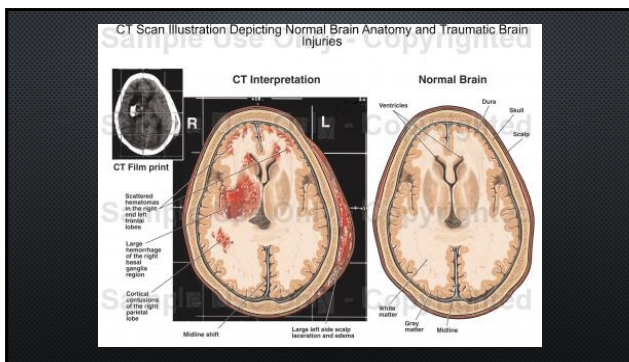


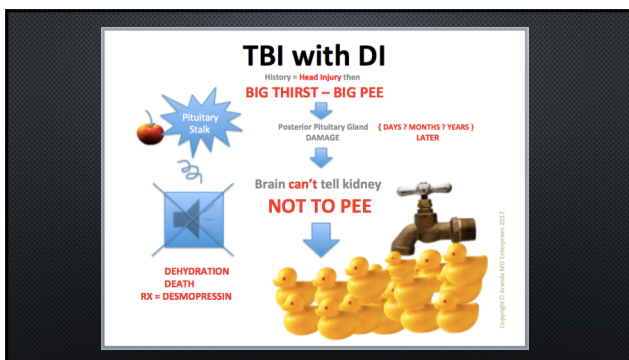


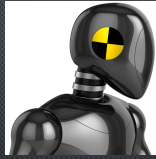
TRAUMATIC BRAIN INJURY

1. MRI OF THE BRAIN – 3T
2. CT OF THE BRAIN
3. EEG OF THE BRAIN
4. FUNCTIONAL IMAGING OF THE BRAIN
5. NEUROPSYCHIATRIC TESTING



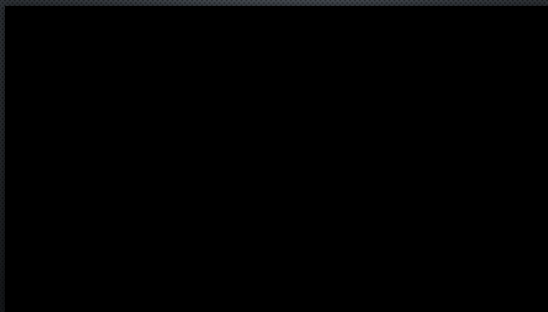


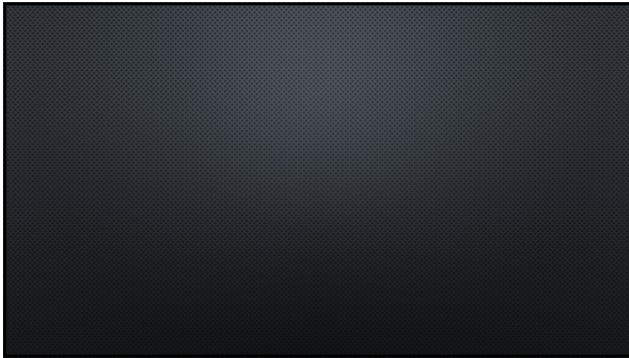


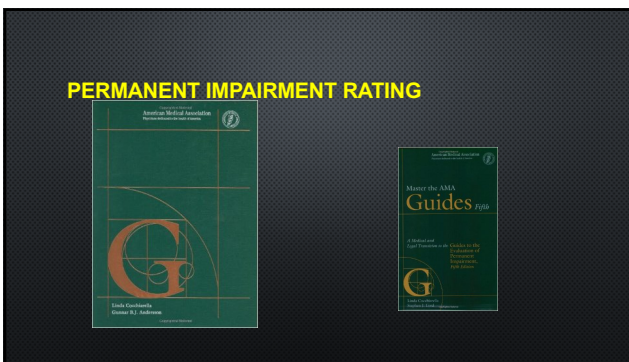


LESSON 7 IMPAIRMENT RATING TERMINOLOGY

- **VII. IMPAIRMENT RATING**
- PERFORM WHEN PATIENT REACHES MMI
- USE THE 5TH EDITION OF THE AMA GUIDES – REGARDLESS OF WC
- SPINE – DRE AND ROM MODEL
 - DRE: ONE LEVEL, NO PRIOR INJURIES
 - ROM: MULTIPLE LEVELS OF IMPAIRMENT, RE-INJURY TO SAME AREA
 - SPECIFIC DISORDERS, ROM , MOTOR AND SENSORY
- EXTREMITIES – ROM, SENSORY AND MOTOR
- USED COMBINED VALUE CHART – PAGE 604 - 606





