

<b>OBCE BOARD MEETING PUBLIC SESSION</b>	<b>January 15-16, 2016 1:00 PM</b>
	<b>Meeting will be held at:</b> Oregon Garden, Lotus Room 895 W Main St Silverton, Oregon
<b>Board President: Daniel Côté, DC</b>	<b>Phone 503-378-5816 Fax 503-362-1260</b>

**Members Present**

Jason Young DC, President  
 Glenn Taylor, Vice-President, Public Mbr.  
 Lisa Kouzes, DC Secretary  
 Daniel Cote DC  
 Paul Bjornson DC  
 Ron Romanick DC  
 Amber Reed JD, Public Member

**Staff Present**

Cassandra Skinner JD, Executive Director  
 Kelly Beringer, Admin Assistant  
 Donna Dougan, Admin Assistant  
 Lori Lindley, AAG  
 George Finch, Investigator  
 Frank Prideaux DC, Health Investigator

**Others Present:** Drs. Joyce McClure, J. Michael Burke, Daniel Murphy, Verne Saboe, and Michael Vissers

**1:00 PM CONVENE**

**ADOPTION OF THE AGENDA  
 REVIEW and ADOPT MINUTES**

**November 19 2015 minutes**

Discussion was had.

**Proposal:** Approve the November 2015 minutes as amended.

**Motion:** Dr. Kouzes moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côté, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**BOARD ELECTIONS & DELEGATIONS**

**I. PUBLIC COMMENTS**

**Attendees: Dr. Michael Burke and Dr. Joyce McClure**

Dr. Burke offered written and oral testimony regarding the OCPUG Committee process and the resulting document that was submitted for approval by the committee. Dr. Burke's written testimony is attached.

**Testimony of Dr. McClure:**

Dr. McClure believes the composition of the committee created a committee with extensive ability to critically read and evaluate the research and to make recommendations.

With regards to the potential bias of the OCA's Executive Board, Dr. McClure does not see any conflict of interest based on their duties as board members for the state association.

Dr. McClure does contend that Dr. Saboe made his opinion known that the guideline document needed the W.A.D. (Whiplash Associated Disorders) section to somehow help the insurance industry understand that we are trying to have a structure for chiropractic treatment of whiplash cases because of those few outlying over utilizers. Dr. McClure doesn't believe that his arguments convinced the committee as a whole and, in fact, when they had voted on the W.A.D section whether to include the section or not it was a very close vote.

The most contentious part about the W.A.D. guideline was with regards to keeping the timelines in the document or not and the feeling of many of the committee members was that the timelines, the only document that had any recommendation for timelines was Croft, and there was concern as to how much weight should be given to that quality of evidence in terms of making that the guideline for our state chiropractors. Many committee members felt strongly that having a guideline of this nature was important for new doctors entering the chiropractic field. Dr. McClure would like more specificity in the W.A.D. section and referred the Board to guidelines by Michelle Sterling.

Dr. McClure suggests that, in the future, possibly making a collaborative effort with the University of Western States, should the Board take on another project such as this.

**Comment by Dr. Côté:** The opening statement should be a strong statement that these are guidelines not meant to replace clinical judgement and evidence.

**Question from Dr Young:** Outside of the W.A.D., are there any shortcomings that you think should be improved?

**Response by Dr. McClure:** There is a big transition now to rehabilitation and we (the committee) could have put more effort into that, the active care component.

**Question from Dr. Romanick:** Do you agree with Dr. Burke that algorithm has everything, no matter how the patient is hurt?

**Response by Dr McClure:** Yes, absolutely. The committee in general, I think, believe that and that a significant portion of the committee felt that more detail specific to whiplash associated disorders was a good idea.

**Question from Dr. Côté:** To be clear, this is your personal opinion? Because as the committee, the committee as a majority oppose what you just said.

**Response by Dr. McClure:** No, that's not true. The committee as a whole agreed that the algorithm works as a standalone, however, a significant, greater than 50% of the committee believed that having a whiplash associated disorders additional section in chapter five was necessary for the reasons previously discussed.

End of public comment.

Action Item

1. Dr. Burke to send Dr. Côté information on psycho-social factors (Dr. Marrone, also has a slew of materials regarding psycho-social factors)
2. Word document of the OCPUG went to Kelly- need to get.

## II. DISCUSSION ITEMS

### 1. OCPUG Committee Report

Public comment taken Friday, January 15, 2016. Discussion Saturday, January 16, 2016.

### 2. Draft Rule Language – CA fingerprint background check (OAR 811-010-0084, 811-010-0110)

**Proposal:** Staff presented draft language to the board for review and to go into rulemaking.

**Motion:** Dr. Kouzes moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

### 3. Draft Rule Language – OHA Workforce Survey SB 230

Moved to March 17, 2016 board meeting.

### 4. Draft Rule Language – NBCE exam and DC Applicants (OAR 811-010-0085)

Staff presented draft language to the board discussion continued on Saturday and will continue to refine the final product, bringing it forward to the March 17, 2016 meeting for possible rulemaking.

### 5. Continuing Education Policy Revision (re: handbooks, instruction books, etc.)

**Proposal:** The Board reviewed its current policy and made the following revisions:

*Reading a textbook in and of itself is not valid continuing education. The Board has allowed CE credit for reading in some specific pre-approved circumstances (e.g. SCUHS's Topics in Clinical Chiropractic home study, and Chapters of the OBCE's Education Manual for Evidence-Based Chiropractic). The Board does not allow CE credit for reading instruction/equipment manuals, guides, or handbooks (e.g. ICD code books, and the CME's Guide to the DOT Physical Exam).*

**Motion:** Dr. Kouzes moved to accept the proposal, as amended; Dr. Romanick seconded the motion. **Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

### 7. New Doctor Meeting: Mr. Taylor and Dr. Kouzes will present on behalf of the Board and Dr. Russ will present on behalf of the Peer Review Committee. The meeting is being held Saturday, April 9, 2016, at the University of Western States.

## III. CORRESPONDENCE

### 1. OCA CE request for 2 hours record keeping for DCs and 2 hours Vitals for CAs.

**Proposal:** Approve the request for continuing education for the DC and CA.

**Motion:** Dr. Young moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**IV. IN THE MATTERS OF** (following Executive Session)

**Case # 2012-5025**

**Proposal:** Allow settlement as proposed.

**Motion:** Dr. Côtè moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes is recused for possible conflict of interest.

**Motion passed unanimously.**

**Case # 2015-3003**

**Proposal:** Case Closed

**Motion:** Dr. Côtè moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes is recused for possible conflict of interest.

