

## Philosophy IV Midterm Review

1. Please know the material covered by the assigned homework already turned in.

List and describe the six types of categories of chiropractic practice (p.19, Redwood & Cleveland)  
Chiropractors who primarily perform a musculoskeletal diagnostic workup and use adjustment as their sole intervention

- Those who primarily perform a musculoskeletal diagnostic workup and use adjustments along with exercise, dietary recommendations, rehabilitation, other adjunctive procedures, or any combination
- Those who perform no diagnosis beyond the analysis of spinal subluxations and use adjustments as their sole intervention
- Those who perform a broad diagnostic workup, including the musculoskeletal and other systems, and practice as musculoskeletal specialists, using adjustments and various adjunctive procedures primarily for treating musculoskeletal disorders
- Those who perform a broad diagnostic workup, including the musculoskeletal and other systems, and practice as complementary care generalists, using adjustments and adjunctive procedures with a strong emphasis on nutritional therapy, including supplements for treating disease
- Those who limit their practice to diagnosis, specifically diagnostic imaging (chiropractic radiologists), and who serve as consulting specialists

2. Please know the material covered by the assigned reading of Weeks 1 through 7 from the syllabus.

3. Please read and know all Weekly (Week 1 thru Week 6) handouts.

4. Know the three main types of Chiropractic Practices

- a. Subluxation Based- “Straight”- spine only
- b. Condition Based- “Straight” or “Mixer”- medical model
- c. Wellness Based- CAM Practice- “Mixer”

1. Most common CAM self-care users are:

- a. Herbs
  - b. Prayer Healing
  - c. High dose Vitamin therapy
  - d. Other nutritional supplements
  - e. Folk and home remedies
  - f. Massage therapy
2. Lifestyle Advice
  3. Diet
  4. Exercise
  5. Relaxation Methods
  6. Stress Management

5. Know what SOAP means and what each part consists of.

- S- Subjective complaints- patient either tells you and you write it down or patient writes it down and signs it
- O- Objective Findings- Palpation, orthopedic tests, lab tests, x-ray
- A- Analysis- Differential diagnosis
- P- Plan- Treatment plan

6. Know the difference between Subjective and Objective Findings (see previous question): subjective- patient tells you, objective- dr. finds via tests

7. Know the inventors/developers of the first 30 Techniques on the Chiropractic Technique List, plus Craniopathy, Bloodless Surgery, CHRANE Condylar Lift, Cox, Meric, SOT, Polarity, Directional Non-Force Tech., CPK, HIO, Pro-Adjuster, Touch for Health, Motion Palpation Institute, Webster.

1. Logan Basic- LBT (Hugh Logan)- sacrum subluxates first, then everything else
2. Gonstead (Clarence Gonstead)- ilium subluxates first, then everything else
3. Applied Kinesiology (George Goodheart, Walter Schmidt, John Thie)- visceral and spinal function
4. Thompson (Clay Thompson)- drop technique
5. Pierce-Stillwagon (Vernon Pierce, Glenn Stillwagon)- refined Thompson tech., head piece drops Inf. to Sup
6. Diversified (Joy Loban, Bunn, Alfred Stases; Stephenson, Otto Reinert; Homer Beatty; Joseph Bonyun; Carver-thumb move, Frank DiGiacomo; A.L. Logan; Metziner; Stonebrink; Steirwalt-rib moves)
7. Mears (M.B. Mears)- upper cervical