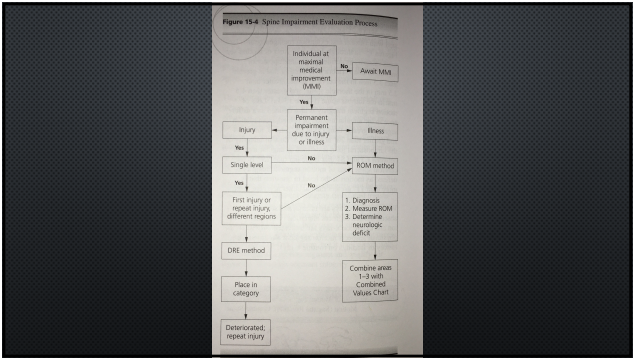


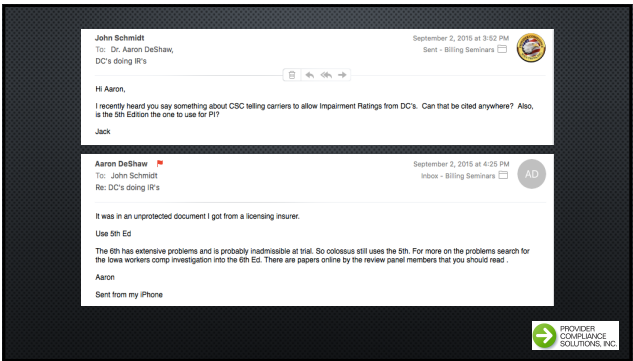
2nd Biggest Value Driver in COLOSSUS

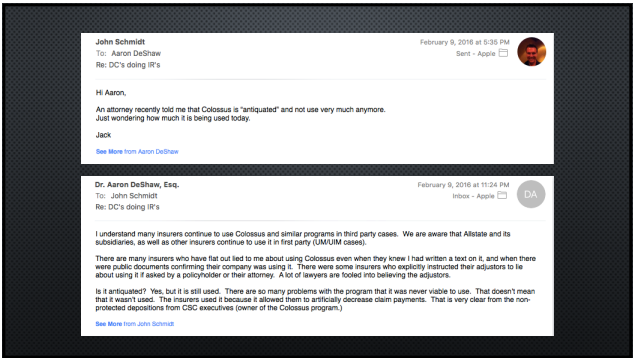
- Patient must be at Maximum Medical Improvement (MMI) – medically stable
- 2% awarded if there is no impairment rating issued

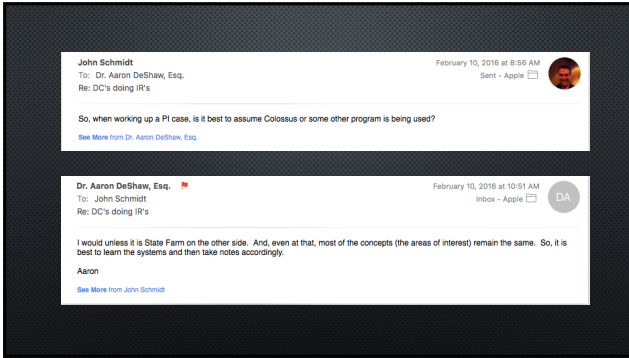
Two (2) Methods:

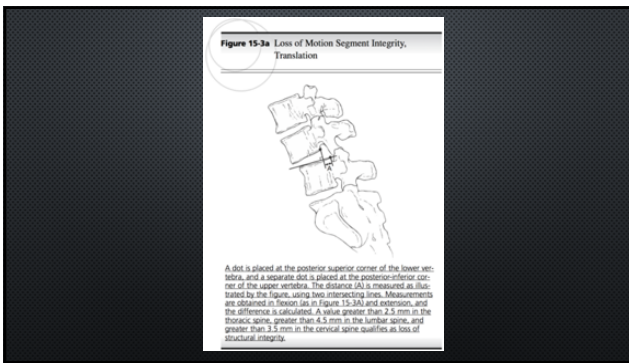
- Diagnostic Related Estimate (DRE) Method
- Range of Motion (ROM) Method – Multiple injuries in same region of the spine
- If both can be used: Award higher impairment