**Motion passed unanimously.**

**Case # 2015-2012**

**Proposal:** Denial of Initial Licensure

**Motion:** Dr. Young moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye

**Motion passed unanimously**

**Case # 2015-3020**

**Proposal:** Insufficient Evidence

**Motion:** Ms. Reed moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye

**Motion passed unanimously.**

**Case # 2015-5013**

**Proposal:** Dismiss the Proposed Order of Discipline

**Motion:** Dr. Young moved to accept the proposal; Dr. Romanick seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2016-5000**

**Proposal:** License without stipulations

**Motion:** Dr. Young moved to accept the proposal; Dr. Romanick seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2011-1022 et. al**

**Proposal:** Approve the reduction in counseling sessions.

**Motion:** Dr. Côtè moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2015-1020**

**Proposal:** No Statutory Violation with a Letter of Concern.

**Motion:** Dr. Romanick moved to accept the proposal; Dr. Bjornson seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2015-1017**

**Proposal:** No Statutory Violation

**Motion:** Dr. Bjornson moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2015-1016**

**Proposal:** Insufficient Evidence

**Motion:** Dr. Young moved to accept the proposal; Ms. Reed seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**Case # 2015-1019**

**Proposal:** No Statutory Violation

**Motion:** Dr. Côtè moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Case # 2015-5005**

**Proposal:** Proposed Notice of Discipline to include a \$2000 fine payable within 60 days of the notice and 30 days to demonstrate the problem has been resolved.

**Motion:** Dr. Kouzes moved to accept the proposal; Dr. Bjornson seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Case # 2015-1012**

**Proposal:** Notice of Proposed Discipline which includes: take and pass National Boards SPEC Exam within three months; take and pass EBAS within six months; one file pull of three cases related to nutritional counseling within six months; report complaint to Oregon Medical Board.

**Motion:** Dr. Kouzes moved to accept the proposal; Mr. Taylor seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Case # 2015-1014**

**Proposal:** No Statutory Violation with a Letter of Concern.

**Motion:** Dr. Bjornson moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Case # 2015-3004**

**Proposal:** No Statutory Violation

**Motion:** Mr. Taylor moved to accept the proposal; Dr. Bjornson seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Case # 2015-1018**

**Proposal:** No Statutory Violation

**Motion:** Ms. Reed moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**3:45 PM      Adjourn to Executive session**

**3:50 PM      Reconvene to Public session**

Board members will review all of the OCPUG drafts and comments overnight for review tomorrow.

**WORK SESSION** – no movement on work session items this day

Ratify OBCE's Guide to Policy & Practice Questions

Administrative Rule Considerations/Revisions

Citation Authority

Good Moral Character

Telehealth/telemedicine rules (Other State Rules?)

- Lisa Kouzes – 811-010-0005 through 0040 (*Definitions; Addresses; etc.*)
- Glenn Taylor – 811-010-0066, 0071, 0080 and 0084 (*Reciprocity; Board; Applicants*)
- Daniel Côté – 811-010-0090 and 0093 (*Food and Drugs; Policy & Practice*)
- Paul Bjornson – 811-010-0095 (*Peer Review*)
- Jason Young – 811-010-0100 (*Chiro Assistants*)
- Amber Reed – 811-010-0120 and 0130 (*no draft*)

Board Retreat Follow Up (Review table of Priorities)

**4:20 PM      ADJOURN for the Day (January 15, 2016)**

**Saturday, January 16, 2016**

**RECONVENE 9:00 AM**

**Present:** Daniel Côté DC, Glenn Taylor, Lisa Kouzes DC, Jason Young DC, Ron Romanick DC, Paul Bjornson DC, and Amber Reed. Staff: Cass Skinner, Lori Lindley, Kelly Beringer, and Donna Dougan.  
**Others Present:** Verne Saboe DC, Michael Vissers DC, Daniel Miller DC

**Public Comment re: OCPUG**

Dr. Saboe offered written and oral testimony. Written testimony attached.

1. **Question from Dr. Kouzes:** I'm looking at the grades I-V of the Grade I W.A.D. So if someone has no limitation of motion, no ligamentous injury, no neurological findings, must have some level of pain, you are still recommending 2.5 months of care?

**Response by Dr. Saboe:** It says up to ten weeks, these were observations of data from those 80 offices, 2000 cases, these are not treatment recommendations, this is what Croft observed. You can have a muscular strain type of injury without any limitation of motion but pain. So what he observed was that those kinds of findings up to ten weeks was possible. The final determinate, and we have this in our guides, the final determinate of when curative care should end is based on evidence-based outcomes management. Self-reporting psychometrics of the patients and the forms they fill out of their pain and disability combined with the examiners' objective findings. When those plateau out, you have to do one of three things in this state: 1) Change what you're doing; 2) Refer them out for a second opinion; or 3) deem them at maximum medical chiropractic improvement and care. This is just observation data that Croft observed.

**Question from Dr. Kouzes:** How did Croft get that observational data?

**Response by Dr. Saboe:** From 2000 patient cases.

**Question from Dr. Kouzes:** How did he obtain those patient cases?

**Response by Dr. Saboe:** As far as the mechanism by which he got the cases, I could not tell you, you'd have to ask Croft.

**Response by Dr. Kouzes:** He put an ad in the community.

**Questions from Dr. Young:** One of the frustrations I have as far as with Croft is that when it suits us, we call them Croft guidelines, and when it doesn't suit us, we call them a study. Really it is a study, and we, the Board, don't refer to them as guidelines. The Board uses the algorithm when reviewing cases. So what is the rationale for having the W.A.D language there and not just going with the algorithm?

**Response by Dr. Saboe:** Because, I think it's specific to Whiplash Associated Disorders and it's critical. Part of the charge of the Board is to protect the public and consumers, and we have those small numbers that would treat excessively for economic gain. These guidelines, along with our administrative rule, help to address that issue. As well as those biased opinions, inside and outside of the profession, always find muscle strain, six to eight weeks, the maximum twelve weeks. When there's demonstrative exam findings validating ligamentous involvement and the need for longer periods of care and rehab because of the prognosis. We know that when there is ligamentous involvement, there's more protractive care more likely the possibility or probability of permanent impairment.

**Question from Dr. Young:** Why doesn't the algorithm address that, because I think it has appropriate steps in there, and the other thing - why only focus on neck ligaments as opposed to ankle ligaments, lumbar ligaments?

**Response by Dr. Saboe:** Ligaments is ligaments. The classification of I-IV ligament involvement might be applied to other areas of the body. The reference you see in the literature is relative to the cervical spine. But you can apply that to other areas of the spine. There is a limit to what you can put into the algorithm, it's more instructive to practitioners and those outside the profession to spell it out in paragraph form. Most lay individuals, claims reps and so forth, would have some difficulty with the algorithm and the combination of both is preferred.

**Question from Dr. Côté:** Is there support in the number of treatments rather than weeks?

**Response by Dr. Saboe:** Yes, that is the upper limits of weeks, there will be cases that go over that.

**Question from Dr. Young:** Do you feel the WAD information included is flexible enough that it allows for patients that are non-compliant?