8. Spears Painless System of Adjusting (Leo Spears)- fingertips used, upper cervical
9. Palmer Specific Upper Cervical (Joy Loban, B.J. Palmer)
10. Loban (Joy Loban)
11. Activator (Warren C. Lee, Arlan W. Fuhr)
12. Active Release Technique (Michael Leahy)- mostly muscle and soft tissue
13. Advanced Biostructural Correction (Breig; Jesse Jutkowitz)
14. Advanced Muscle Palpation (Nicholas Spano)- muscle indentations- tight part of muscle w/in spine that doesn't fit same spot
15. Alberts Cerebral Meningeal Stress Syndrome Technique (James R. Alberts)
16. Alphabiotics (Virgil Chrane, Jr.)
17. Anatomical Adjustive Technique (Homer G. Beatty)
18. Applied Chiropractic Distortion Analysis (William J. Kotheimer)
19. Applied Spinal Biomechanical Engineering (Ronald Aragona)
20. ABSTM- Aronow Biomechanical-Soft Tissue Method
21. Atlas Orthogonality (Adjusting Instrument- Roy Sweat)
22. Aquarian Age Healing (John Hurley, Helen Sanders)- nude patients, taking away pain, spine would heal itself
23. Arnholtz Muscle Adjusting (Walter W. Arnholtz)
24. Atlas Specific (A.A. Wernsing)
25. Barge Torticollis, Tortipelvis (Fred Barge)- T5, C5, C1, if someone has a stiff neck, adjust all 3
26. Bioenergetic Synchronization Technique- BEST (M. Ted Morter)
27. **Bloodless Surgery** (M.B. DeJarnette, Ralph M. Failor, Francis J. Kolar, James F. McGinness)
28. Body Integration (Espy)
29. Chiropractic Spinal Biophysics (Don Harrison)
30. Blair Upper Cervical Technique (Blair)
31. **CHRANE Condylar Lift** (Chrane)- basilar invagination, atlas is further in occiput, assoc. w/deep headaches
32. **Cox** Distraction (James Cox, Markey, Leander, Tom Hill)
33. **Craniopathy**/Cranial Therapy (Linnie Cale, Nephi Cottam)
34. **Directional Non-Force Technique**- DNFT (Richard Van Rumpf)
35. **Meric** (Cleveland, Palmer, Loban, Forster, Riley)- used w/illness
36. **Sacral Occipital Technique**/Chiropractic Manipulative Reflex Technique- SOT/CMRT (Major B. DeJarnette)
37. **HIO** (Palmer)- hole in one
38. **Polarity** Technique (Randolph Stone) – (+) vs. (-), opposite sides
39. **Chiro Plus Kinesiology** (Milton Dowty)
40. **Touch for Health** (John Thie)
41. **Pro-Adjustor** Technique (Piscotano)
42. **Webster** Technique (Larry Webster)
43. **Motion Palpation Institute**/ Motion Palpation (Henri Gillet, John Faye)
8. Know "Today's Chiropractic Practice and Principles Study" by McDonald. (see handout)
9. Know what the VAS is and what it is used for in a Chiropractic Office
  - VAS- visual analog scale- line from 0-no pain to 10-worst pain possible (usually 10cm long), patient places a mark where they think their pain level is, Dr. measures it to see where it is at; Pain descriptors: 1-3 slight (annoyance), 4-7 moderate (cannot be ignored, but doesn't stop them from doing their job), 8-10 severe (prevents them from doing anything)
10. Know what are E/M and CMT codes
  - E/M (Evaluation and Management) codes
    1. New Patient (Office Visits- problems rated on severity)- has not received any professional services from the physician or another physician of the same specialty who belongs to the same group practice, within the past 3 years
      - a. 99201- self-limited or minor
        1. 10 min. face-to-face
        2. 3 Key Components:
          - a. problem focused history

- b. problem focused examination
      - c. straight-forward medical decision making
    - b. 99202- low to moderate severity
      - 1. 20 min face-to-face
      - 2. 3 Key Components:
        - a. problem focused history- expanded
        - b. problem focused examination- expanded
        - c. straight-forward medical decision making
    - c. 99203- moderate severity
      - 1. 30 min face-to-face
      - 2. 3 Key Components:
        - a. detailed history
        - b. detailed examination
        - c. medical decision making of low complexity
    - d. 99204- moderate to high severity
      - 1. 45 min face-to-face
      - 2. 3 Key Components:
        - a. comprehensive history
        - b. comprehensive examination
        - c. medical decision making of moderate complexity
    - e. 99205- moderate to high severity
      - 1. 60 min face-to-face
      - 2. 3 Key Components:
        - a. comprehensive history
        - b. comprehensive examination
        - c. medical decision making of high complexity
  - 2. Established Patient- has received professional services from the physician or another physician of the same specialty who belongs to the same group practice, within the past 3 years
    - a. 99211- minimal (may not require the presence of a physician)
      - 1. 5 min spent performing or supervising services
    - b. 99212- self limited or minor
      - 1. 10 min face-to-face
      - 2. requires at least 2 of 3 key components:
        - a. problem focused history
        - b. problem focused examination
        - c. straight-forward medical decision making
    - c. 99213- low to moderate in severity
      - 1. 15 min face-to-face
      - 2. requires at least 2 of 3 key components:
        - a. problem focused history- expanded
        - b. problem focused examination- expanded
        - c. medical decision making of low complexity
    - d. 99214- moderate to high severity
      - 1. 25 min face-to-face
      - 2. requires at least 2 of 3 key components:
        - a. detailed history
        - b. detailed examination
        - c. medical decision making of moderate complexity
    - e. 99215- moderate to high severity
      - 1. 40 minutes face-to-face
      - 2. requires at least 2 of 3 key components:
        - a. comprehensive history
        - b. comprehensive examination
        - c. medical decision making of high complexity