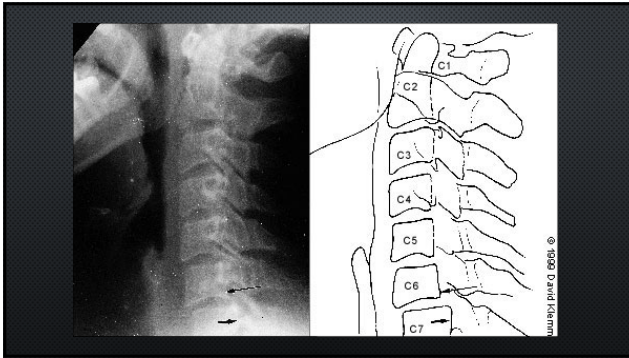




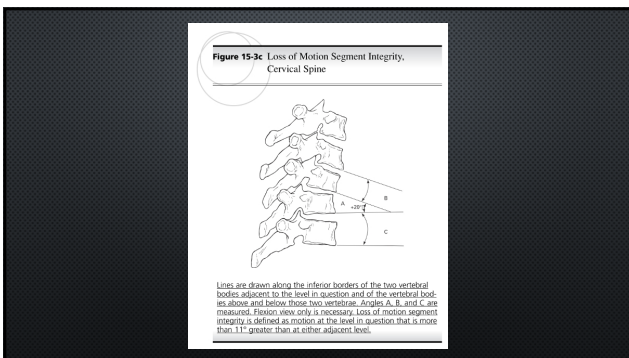


QUICK REVIEW OF LIGAMENT LAXITY RELATED INFO FROM CHIRO TEXTS

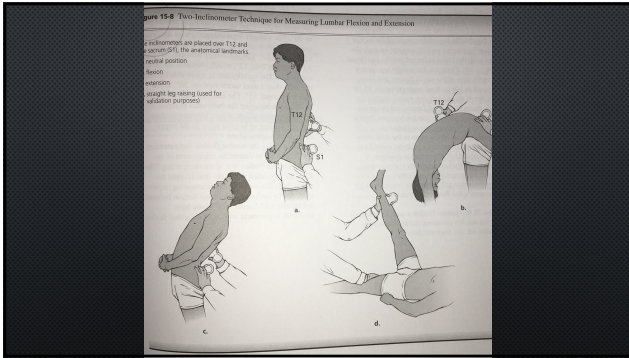
- **ESSENTIALS OF SKELETAL RADIOLOGY, 2ND ED.;** YOKUM AND ROWE (1996)
 - **GEORGE'S LINE: P. 149 "...MAY BE RADIOLOGIC SIGN OF INSTABILITY DUE TO FRACTURE, DISLOCATION, LIGAMENTOUS LAXITY, OR DJD"**