**Response by Dr. Saboe:** Yes, but the clinical notations and documentation are the key.

**Question from Dr. Romanick:** Doesn't 51% seem like a very low threshold for a field consensus for standard of care?

**Response by Dr. Saboe:** The field consensus does not apply for standard of care.

**Question from Dr. Romanick:** However, as I understand that, if we take the WAD as presented to the Board and use that in the OCPUG, we are now presenting it as a standard of care, and 51% doesn't seem to be a threshold that would be, across other professions even our profession, one that would say that this is an appropriate standard of care, or that this is an acceptable standard of care.

**Response by Dr. Saboe:** Those are guides and not standards of care, the WAD guidelines go beyond consensus class I, II, or III evidence or consensus of 51% or greater.

**Question from Dr. Romanick:** The concern is that, that means that essentially half of the doctors in the field are saying that they don't think that that is appropriate.

**Response by Dr. Saboe:** It doesn't apply, the consensus is superseded by the fact that the Croft 2000 case series from 80 doctors constitutes class III level evidence which is beyond field consensus. Croft's work goes beyond class III level evidence.

**Question from Dr. Romanick:** Often guidelines, although just guidelines, become standards of care. Often when a guideline suggests up to a certain amount of time for an injury and the care of that injury some doctors will accept that as a standard of care. So accepting class III evidence at the threshold of 51% seems very low.

**Response by Dr. Saboe:** It's apples to oranges or silver coins and gold coins, class III evidence is gold coins, stronger. The last other point that you made is that the document says up to that number of weeks and that's where education comes in for clarification. The final determination is evidence-based outcomes management which you must provide. It's patient-driven outcomes and provider-driven outcomes and when those things plateau out and there's no longer progression of care, you've got to do one of three things: 1) change your treatment plan; 2) refer them out; or 3) deem them at maximum medical chiropractic improvement. To continue to treat without showing validation of progression of care or improvement won't follow the standard of care.

**Comment from Dr. Côté:** The algorithm and all those treatment plans should be supported by clinical findings and justification. The WAD is not a core of the OCPUG. The WAD is there as an example of what some of the clinical collection of data has represented. And I think in the

forward, it would be very clear that this does not constitute a replacement for clinical judgement and objective findings.

**Question from Dr. Kouzes:** Have you looked for other guides to reference in the OCPUG?

**Response by Dr. Saboe:** The Quebec Task Force, The Canadian Chiropractic Guides, the Australian Guides, and the Official Disability Guides.

**Question from Dr. Kouzes:** Why not put those kinds of things as examples and that people should reference whatever is currently evidence-based?

**Response by Dr. Saboe:** In my view, these are specific to our profession and it's your colleagues that put this together based on the evidence and their experience. There are flaws in the other guides which I won't go into and we're actually having an independent individual reviewing all of that and putting together a document and critiquing the other guides. We reviewed them and this is what we came up with.

### **Public Comment (cont):**

Dr. Dan Miller and Dr. Vissers offered oral testimony regarding the OCPUG:

The purpose of recreating this document is based on the failures of the original document and it did have treatment duration based upon specific diagnosis that were kind of vague and very broad ranged. So one of the reasons we felt the need to maintain the durations in this guideline is to maintain the ability to have the broad range based upon your philosophical practices, your techniques, your beliefs as to what that patient needed. And to ensure that treatment parameters can fall within these ranges if it still made sense within the algorithm we created. In response to Dr. Côté's comments regarding the forward, it clearly states that the WAD section is not a stand-alone section. We are trying to teach the brand new and the seasoned doctors to go through a process. This document is not designed to teach them that process.

**Question from Dr. Young:** Why are we focusing on a neck issue, because the most common thing people go see chiropractors about is low back pain. So as I see it, this chapter is in there to justify care, to provide a resource for chiropractors to justify care, get paid for care from insurance companies, especially related to PIP claims. And if that's one of its purposes, I'm not sure that is appropriate given the mission of the Board and purpose of the OCPUG.

**Response/Question by Dr. Miller:** Why are you labeling it as a neck diagnosis only?

**Response by Dr. Young:** Because it's Whiplash Associated Disorder.

**Response/Question by Dr. Miller:** What does whiplash mean to you? Whiplash, by definition, is a mechanism of injury, not the injury, and certainly not the location of injury.

**Response by Dr. Young:** If we went field consensus and we asked every chiropractor out there, can you point to the area of the body that is affected by whiplash, what percentage would point to the neck area?

**Response/Question by Dr. Miller:** You are saying point to an area, why don't you ask the question: point to all the areas affected by whiplash? Do you think they would only point to the neck?

**Response by Dr. Côté:** Sadly enough, yes.

**Response by Dr. Vissers:** We did discuss that in committee. That was a significant portion of the OCPUG so we wanted to maintain that and clean it up and improve upon it. We discussed a multitude of things these guidelines can be used on but choose to focus on the WAD because we

didn't have the time to focus on the other areas, and we thought this was most important -not so chiropractors can justify their care but because this is the area they seemed to be the most controversial.

**Response by Dr. Miller:** Another reason we focused on the WAD was if you look at the original OCPUG, the whiplash section had the greatest range - two to twelve months regardless of the severity - so we wanted to clean that up. We weren't concerned about the mild sprain/strain of the low back or the moderate sprain/strain of whatever else was specifically located in the original OCPUG. The WAD does have the ability for someone to misinterpret and that is why we want to make sure that it's not a stand-alone chapter.

**Question from Dr. Bjornson:** Do you think there will be a legal medical benefit to having this chapter in the OCPUG?

**Response by Dr. Miller:** I have seen the guidelines used on both sides of the equation, so we are trying to make this much more clear and easier to read.

Dr. Vissers offered oral testimony regarding the OCPUG:

Three comments about the OCPUG guidelines: 1. Guidelines, what are they for? 2. That most of this WAD Section was in the old OCPUG; 3. That contentious issues don't always lead to significant damage in our profession.

Public testimony ended at 10:00 AM.

## **CORRESPONDENCE**

### **Request for Approval of Documentation CE (T. Freedland DC/Burke DC/Corll DC)**

The request is for approval of a two hours course meant to address the mandatory two hours record keeping for 2016. However, the Board wants licensees to spend two hours on the Record Keeping Check List, in addition to any other material.

**Outcome:** Not approved, resubmit a new proposal.

### **Discussion #4 Draft Rule Language – NBCE exam and DC Applicants (OAR 811-010-0085)**

Staff drafted language that will address the delegation to allow the National Board of Chiropractic Examiners to put on the two Oregon-specific exams. Director Skinner, Donna Dougan, and the AAG will work on the language.

Regarding the language for passing grades of the exams, Dr. Côté recommends relaying to the NBCE that we would like to have the questions to be weighted as we do now. The goal is to have the rule adopted prior to the April 2016 exam (preferably offered by the NBCE).

**Proposal:** To enter into rulemaking on OAR 811-010-0085

**Motion:** Dr. Romanick moved to accept the proposal; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côté, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

**IN THE MATTERS OF (Jan 16, 2016) (cont'd.)**

**Case # 1996-1020**

**Proposal:** Licensee has fulfilled his stipulated final order and to release from probation.

**Motion:** Dr. Côté moved to accept the proposal; Dr. Young seconded the motion.

**Vote:** Dr. Côté, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously**

**Discussion #6 Ad hoc Committee Procedures**

Director Skinner will make proposed edits to the policy and return the final to the Board in March 2016.