- CMT (Chiropractic Manipulative Therapy) codes- Adjustment

1. body is divided into “areas” or “regions”
2. CMT numbers or codes are assigned by the number of these regions
3. Regions are:
  - a. Cervical spine
  - b. Thoracic spine
  - c. Lumbar spine
  - d. Pelvis
  - e. Sacrum
  - f. Extraspinal- not considered in the CMT codes in bundling for the spine
4. Codes:
  - a. 98940- 1 to 2 areas
  - b. 98941- 3 to 4 areas
  - c. 98942- 5 areas
  - d. 98943- Extraspinal (only 1 charge per visit)
5. 98940, 98941, & 98942 cannot be combined with each other
6. any one of these numbers can be combined with 98943 (Extraspinal)
11. Know when an established patient can be billed as a new or established patient using the E/M codes, the conditions of each level and the difference between established and new patient. (see previous question)
12. Know what the areas or regions of the body are included in the CMT codes
 

Regions are: Cervical spine, Thoracic spine, Lumbar spine, Pelvis, Sacrum & Extraspinal- not considered in the CMT codes in bundling for the spine
13. Know what the Levels of Disease and the Stages of the 3<sup>rd</sup> Level are.
 

Level 1- Cause Strikes

Level 2- Body Reaction

Level 3- Signs and Symptoms

  - a. Stage 1- D.C.
  - b. Stage 2- D.C. & M.D.
  - c. Stage 3- M.D.

Level 4- Organ Failure and/or Death
14. Know the different CAM healing arts are (see handout)
15. **Know what a motion segment is and the difference between typical and atypical motion segments.**

A motion segment has 3 articulations. The segment moves as a unit.

Typical = 2 adjacent vertebrae joined by a disc with 2 posterior articulations with associated ligaments and a capsule

Atypical = Occiput/C1, C1-C2, Pelvic Ring with both SI joints (pubic symphysis, ant. and post. Parts of SI joints)

**16. Know what the MERIC System is.**

MERIC system establishes a relationship between vertebral levels and subluxations at specific levels with autonomic system involvement. Headaches – C1, C2....Sorethroat – C3....Cough – C4, C5 (C4 and C5 are related to phrenic nerve), T2, T3...Asthma – T3...Stomach Acid (Heartburn) T5-T9....Irritable Bowel – T11, T12, L1, L2

**17. Know what the description of a Family practice is by Dennis Nitikow.**

According to Nitikow, kids are the key to a family practice. Other factors are the following: establish a wellness model, relate subluxations to posture, show the heredity of posture, link bad posture habits to subluxations, create a kid-stimulating office, have affordable family plans.

Age ranges:

Infant: 0-2

Young child: 2-8

Old Child: 8-12

Adolescent: 12-20

Young Adult: 20-40

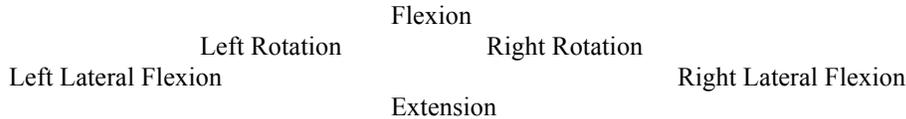
Middle Age: 40-60

Senior: 60-70

Ancients: 70+

### 18. Know how to interpret the STAR and Pelvic Diagrams

STAR Diagram (see notes): A Star Pattern (\*) diagram that lists ranges of motion for a vertebrae with motion restrictions. If the patient has restriction in a movement, 1-3 slashes are placed on the diagram in a particular range of motion. 1 slash indicated mild restriction. 2 slashes indicates moderate 3 slashes indicates marked restriction. Also, P (painful), PM (passive range) or EP (end play range) can be placed on the diagram indicating assessment of movement in particular range. The diagram shows through motion which way a segment will not move.