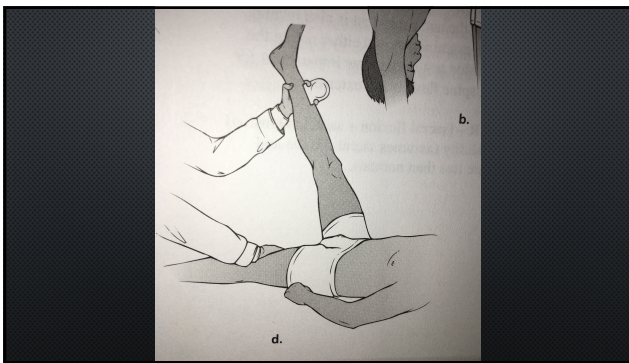


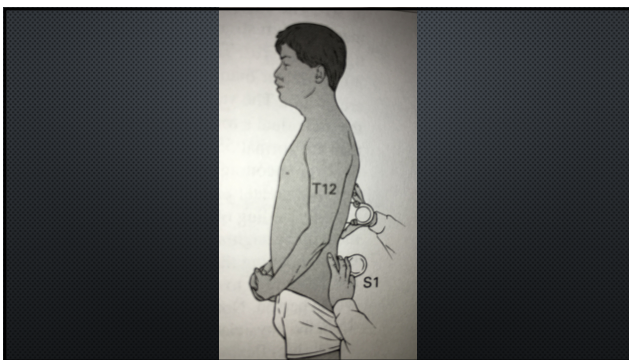


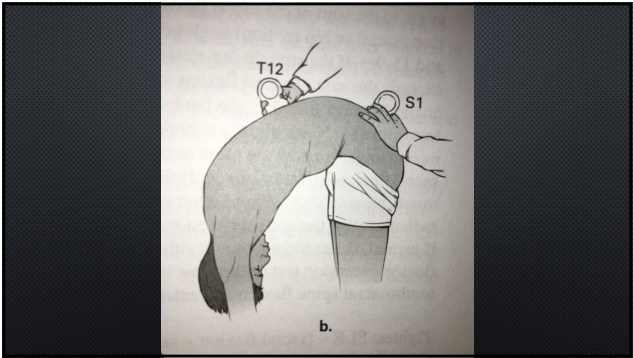












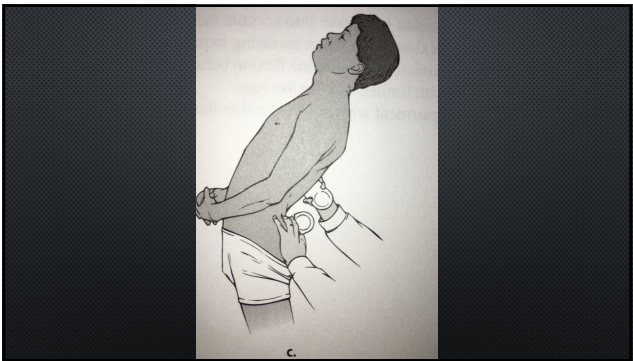


Table 15-8 Impairment Due to Abnormal Motion of the Lumbar Region: Flexion and Extension*

The proportion of flexion and extension of total lumbosacral motion is 75%.

| Sagittal (Wpi) Flexion Angle (°) | True Lumbar Spine Flexion Angle (°) | % Impairment of the Whole Person |
|----------------------------------|-------------------------------------|----------------------------------|
| 45+ | 65+ | 0 |
| | 45 | 2 |
| | 30 | 4 |
| | 15 | 7 |
| | 0 | 10 |
| 30-45 | 40+ | 6 |
| | 20 | 7 |
| | 0 | 10 |
| 0-29 | 30+ | 5 |
| | 15 | 8 |
| | 0 | 11 |

| True Lumbar Spine Extension From Neutral Position (°) or | Degrees of Lumbosacral Spine Motion Lost | Degrees of Lumbosacral Spine Motion Retained | % Impairment of the Whole Person |
|--|--|--|----------------------------------|
| 0 | 25 | 18 | 7 |
| 10 | 15 | 10 | 6 |
| 15 | 10 | 15 | 3 |
| 20 | 5 | 20 | 2 |
| 25 | 0 | 25 | 0 |

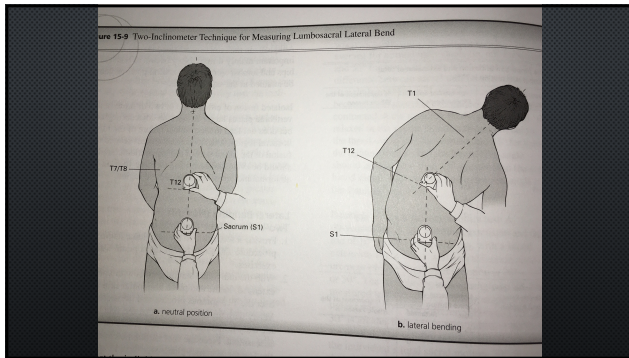


Table 15-9 Impairment Due to Abnormal Motion and Ankylosis of the Lumbar Region: Lateral Bending

Abnormal Motion
Average range of left and right lateral bending is 50°; the proportion of total lumbosacral motion is 40% of the total spine.