**Scott Abrahamson CA ITC request**

The Board will consider this request in March 2016.

**11:05 AM Break to EXEC  
AM Return to Public**

**OCPUG Review, cont'd.**

Initial clarification: the OCPUG ad hoc committee only proposed (as requested) amendments to chapters four and five. Information the Board referred to in their review: the original OCPUG, Dr. J. Michael Burke's written comments, verbal comments yesterday and today, draft version #15 (from Dr. Joyce McClure), version #16 (from Dr. Vern Saboe), and the Definition of Terms (attached to version #16). The Board acknowledged that the intent is to see the document expanded to cover more of what chiropractic is in Oregon.

A significant part of the revisions address whiplash associated disorders; the Board discussed this section at length.

**12:30 PM Break for lunch**

**1:15 PM Reconvene**

**OCPUG Review, cont'd.**

The Board acknowledged that there should be sections for other conditions such as acute care, rehab care, low back, and/or nutritional. Dr. Côté had the opinion that the board accept as much of this document today as possible. Dr. Romanick recommended the Board consider contacting Dr. Dan Murphy to assist in development.

If we don't use the term WAD, it was recommended to use the "standard definition" of WAD.

## **OCPUG Sections**

Chapters 1, 2, and 3: Not included in this discussion.

### **Introduction**

**Proposal:** Accept as written.

**Motion:** Dr. Young moved to accept. Dr. Bjornson seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Disclosure**

**Proposal:** Accept as written.

**Motion:** Dr. Young moved to accept. Dr. Bjornson seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Chapter 4 Chiropractic Management Algorithm, Chart and Table**

**Proposal:** Accept as amended.

**Motion:** Dr. Young moved to accept. Dr. Kouzes seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Chapter 5 (first page)**

**Proposal:** Accept as amended.

**Motion:** Dr. Young moved to accept. Dr. Romanick seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Chapter 5 (2<sup>nd</sup> and 3<sup>rd</sup> page) amended motion to accept pages 2 and 3.**

**Proposal:** Accept as amended to include the addition of the following statement added prior to the Wellness Care section: “The following information addresses some of the possible case management types. Additional types will be addressed in future revisions of this document.”

**Motion:** Dr. Young moved to accept. Mr. Taylor seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Draft 16 –Definition of Reassessment**

**Proposal:** Move the definition of reassessment of draft 16 to under “Supportive Care”

**Motion:** Dr. Young moved to accept. Dr. Bjornson seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **Chapter 5**

**Proposal:** Original version - amend the category descriptions to include “non-WAD” in front of every reference to sprain or strain in each of the categories, as well as in the title; remove item #4 in Category IV and appropriately renumber; remove the section on reassessments and move it to be after Supportive Care in Draft 16. Everything after category IV is gone.

**Motion:** Dr. Young moved to accept. Dr. Romanick seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **W.A.D Draft 16**

**Proposal 1:** to delete two sentences from “additionally...field consensus...” And replace it with the following: “accumulated data are provided regarding types of injuries and treatment duration.”

**Motion 1:** Dr. Young moved to accept; Dr. Romanick seconded that motion.

**Proposal 2:** Amend the previous motion to remove the entire second paragraph under the Treatments in W.A.D Draft 16.

**Motion 2:** Dr. Young moved to accept; Dr. Romanick seconded that motion.

**Vote:** Dr. Côtè, aye; Dr. Romanick, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye.

**Motion passed unanimously.**

### **W.A.D Draft 16 – The Five Grades**

**Proposal 1:** Modify grade 3, #5 “Neurological symptoms (OR to) **and** findings,” and change all Grades to state “zero” to number weeks instead of “up to”. Amendment: to remove the comma in section 5 between “IV and spine.” Further amend to remove the reference to “spondylosis” in both Grades III and IV, line 4. Grade 5 add comma or fracture.

**Motion:** Dr. Côté moved to accept; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, nay; Dr. Romanick, nay.

**Motion passed.**

### **W.A.D Draft 16- Risk Factors and Pre-Existing**

**Proposal:** To remove reassessments from this draft and the entire section of risk factors for whiplash injury and the entire section of pre-existing complicating risk factors for whiplash injury, and remove the reference to the clinical justification rule at the end of that section.

**Motion:** Dr. Young moved to accept; Ms. Reed seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

Discussion: Does that remove that entire paragraph?

### **WAD Draft 16- References**

**Proposal:** maintain all the relevant references to the document. **Amendment 1:** Re-categorize the references that are no longer attached to language and place them in a separate subsection.

**Motion:** Dr. Young moved to accept; Dr. Kouzes seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **Confirmation of Payment**

**Proposal:** Confirm payment for bar dues and CLE for Director Skinner are part of her employment package; confirm paying for director's bar dues and CLE; and provide justification for that authorization.

**Motion:** Dr. Côtè moved to accept; Dr. Bjornson seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

Discussion was had.

### **Value of the Above Motion**

**Proposal:** Statement of Value; "The payment is for authorized purpose and is a responsible and appropriate use of funds for DAS Accounting Manual Guidelines as provided in attachment B."

**Motion:** Dr. Côtè, moved to accept; Dr. Bjornson seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

Discussion was had.

### **Justification Draft**

**Proposal:** Director Skinner will draft a justification memorandum to DAS for the Board Chair to sign, communicating the Board's determination.

**Motion:** Dr. Côtè, moved to accept; Dr. Young seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **Board Elections & Delegations**

**Presidential nominees:** Mr. Taylor and Dr. Young. Brief statements were made by both nominees. Dr. Young was voted in as President.

**Vice-presidential nominees:** Dr. Kouzes, Mr. Taylor, and Dr. Romanick; statements were made from all nominees. Mr. Taylor was voted in as Vice President.

**Secretary nominees:** Dr. Kouzes and Dr. Romanick. Dr. Kouzes was voted in as Secretary.

### **FCLB Delegate**

**Proposal:** Motion to appoint Mr. Taylor as the FCLB delegate.

**Motion:** Dr. Côtè, moved to accept; Ms. Reed seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **FCLB Alternate Delegate**

**Proposal:** Motion to appoint Dr. Kouzes as the FCLB alternate delegate.

**Motion:** Dr. Côtè, moved to accept; Mr. Taylor seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **NBCE Delegate**

**Proposal:** Motion to appoint Dr. Kouzes as the NBCE delegate.

**Motion:** Dr. Côtè, moved to accept; Ms. Reed seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **NBCE Alternate Delegate**

**Proposal:** Motion to appoint Dr. Bjornson as the NBCE alternate delegate.

**Motion:** Dr. Côtè, moved to accept; Mr. Taylor seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **Executive Director Participation**

**Proposal:** Motion for Director Skinner to attend the FCLB and NBCE annual conference.

**Motion:** Dr. Romanick moved to accept; Mr. Taylor seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **Rules Advisor Committee Liaison**

**Proposal:** Motion to appoint Dr. Kouzes as the Board Liaison to the Rules Advisory Committee.

**Motion:** Dr. Romanick moved to accept; Ms. Reed seconded the motion.

**Vote:** Dr. Côtè, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

### **WORK SESSION** – *No action today*

Ratify OBCE's Guide to Policy & Practice Questions

Administrative Rule Considerations/Revisions

Citation Authority

Good Moral Character

Telehealth/telemedicine rules (Other State Rules?)