Malposition vs. Restriction: Flexion Malposition indicates that a vertebra is stuck in a position of flexion. The vertebrae hence cannot go into extension (restricted in extension). A flexion restriction will be an extension malposition.

Pelvic Diagram (see notes): A Cross diagram is drawn with 4 quadrants that shows through motion where the pelvis will not move. The pelvis and sacrum are divided into 4 quadrants. They are labeled UL (upper left), UR (upper right), LL (lower left), and LR (lower right). The appropriate fixation/malposition is noted on the involved quadrant.

### 19. Know the difference between the vertebral subluxation listing systems.

(See handout for examples)

1. ACA Advisory Panel (adopted for Medicare) = Vertebral Body listings
2. Reinert Diversified = Spinous Listing or Body Listing
3. Palmer Gonstead Listing = Spinous Process Listing
4. National = Vertebral Body Listing

Examples:

1. Flexion Malposition 2. Flexion Malposition or Bilateral Posterior Disc 3. None 4. Anterior Inferior
1. Extension Malposition 2. Extension Malposition or retrolisthesis 3. Posterior Inferior 4. Posterior Inferior
1. Right Lateral Flexion Malposition 2. Open Wedge left or Disc Bulge 3. None 4. Right Inferior
1. Left Rotational Malposition 2. Spinous Right or Body Left 3. Posterior Spinous 4. Left Posterior
1. Anterolisthesis 2. Spondylolisthesis 3. None 4. Anterior
1. Right laterolisthesis 2. Right Laterolisthesis 3. None 4. Right laterolisthesis
1. Retrolisthesis 2. Retrolisthesis 3. Posterior 4. Posterior

### 20. Know what a “treatment window” is and how it changes with the patient’s progress.

Treatment window is the time frame you have (based on stage of injury/healing) to treat a patient for a specific problem/condition.

1. Intensive Care – A trial period of therapy. In acute situations, you’ll have to see them more often. Often this is 3-5 visits to start in the first couple weeks. After 3-5 visits, evaluate to see if there is a change. Typically this is 3x per week for 2 weeks, followed by 2x per week

for 2 weeks. If your initial treatment is successful, proceed to 10-15 visits in 3-6 weeks time. Re-exam as necessary as this is a measure of progress.

2. Corrective Care: The acute trauma/damage is over and the treatment window expands. The doctor is able to lengthen the opportunity to treat the patient to get better results or treat the condition further (for longer lasting changes).
3. Maintenance Care: The patient often is responsible for the financial burden, as insurances don't pay for this. Typically, this is the patient's responsibility (via doctor-patient education) to establish maintenance treatments. These treatments maintain the gains by the patient or are for general wellness.

#### 21. Know the stages of Care

See above!!! Intensive, Corrective, Maintenance

#### 22. Know the order of corrections of vertebral positional subluxations.

1. Motion – Restoring motion happens first, right away (check before and after adjustment)  
2. Static – Takes Longer (several or more adjustments). This is also based on anatomy. The order is below.

- a). Atlas: Atlas is first. Sometimes static changes can occur with 1 movement.
- b). C-Spine: Can happen quickly, often not as quickly as atlas, though.
- c). Lumbar
- d). Thoracics: Multiple structures are involved and that is why it takes longer. For example, ribs, ligaments, multiple articulations (Ex.—T6 has 12 structures...2 discs (above and below), 2 SAP's, 2 IAP's, 2 ribs, 2 demifacets, 2 tp's)
- e). Pelvis: Major pelvic movements are last. This is due to the anatomy of pelvis, sacrum and SI joints.

Extremities: Positional changes and motion changes most often occur together.

#### 23. Know the 5 important parts of patient health.

1. Proper Rest (Not just sleep, relaxation mental health days, meditation, vacation, etc.) 2. Proper Exercise 3. Proper Nutrition (Foods, Nutrients and Hydration) 4. Proper Mental Attitude (think yourself sick or well) 5. Proper Functioning Electrical System (Nervous System)

#### 24. Know what retracing is.

Going back step by step over various stages of dis-ease through which they have progressed, in order to regain health. (going over ground until the person reaches the point where he started). The dis-ease must be retraced step by step, in order to reach that point from where it started, namely, health. Disease is produced by lack of proper oxygenation of tissue, nutrition in the proper quantity, and vital energy in proper quantity and quality (dependent on the nervous system). This idea is no longer valid in chiropractic. This idea is referred to in other healing arts like iridology. This idea was proposed by DD Palmer.