| a. Left Lateral Bending From Neutral Position (°) to | Degrees of Lumbosacral Motion Lost | Degrees of Lumbosacral Motion Retained | % Impairment of the Whole Person |
|--|------------------------------------|--|----------------------------------|
| 0 | 25 | 0 | 5 |
| 10 | 15 | 10 | 3 |
| 15 | 10 | 15 | 2 |
| 20 | 5 | 20 | 1 |
| 25 | 0 | 25 | 0 |

| b. Right Lateral Bending From Neutral Position (°) to | Degrees of Lumbosacral Motion Lost | Degrees of Lumbosacral Motion Retained | % Impairment of the Whole Person |
|---|------------------------------------|--|----------------------------------|
| 0 | 25 | 0 | 5 |
| 10 | 15 | 10 | 3 |
| 15 | 10 | 15 | 2 |
| 20 | 5 | 20 | 1 |
| 25 | 0 | 25 | 0 |

c. Ankylosis
Region Ankylosed at (°)

| | |
|----------------------|----|
| 0 (neutral position) | 10 |
| 30 | 20 |
| 45 | 30 |
| 60 | 40 |
| 75 (full flexion) | 50 |

Figure 15-10 Lumbar Range of Motion (ROM)

Name: _____ Sex: _____ Age: _____ Date: _____

| Measurement | Description | Range | Impairment |
|--------------------------------------|--|--|------------|
| Lumbar flexion | T12 ROM Seated Trunk flexion angle ± 10% or 1° Maximum trunk flexion angle % impairment | Yes | No |
| Lumbar extension | T12 ROM Seated Trunk extension angle ± 10% or 1° Maximum trunk extension angle % impairment | Yes | No |
| Straight leg raising (SLR), left | Left SLR ± 10% or 1° Maximum SLR left | Yes | No |
| Straight leg raising (SLR), right | Right SLR ± 10% or 1° Maximum SLR right | Yes | No |
| Lumbar left lateral bending | T12 ROM Seated ROM Lateral to neutral bending angle ± 10% or 1° Maximum lumbar left lateral bending angle % impairment | Yes | No |
| Lumbar right lateral bending | T12 ROM Seated ROM Lateral to neutral bending angle ± 10% or 1° Maximum lumbar right lateral bending angle % impairment | Yes | No |
| Lumbar ankylosis in neutral position | Flexion % impairment | Excludes any impairment for abnormal flexion or extension motion | |

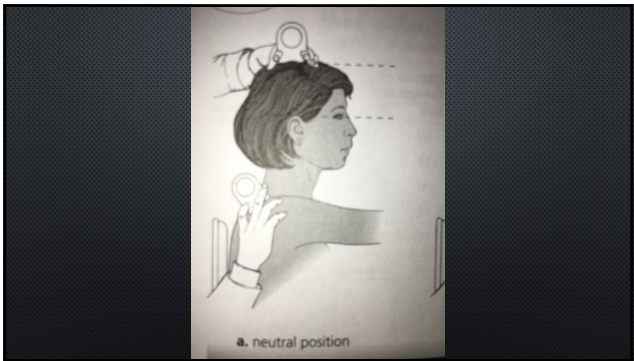
Baseline range of motion and ankylosis impairment: _____ %

Table 15-10 Impairment Due to Abnormal Motion (Flexion) and Ankylosis of the Thoracic Region

Average range of flexion and extension is 50°; the proportion of all thoracic motion is 60% of the total spine.

| Abnormal Motion | | | |
|---|----------------------------|----------|----------------------------------|
| Flexion From Erect Position (Angle of Thoracic Flexion) to: | Degrees of Thoracic Motion | | % Impairment of the Whole Person |
| | Lost | Retained | |
| 0 | 50 | 0 | 4 |
| 15 | 35 | 15 | 2 |
| 30 | 20 | 30 | 1 |
| 60 | 0 | 50 | 0 |

| Ankylosis | |
|-----------------------------------|----|
| Angle of Minimum Kyphosis (°) | |
| -30 (Extension thoracic lordosis) | 20 |
| 0 (neutral) | 0 |
| 60 | 5 |
| 80 | 20 |
| 100 | 40 |



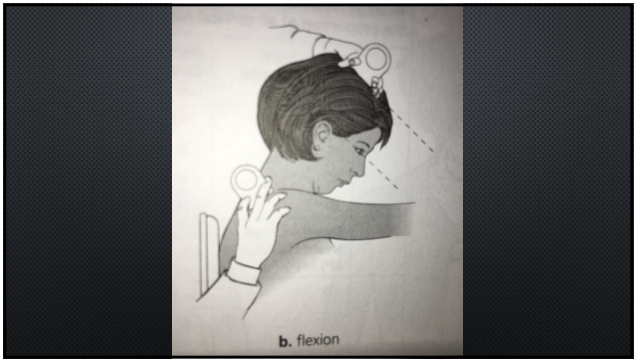


Table 15-12 Cervical Region Impairment From Abnormal Flexion or Extension or Ankylosis