- Lisa Kouzes – 811-010-0005 through 0040 (*Definitions; Addresses; etc.*)

- Glenn Taylor – 811-010-0066, 0071, 0080 and 0084 (*Reciprocity; Board; Applicants*)
- Daniel Côté – 811-010-0090 and 0093 (*Food and Drugs; Policy & Practice*)
- Paul Bjornson – 811-010-0095 (*Peer Review*)
- Jason Young – 811-010-0100 (*Chiro Assistants*)
- Amber Reed – 811-010-0120 and 0130 (*no draft*)

Board Retreat Follow Up (Review table of Priorities)

### **Adjourn**

**Proposal:** Motion to adjourn.

**Motion:** Dr. Côté, moved to accept; Dr. Young seconded the motion.

**Vote:** Dr. Côté, aye; Dr. Bjornson, aye; Dr. Young, aye; Mr. Taylor, aye; and Ms. Reed, aye; Dr. Kouzes, aye; Dr. Romanick, aye.

**Motion passed unanimously.**

**ADJOURN:**

**4:15 PM**

Prepared by Donna Dougan, OBCE, Administrative Assistant

Transcribed 03/02/16; edited 3/16/16

Recording destruction 03/16/17

4) **Board and Commission Meeting Minutes** Series documents the official proceedings of the board or commission meetings. Records may include agendas; minutes; meeting notices; items for board action; contested case hearings schedules; committee reports; exhibits; and related correspondence and documentation. Records may also include audio recordings of meetings used to prepare summaries.

(Retention: (a) Minutes: Permanent, transfer to State Archives after 10 years; (b) Audio recordings: 1 year after transcribed, destroy; (c) Other records: 5 years, destroy).

---

**From:** J. Michael Burke [jmbchiro@gmail.com]  
**Sent:** Friday, January 15, 2016 11:06 AM  
**To:** BERINGER Kelly \* BCE  
**Subject:** Comments for OBCE Meeting

Dear Ms. Beringer,

Attached are my comments for today's public meeting. I understand if it is now too late to copy and provide to the Board members. I will bring a few copies with me. Nonetheless, I would appreciate it if you would distribute this to the Board members after the meeting if you are not able to do so beforehand.

Thank you.

**J. Michael Burke, D.C.**  
*Clinical and Forensic Chiropractor*  
*Board Certified Chiropractic Orthopedist*  
[jmbchiro@gmail.com](mailto:jmbchiro@gmail.com)  
(503) 701-8649 (direct)

*"The role of science is not to provide everlasting truth, but to provide a modest obstacle to everlasting and comprehensive error."*  
- anon

---

*This transmission and any attached document(s) contain confidential health or other information that is legally privileged. The information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party unless required to do so by law, and is required to destroy the information after its stated need has been fulfilled.*

*If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or action taken in reliance on the contents of this transmission is strictly prohibited. If you have received this information in error, please call us immediately at (503) 701-8649, ask to speak to the sender and arrange for the return or destruction of this transmission and any attached documents.*

*J. Michael Burke, D.C.*  
Clinical and Forensic Chiropractor  
Board Certified Chiropractic Orthopedist  
10208 S.W. 32<sup>nd</sup> Avenue  
Portland, Oregon 97219  
(503) 701-8649 • jmbchiro@gmail.com

January 15, 2016

TO: Oregon Board of Chiropractic Examiners

RE: OCPUG Ad Hoc Advisory Committee Draft Guidelines

It has been said that a camel is a horse created by a committee. This is true of the draft submitted to the OBCE by the Oregon Chiropractic Practice and Utilization Guidelines Ad Hoc Advisory Committee (“Committee”), insofar as many of the recommendations were arrived at via compromise or represent majority opinions rather than consensus. My comments about the Committee process leading up to this draft are presented here for several reasons, including giving voice to minority opinions and airing deficiencies in the manner in which our work was conducted. Although I am not speaking for other Committee members (“Members”), I think all of us understand that our draft is still a work in progress, so I am submitting these comments in the hope that reason may still have a chance to work its wonders on this document.

I am not attributing blame to the Committee as a whole for flaws in the draft or errors in the process of its development. I especially want to make clear that our chairperson’s efforts to herd and cajole Members to work together were amazing. I doubt we could have accomplished nearly as much without Dr. McClure’s leadership.

There were several problems with both the process and the resulting document including Committee makeup, conflicts of interest, an incomplete literature review, and disagreement on rating the quality of evidence. The quality of the guideline draft now before the OBCE has suffered because of these problems.

Many resources are available to guideline development groups such as AGREE,<sup>1</sup> GRADE,<sup>2</sup> and IOM.<sup>3</sup> The paper on Practice Guidelines Development by Dr. Meridel Gatterman, found on the OBCE website, is also a very good reference. The IOM’s text, *Clinical Practice Guidelines We Can Trust*, defines guidelines to be “statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of

---

<sup>1</sup> The Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument, <http://www.agreetrust.org>

<sup>2</sup> The Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group, <http://gradeworkinggroup.org>

<sup>3</sup> Institute of Medicine, *Clinical Practice Guidelines We Can Trust*, <http://iom.nationalacademies.org/reports/2011/clinical-practice-guidelines-we-can-trust.aspx>

alternative care options.” According to IOM, the guideline development process should include several components including the following:

- a systematic review of the existing evidence;
- a knowledgeable, multidisciplinary panel of experts and representatives from key affected groups;
- an explicit and transparent process that minimizes distortions, biases, and conflicts of interest;
- ratings of the quality of evidence and the strength of the recommendations.

Recommendations from other guideline development groups are similar.<sup>4</sup> Unfortunately, the Committee did not follow this kind of process. The Committee was comprised of 15 chiropractors. There were no members from outside the chiropractic profession. No other stakeholders such as patient group representatives, public policy makers, payers, or other healthcare professions were represented. No Member was an expert on guideline development.

A systematic review of evidence was not performed, but recognition was given to literature searches performed by the Council on Chiropractic Guidelines and Practice Parameters (aka Clinical Compass). There was at least an implicit agreement to rely on their references, but this was not realized. Individual Members brought evidence to the Committee which sometimes was considered and other times not. Toward the end of our term an organized effort was made to vet evidence already cited in the WAD guideline authored by Drs. Saboe and Vissers and to add additional references to that document.