#### 25. Know the 9 part of Today's Concept of the Vertebral Subluxation Complex

1. Kinesiology: Spine moves as a unit and one areas dysfunction affects another. Immobilization has a significant effect on motion of a segment and in the body (immobilization can lead to degeneration)
2. Neurologic Component: BOOP's impact...herniated discs can causes damage to spinal nerves, in addition to spurs and osteophytes...Subluxations can also lead to repetitive firing of nerves (by sensitization) and lead to long standing pain...Also, articular neurologic changes
3. Myology: Immobilization of muscles can cause disuse atrophy. Muscle tension may also cause excessive degeneration of cartilage by compressing the joint surfaces together. Muscle spasticity may lead to joint contracture leading to more spasticity and more contractures.
4. CT Physiology: All connective tissues affected by immobilization. Synovial fluid undergoes fatty consolidation (adherence, deposition of bone salts, joint ankylosing). There can be shrinking of articular cartilage (loss of proteoglycans). Adhesions can form both in connective tissue and between nerve root sleeve and adjacent osseous and capsular structures in the IVF (between tendons and articular capsules or between any tow connective tissues). Also ligamentous changes can occur (first laxity then shortening/stiffness).

5. Angiology: Segmental arteries can be affected via compression Venous return can be influenced by posture and gravity and can allow toxins and chemicals in one area to travel to another.
6. Inflammatory Response: Immobilization can lead to inflammatory response. Inflammation can manifest as pain. Inflamed nerves can be hyperexcitable, firing long after it is necessary “chemical radiculitis.” Mobilization is effective in reduction of inflammation and therefore pain.
7. Anatomy: Anatomical structures may change in vertebral subluxation complex. Immobilization can affect anatomy.
8. Physiology: Pathophysiology (Neurophysiology) can occur due to the subluxation complex. Neurophysiology: a. Irritation---Facilitation....b. Pressure ---Degeneration.... c.Decrease Axoplasmic Flow
9. Biochemistry : Subluxation can cause local tissue damage or further stages of general adaptation syndrome. Chemical mediators of histamines, prostaglandins, kinines,. These chemicals are released in stress and are pro-inflammatory.

**26. Know the following terms and what they stand for (CH 9 textbook):**

- a. Somatosomatic Relationship (CH 9 textbook): SA-SE relationship...The soma body can send afferent messages that will affect the soma/body efferently
- b. Somatovisceral Relationship: Ex. SA-VE – Afferent messages from the body can affect visceral structures (via efferents)
- c. Viscerosomatic: VA-SE – This explains the phenomenon of referred pain. In a heart attack, the heart can refer pain to the arm. The visceral afferent message from the heart triggers an efferent response in the arm.
- d. Neurodystrophic Hypothesis: This relates to lowered tissue resistance. This plays a factor in subluxation, disease and dis-ease.

**27. Know the details of the changes that happen in the connective tissue component of the subluxation complex.**

All connective tissues affected by immobilization. Synovial fluid undergoes fatty consolidation (adherence, deposition of bone salts, joint ankylosing). There can be shrinking of articular cartilage (loss of proteoglycans). Adhesions can form both in connective tissue and between nerve root sleeve and adjacent osseous and capsular structures in the IVF (between tendons and articular capsules or between any two connective tissues). Also ligamentous changes can occur (first laxity then shortening/stiffness).

**28. Know the four Cardinal Signs of Inflammation**

- a. Rubor (redness) b. Tumor (swelling) c. Calor (heat) d. Dolor (pain)

**29. Read and Know Ch 9 Gatterman**

CH. 9 goes over the subluxation complex and the presentation of the subluxation complex. The Subluxation complex presents with Pathophysiology ---- Pathology (Neurophysiology, Kinesioapathology, Myopathology, Histopathology, Biochemical Changes). The chiropractic approach involves adjustive procedures, reflex techniques, exercise, diet, posture advice, modalities, socio-occipito advice and other means. The adjustment produces a specific movement that affects the movement component directly and other components indirectly.

The chapter also goes over the GAS (general adaptation syndrome), afferentation, dysafferentation, Neurogenic inflammation, and central sensitization. These were all covered in Dr. Christy’s Class (NMS and Philosophy 2) and Dr. Dishauzi’s Class (Philosophy 3).