Abnormal Motion
Average range of flexion and extension is 110°; the proportion of all cervical motions is 40%.

| a. | Flexion From Neutral Position (0° to 0°) | Degrees of Cervical Motion | | % Impairment of the Whole Person |
|----|--|----------------------------|----------|----------------------------------|
| | | Lost | Retained | |
| | 0 | 50 | 0 | 5 |
| | 15 | 35 | 15 | 4 |
| | 30 | 30 | 20 | 3 |
| | 50 | 0 | 50 | 0 |

| b. | Extension From Neutral Position (0° to 0°) | Degrees of Cervical Motion | | % Impairment of the Whole Person |
|----|--|----------------------------|----------|----------------------------------|
| | | Lost | Retained | |
| | 0 | 60 | 0 | 4 |
| | 20 | 40 | 20 | 4 |
| | 40 | 20 | 40 | 2 |
| | 60 | 0 | 60 | 0 |

| c. Region Ankylosed at (°) | | | | |
|----------------------------|----------------------|--|--|----|
| | 0 (neutral position) | | | 12 |
| | 15 | | | 20 |
| | 30 | | | 30 |
| | 50 (full flexion) | | | 40 |

| d. Region Ankylosed at (°) | | | | |
|----------------------------|----------------------|--|--|----|
| | 0 (neutral position) | | | 12 |
| | 20 | | | 20 |
| | 40 | | | 30 |
| | 60 (full extension) | | | 40 |

Figure 15-17 Measuring Cervical Rotation

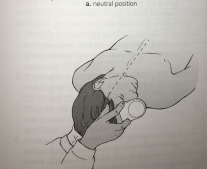
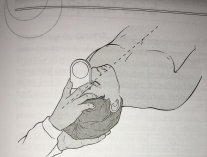


Table 15-14 Impairment Due to Abnormal Motion and Ankylosis of the Cervical Region: Rotation

Abnormal Motion
Average range of rotation is 160°; the proportion of all cervical motion is 35%.

| a. | Left Rotation From Neutral Position (0° to 0°) | Degrees of Cervical Motion | | % Impairment of the Whole Person |
|----|--|----------------------------|----------|----------------------------------|
| | | Lost | Retained | |
| | 0 | 80 | 0 | 6 |
| | 20 | 60 | 20 | 4 |
| | 40 | 40 | 40 | 2 |
| | 60 | 20 | 60 | 1 |
| | 80 | 0 | 80 | 0 |

| b. | Right Rotation From Neutral Position (0° to 0°) | Degrees of Cervical Motion | | % Impairment of the Whole Person |
|----|---|----------------------------|----------|----------------------------------|
| | | Lost | Retained | |
| | 0 | 80 | 0 | 6 |
| | 20 | 60 | 20 | 4 |
| | 40 | 40 | 40 | 2 |
| | 60 | 20 | 60 | 1 |
| | 80 | 0 | 80 | 0 |

| c. Ankylosis Region Ankylosed at (°) | | | | |
|--------------------------------------|----------------------------------|--|--|----|
| | 0 (neutral position) | | | 12 |
| | 20 | | | 20 |
| | 40 | | | 30 |
| | 60 | | | 40 |
| | 80 (full right or left rotation) | | | 50 |

Table 15-12 Cervical Range of Motion (ROM)

Name: _____ Sex: _____ Age: _____ Date: _____

| Movement | Description | Range |
|--------------------------|--------------------------------|-------|
| Cervical flexion | Chin to neck angle | |
| | 11 ROM | |
| | Cervical flexion angle | |
| | 0-75° | |
| Cervical extension | Neck to head angle | |
| | 11 ROM | |
| | Cervical extension angle | |
| | 0-75° | |
| Cervical lateral bending | Neck to head angle | |
| | 11 ROM | |
| | Cervical lateral bending angle | |
| | 0-75° | |
| Cervical rotation | Neck to head angle | |
| | 11 ROM | |
| | Cervical rotation angle | |
| | 0-75° | |

Note: Cervical range of motion is measured with the subject in a neutral position. The average range of motion for each movement is 25%.