The Committee composition resulted in considerable bias. Six Members were either current or former members of the Oregon Chiropractic Association executive board, including the chairperson. In addition, one Member is the professional association’s lobbyist. Thus, nearly half of the Committee had a potential conflict of interest between their roles as principles in a professional association and as members of the Committee. While this conflict did not appear to influence all of these doctors all of the time, many often expressed opinions that appeared self-serving to professional interests rather than objective. (I am specifically excluding the chairperson from this criticism. She acted admirably despite the potential conflict.)

The influence of the OCA lobbyist, Dr. Saboe, was detrimental to the Committee’s work. His opinions seemed to unduly affect many other Members, in part because of the makeup of the Committee was weighted heavily toward OCA executive board participation, and in part because other stakeholders were not represented. Dr. Saboe seemed to confuse his role on the Committee with his job as a lobbyist. He promoted a political agenda apparently designed to benefit the professional association

---

<sup>4</sup> Criteria for applying or using GRADE, [http://gradeworkinggroup.org/publications/Minimum\\_criteria\\_for\\_using\\_GRADE\\_web.pdf](http://gradeworkinggroup.org/publications/Minimum_criteria_for_using_GRADE_web.pdf), accessed March 1, 2015

members he serves. He asserted that the purpose of the guidelines, specifically the WAD guideline discussed below, was to prevent insurance companies and doctors who perform independent medical evaluations and medical record reviews from cutting off care. He also expressed concern that, in his opinion, a few chiropractors or "PIP mills" were responsible for overutilization, which our proposed guidelines would ostensibly inhibit. He claimed that, because of these overutilizers, guidelines were needed to prevent insurance companies from getting legislation passed that would eliminate chiropractors as providers under the PIP laws. Language to this effect was incorporated into the guideline draft but was deleted just prior to submitting it to the OBCE.

There are many examples of Dr. Saboe's harmful effect on the Committee's work, but I will focus on only three. Early in our work there was a discussion about the definitions of acute, subacute, and chronic. Someone offered an article on low back pain from a peer-reviewed journal in which timeframes for these three phases were presented, along with yellow flags and recommendations critical to each of the phases. Dr. Saboe refused to consider the information because, in his opinion, the article was outdated, having been published in 2006. Yet he offered references going as far back as the 1977 to support a guideline for whiplash associated disorders (WAD) that he championed. Dr. Saboe disregarded or refuted any evidence contrary to his opinions.

Another position he advocated was in regard to the quality of evidence. Dr. Saboe often referred to a document he coauthored and which he claimed was endorsed by the OBCE which includes a category for Class III evidence from "field consensus," apparently meaning that a simple majority of practicing chiropractors in the state could determine reasonable and appropriate practices when higher levels of evidence were not available. Another Member, who is currently on the OCA executive board, presented about 70 articles he claimed contained evidence derived from field consensus. However, the Member had confused the consensus of expert panels with field consensus. In fact, none of the articles even considered this notion. No precedent for "field consensus" was ever produced. Dr. Saboe moved for a vote. The majority, mostly comprised of the current and former OCA executive board members, voted to adopt this quality of evidence format. Later, when higher quality evidence was presented which contradicted Dr. Saboe's opinion about whiplash treatment timeframes, he denounced one of the study's authors for consulting with insurance companies, claiming that the evidence was thus invalid.

The conflict of interest held by Dr. Saboe and other OCA-affiliated Members was most apparent in their advocacy of the proposed WAD guideline, written by Drs. Saboe and Vissers. (To my knowledge Dr. Vissers has never served on the OCA executive board.) Lengthy discussions spanning many months were held at Committee meetings and by email about this proposed guideline, which went through 16 drafts. (I don't recall that a vote to specifically adopt the WAD guideline was ever held.) The WAD guideline

incorporated a large portion of the so-called Croft Guidelines. Dr. Saboe claimed the Croft Guidelines were supported by research performed by Dr. Croft. This claim was refuted by a few Members, but when faced with vigorous argument against the Croft Guidelines, Dr. Saboe invoked the quality of evidence document adopted by the Committee, specifically its Class III “field consensus” evidence, as sufficient to counter all logic and reason brought to bear against it.

The above criticisms notwithstanding, I endorsed all but the WAD section of the guideline draft presented to the OBCE. The Chiropractic Management Algorithm, Wellness Care, and Supportive Care sections present recommendations for care that, for the most part, reflect reasonable and prudent practice behaviors. The Chiropractic Management Algorithm and accompanying explanatory paragraphs are the backbone of this guideline draft. They are not entirely supported by scientific evidence, and in some places they are contrary to evidence in the medical literature. Furthermore, references in support of these recommendations are not included in the draft. The algorithm forms one of our camel’s humps.

The remainder of my comments concern the WAD guideline. This was the most contentious section and involved Members in lengthy deliberations, both during Committee meetings and in email communications. The aforementioned political agenda was a driving factor of the controversy. My strong objections to the incorporation of the Croft Guidelines was another. Many Members unquestioningly accepted the validity of the Croft Guidelines, even after it was shown that Croft’s methodology was unscientific and his treatment parameters contradicted current evidence for patients with whiplash associated disorders. Dr. Croft was asked to respond to questions about his guidelines. In his reply he stated that his “research does not propose a testable hypothesis,” “the guidelines merely represent the descriptive statistics from the data collected” and “are not recommendations for treatment, nor do they imply ideal treatment regimes.” It thus appeared, to me at least, that Dr. Croft himself invalidated his own guidelines.<sup>5</sup> Nonetheless, support among certain Members for the Croft injury categories, treatment timelines, risk factors, and complicating conditions did not waver. There is little to no support in the evidence-based medical literature for many of these items. Many of the references given to support the recommendations in this draft guideline consist of outdated research and studies containing serious flaws.

Additionally, the WAD guideline states that management of WAD injuries should follow the algorithm in Chapter IV. This statement would appear to obviate the need for an additional guideline dedicated to whiplash injuries. The Chiropractic Management Algorithm is intended to encompass multiple conditions and is not exclusive of whiplash associated disorders. The WAD guideline contradicts portions of the algorithm. Furthermore, it will very likely be used by some chiropractors to justify

---

<sup>5</sup> A thorough argument against incorporation of the Croft Guidelines can be provided to the OBCE upon request.

unnecessarily frequent and extensive treatment, as is true for the Croft Guideline itself and for the treatment parameter for whiplash found in Chapter V of the current OCPUG.

Recent research studies and other articles have focused on psychosocial factors that influence patient responses to whiplash injuries and their treatment. Some authors argue that early recognition of these factors may prevent chronicity and improve patient outcomes.<sup>6</sup> A significant feature that has been found to impede recovery is over-medicalization, e.g., early aggressive care and over-management.<sup>7,8</sup> Given this consideration, the treatment timelines in the WAD guideline may be antithetical to current evidence-based treatment considerations. The recommendation to consider psychosocial factors in the WAD guideline was added at the last minute as more Members were made aware of the literature concerning their importance. Many chiropractors appear blissfully ignorant of the role of psychosocial factors in their patients' perceptions of pain and as a driving feature of pain behavior and disability.<sup>9</sup> A more detailed emphasis on the necessity of considering psychosocial factors consistent with current evidence should be included in the revised OCPUG. Furthermore, chiropractors should broaden their knowledge of the recognition and management of psychosocial factors through required continuing education courses.