Table 15-13 Impairment Due to Abnormal Motion and Ankylosis of the Cervical Region: Lateral Bending

Abnormal Motion
The average range of lateral bending is 90°; the proportion of all cervical motions is 25%.

| a. Left Lateral Bending From Neutral Position (0° to 1°) | Degrees of Cervical Motion Lost | Degrees of Cervical Motion Retained | % Impairment of the Whole Person |
|--|---------------------------------|-------------------------------------|----------------------------------|
| 0 | 45 | 0 | 4 |
| 15 | 30 | 15 | 2 |
| 30 | 15 | 30 | 1 |
| 45 | 0 | 45 | 0 |

| b. Right Lateral Bending From Neutral Position (0° to 1°) | Degrees of Cervical Motion Lost | Degrees of Cervical Motion Retained | % Impairment of the Whole Person |
|---|---------------------------------|-------------------------------------|----------------------------------|
| 0 | 45 | 0 | 4 |
| 15 | 30 | 15 | 2 |
| 30 | 15 | 30 | 1 |
| 45 | 0 | 45 | 0 |

| c. Ankylosis Region Ankylosed at (°) | % Impairment of the Whole Person |
|--------------------------------------|----------------------------------|
| 0 (neutral position) | 8 |
| 15 | 20 |
| 30 | 30 |
| 45 (full left or right rotation) | 40 |

Table 15-14 Unilateral Spinal Nerve Root Impairment Affecting the Upper Extremity

a. Cervical

| Grade | Impairment of Cervical Function | % Motor Loss |
|-------|---------------------------------|--------------|
| 1 | Neck to head angle | 0-15 |
| 2 | Neck to head angle | 15-30 |
| 3 | Neck to head angle | 30-45 |
| 4 | Neck to head angle | 45-60 |
| 5 | Neck to head angle | 60-75 |
| 6 | Neck to head angle | 75-90 |

b. Thoracic

| Grade | Impairment of Thoracic Function | % Motor Loss |
|-------|---------------------------------|--------------|
| 1 | Neck to head angle | 0-15 |
| 2 | Neck to head angle | 15-30 |
| 3 | Neck to head angle | 30-45 |
| 4 | Neck to head angle | 45-60 |
| 5 | Neck to head angle | 60-75 |
| 6 | Neck to head angle | 75-90 |

c. Lumbar

| Grade | Impairment of Lumbar Function | % Motor Loss |
|-------|-------------------------------|--------------|
| 1 | Neck to head angle | 0-15 |
| 2 | Neck to head angle | 15-30 |
| 3 | Neck to head angle | 30-45 |
| 4 | Neck to head angle | 45-60 |
| 5 | Neck to head angle | 60-75 |
| 6 | Neck to head angle | 75-90 |

Table 15-15 Unilateral Spinal Nerve Root Impairment Affecting the Lower Extremity

| Grade | Impairment of Lower Extremity Function | % Motor Loss |
|-------|--|--------------|
| 1 | Neck to head angle | 0-15 |
| 2 | Neck to head angle | 15-30 |
| 3 | Neck to head angle | 30-45 |
| 4 | Neck to head angle | 45-60 |
| 5 | Neck to head angle | 60-75 |
| 6 | Neck to head angle | 75-90 |

BILLING FOR IMPAIRMENT RATINGS

99455 – Impairment Rating
Performed by Treating Doctor

History, Exam and Record Review

DRE Model: \$500 First body part and
\$250 each additional body area

ROM Model: \$750 First body part and
\$250 each additional part

BILLING FOR IMPAIRMENT RATINGS

99456 – Impairment Rating
Performed by Other Than Treating Doctor

History, Exam and Record Review

DRE Model: \$750 First body part and \$250
each additional body area

ROM Model: \$1,000 First body part and
\$250 each additional part

BILLING FOR FINAL NARRATIVE

99099 – Special Report

\$500 – First 4 pages

\$150 - Each additional page

Review Entire Case

- Initial history: List all injuries
- Diagnosis: Initial and final
- Treatment: What and why
- Test Results: List positive results
- Prognosis and Future Medical
- Impairment Rating: 5th Edition of AMA Guides
- Causation: Reasonable degree of probability