Thank you for considering my comments. The Board is welcome to call on me any time for any assistance I may be able to provide regarding these guidelines and their further development.

---

<sup>6</sup> Jull GA et al. Toward optimal early management after whiplash injury to lessen the rate of transition to chronicity. *Spine* 2011;36:S335-S342.

<sup>7</sup> Coté P et al. Early aggressive care and delayed recovery from whiplash: isolated finding or reproducible result? *Arthritis Rheum* 2007;57:861-8.

<sup>8</sup> Coté P et al. Does early management of whiplash-associated disorders assist or impede recovery? *Spine* 2011;36:S275-9.

<sup>9</sup> My opinion.

## Definition of Terms

### Quality of the Scientific Evidence\*

- Class I** Evidence provided by one or more well-designed controlled clinical trials; or well-designed experimental studies that address reliability, validity, positive predictive value, discriminability, sensitivity and specificity.
- Class II** Evidence provided by one or more well-designed controlled observational clinical studies, such as case-control, cohort studies, etc., or clinically relevant basic science studies that address reliability, validity, positive predictive value, discriminability, sensitivity, and specificity; and published in refereed journals.
- Class III** Evidence provided by expert opinion, descriptive studies or case reports.

### Level of Field Consensus

Full agreement, over 85% consensus. Consensus, over 51%.  
No consensus; less than 25%.

### P&U Committee's Final Recommendations

- A. Established** Accepted as standard in the profession.
- B. Appropriate** Supported by Class I, II or III evidence and/or 51% or greater field consensus. As more evidence accumulates and more field experience gained this rating may change.
- C. Investigational** No Class I, II, or III evidence and less than 25% or no consensus. Evidence and consensus are insufficient to determine appropriateness, further study is warranted. Such procedures fall under Examination, Test, Substance, Device or Procedure (ETSDP) rule pursuant to OAR 811-015-0070. As more experience and evidence accumulates this recommendation will change.
- D. Inappropriate** Multiple negative Class I or II evidence and no consensus, less than 25%. As more or positive evidence accumulates and higher field consensus gained this rating can change.

\*Modified from: Guidelines for Chiropractic Quality Assurance and Practice Parameters: Proceedings of the *Mercy Center* Consensus Conference. Aspen, 1993.

## Whiplash Associated Disorders

### Preamble

This chapter was developed as an adjunctive guideline specifically for whiplash associated disorders (WAD). It is important to note that this chapter does not stand alone within the OCPUG and management for WAD injuries should still follow this OCPUG document completely and be placed in the treatment algorithm of Chapter IV to determine appropriateness of care. The intention of this addition is to minimize potential abuse from over-utilization of treatment or from pre-mature termination of care. The durations presented in this chapter are not intended to encourage treatment beyond that necessary for symptom relief or restoration of normal function. Nor are they intended to serve as instruments for the premature termination of necessary care. They are provided to help clinicians gauge therapeutic responses to care. They should not be interpreted as prescription treatment protocols. The chief factor determining both treatment frequency and duration is the individual patient's response to treatment documented by evidence-based outcomes management.

### Treatments

Multiple treatment interventions are commonly utilized to treat whiplash associated disorders. Recommended interventions may include multimodal care, educating the patient regarding staying active, active exercise, relaxation techniques, soft tissue work, massage, joint mobilization, manipulation, physiotherapies, etc. As a consequence, some treatment recommendations found in the medical literature may be contradictory or conflicting.<sup>1,2,3,4,5,6,7</sup>

~~At present the great majority of common treatment interventions fall within Class III level evidence. The OBCE defines Class III evidence as: "Evidence provided by expert opinion, descriptive studies or case reports." Additionally, levels of field consensus are defined as: "Full agreement, over 85% consensus, consensus over 51%, and no consensus less than 25%. The OBCE has deemed an examination, test, substance, device, or procedure as "appropriate" if supported by Class I, II or III evidence and/or 51% or greater field consensus~~

ADD THIS PHRASE

### Grade I Whiplash Associated Disorder (Minimal)

#### Up to 10 Weeks Treatment Duration

1. No limitation of motion <sup>8,9,10,11,12</sup>
2. No ligamentous injury
3. No neurological findings
4. Must have some level of pain

"FOR YOUR INFORMATION, THE FOLLOWING INFORMATION ACCUMULATED DATA ARE PROVIDED REGARDING TYPES OF INJURIES AND TREATMENT DURATION"

### Grade II Whiplash Associated Disorder (Slight)

#### Up to 29 Weeks Treatment Duration

1. Slight limitation of motion and,
2. No ligamentous injury and,

3. No neurological symptoms or findings and,
4. Musculoskeletal pain and,
5. Musculoskeletal findings

### **Grade III Whiplash Associated Disorder (Moderate)**

#### Up to 56 Weeks Treatment Duration

1. Cervical, thoracic, lumbar, and/or sacroiliac pain/discomfort and,
2. Limitation of motion or motion segment hypermobility and,
3. Class I, ligamentous injury (partial tears with no defect or instability)<sup>13,14,15,16,17,18,19,20</sup>
4. Intra-vertebral disc protrusion, prolapse, sequestration, spondylosis and,
5. Neurological symptoms or findings and,
6. Radiating pain/discomfort into an extremity or extremities

### **Grade IV Whiplash Associated Disorder (Moderate to Severe)**

#### Up to 56 Weeks, May Require Permanent Monthly P.R.N., Treatment Duration

1. Limitation of motion or motion segment hypermobility and,
2. Class II, ligamentous injury (defect in the ligament but no instability) and,<sup>21,22,23,24,25,26</sup>
3. Ligamentous laxity with measurable motion segment translation<sup>27</sup>
4. Intra-vertebral disc protrusion, prolapse, sequestration, spondylosis and,
5. Neurological symptoms and findings

### **Grade V Whiplash Injury (Severe)**

#### Requires Surgical Management/Stabilization, Chiropractic Treatment is Post-Surgical

Class III & IV sprain injuries (Complete tear with instability, facet joint dislocation).<sup>28</sup> or fracture)

#### RE-ASSESSMENTS

The following circumstances are offered as an indication for reassessment by the treating physician. Clinical evidence or special circumstances with clinical justification may support continued treatment and/or work loss beyond these guidelines. Such management indicates the need for consultation, second opinion and/or special examination.

1. Daily treatment exceeding two consecutive weeks
2. Treatment of 12 visits or 6 weeks
3. Authorized full time work loss for longer than four consecutive weeks

#### Risk Factors for Whiplash Injury

1. Wearing a seatbelt<sup>29,30,31</sup>
2. Seat stiffness increases likelihood of injury<sup>32,33</sup>

3. Older vehicles tend to be stiffer increasing likelihood of injury<sup>34,35</sup>
4. Target vehicle of lower weight<sup>36</sup>
5. Rear impact<sup>37,38,39,40,41,42,43,44,45,46,47</sup>
6. Head turned right or left at impact<sup>48,49,50,51,52</sup>
7. Not expecting and not bracing for impact<sup>53,54,55,56,57,58,59</sup>
8. Female gender<sup>60,61,62,63,64,65,66,67,68</sup>
9. Older age<sup>69,70,71</sup>
10. Sitting position<sup>72</sup>
11. Prior car crash injury<sup>73</sup>

### Pre-Existing Complicating Risk Factors for Whiplash Injury

The following pre-existing conditions lower an individual's threshold for injury rendering that individual more susceptible to a whiplash injury, may result in slower responses to curative chiropractic treatment, and increase the probability of additional permanent medical impairment which may result in additional permanent partial or total disability.<sup>74,75,76</sup>

- Advanced age
- Metabolic disorders (e.g. diabetes)
- Congenital anomalies of the spine
- Degenerative disc disease
- Disc protrusion
- Spondylosis
- Facet arthrosis
- Rheumatoid arthritis or other arthritides affecting the spine
- Ankylosing spondylitis or other spondyloarthropathy
- Scoliosis
- Prior cervical or lumbar surgery
- Prior vertebral fracture
- Osteoporosis
- Other disease of bone
- Spinal stenosis and/or foraminal stenosis
- Prior spinal injury

### Clinical Justification Rule, OBCE Policy Statement:

The following policy declarations further describe and explain the intent of OAR 811-015-0010(4). The requirement in OAR 811-015-0010 (4) for evidence based outcomes management for "curative chiropractic treatment" does not include maintenance or wellness care. OCPUG defines maintenance care as inclusive of both preventive care and supportive care. While preventive may be considered similar to wellness care, P.R.N., supportive (palliative) care is appropriate for a patient who has reached maximum therapeutic benefit and suffers from persistent and/or recurrent signs and symptoms of permanent impairment. Nothing in OAR

811-015-0010 should be interpreted as requiring or implementing a “very restrictive cook book approach.” The term “evidence based” as it relates to outcomes measures is not a specific reference to the Educational Manual (EMEBC) or to “evidence-based medicine,” nor “evidence-based best practice.” There should be clinical literature and evidence supporting the outcome assessments utilized. “Evidence” means the whole body of professional knowledge. This includes the spectrum of evidence from randomized, controlled clinical trials to less rigorous forms of evidence. Examples of less rigorous forms of evidence includes one or more well designed controlled observational clinical studies, clinically relevant basic science studies, descriptive studies, case reports, or expert opinions published in refereed journals. Where such evidence is lacking professional field consensus is considered. Lastly, the Board understands that some practitioners employ investigational or other varied (or non-traditional) chiropractic approaches addressing certain types of curative chiropractic care. It is not the Board’s intent to discourage these approaches with the evidence based outcomes measures language of Section (4). Should an issue or complaint arise concerning treatment of this general type, the Board will first look to Section (1) language which states, Clinical rationale, within accepted standards and understood by a group of peers, must be shown for all opinions, diagnostic and therapeutic procedures.<sup>77</sup>

---

<sup>1</sup> Motor Accidents Authority. Guidelines for the management of acute whiplash associated disorders for health professionals. Sydney: Motor Accidents Authority; 2007

<sup>2</sup> Chartered Society of Physiotherapists. Clinical guidelines for the physiotherapy management of whiplash associated disorder. London, UK: Chartered Society of Physiotherapists; 2004

<sup>3</sup> Fernandez de las Penas, Manipulation Treatment versus Conventional Physiotherapy Treatment in Whiplash Injury; A Randomized Controlled Trial. J. Whip Rel. Dis;3:73-90, 2004

- 
- <sup>4</sup> Fernandez de las Penas, Fernandez-Carnero J, Fernadez A, Lomas-Vega R, Miangoiarra-Page JC, Dorsal Manipulation in Whiplash Injury Treatment: A Randomized Controlled Trial. *J. Whip. Rel. Dis.* 3:55-72, 2004
- <sup>5</sup> Sutton DA, et al. Is multimodal care effective for the management of patients with whiplash-associated disorders or neck pain and associated disorders? A systematic review of the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration. *The Spine Jol*, 2014
- <sup>6</sup> Sterling M, Physiotherapy management of whiplash-associated disorders (WAD). *Jol of Physio* 60:5-12, 2014
- <sup>7</sup> Malanga G, Peter J. Whiplash Injuries. *Current Pain and Headache Reports*; 9:322-325, 2005
- <sup>8</sup> Davis CG, et al (ten additional participants); Management of Whiplash Associated Disorders; Second Edition; ICAC; 2014.
- <sup>9</sup> Sterling M; A proposed new classification system for whiplash associated disorders: Implications for assessment and management; *Manual Therapy*; May;9(2):60-70, 2004
- <sup>10</sup> Spitzer WO, Skovron ML, Salmi LR, Cassidy JD, Duranceau J, Suissa S, Zeiss E; Scientific monograph on the Quebec Task Force on Whiplash-Associated Disorders: Redefining "whiplash" and its management; *Spine*; Apr 15;20(8 Suppl): 1S-73S, 1995
- <sup>11</sup> Croft A; Treatment paradigm for cervical acceleration/deceleration injuries (whiplash); *ACA Journal of Chiropractic*; Vol. 30; No. 1: PP 41-45, 1993
- <sup>12</sup> Norris SH, Watt I; The prognosis of neck injuries resulting from rear-end vehicle collisions; *J Bone Joint Surg Br.* Nov;65(5):608-11, 1983
- <sup>13</sup> Orthopaedic Knowledge Update, Chapter 24, Cervical Spine: Trauma. American Academy of Orthopaedic Surgeons, pg., 3, 2009
- <sup>14</sup> Mazion, JM, Illustrated Manual of Part II Orthopedic Signs, Tests, Maneuvers; Second Edition, pg. 347, Daniels Pub Co., 1980
- <sup>15</sup> Nordhoff LS, Motor Vehicle Collision Injuries, Mechanisms, Diagnosis, and Management; First Edition, Aspen Pub. Pg. 22, 1996
- <sup>16</sup> Foreman SM, Croft AC, Whiplash Injuries, The Cervical Acceleration/Deceleration Syndrome; First Edition, Williams & Wilkins Pub. pg. 79, 1988
- <sup>17</sup> Bland JH, Disorders of the Cervical Spine, Diagnosis and Medical Management; W.B. Saunders Co. pg. 222, 1987
- <sup>18</sup> 80 Contributors, The Cervical Spine, The Cervical Spine Research Society; Second Edition, J.B. Lippincott pg. 113, 116, 437, 1989
- <sup>19</sup> Yochum TR, Rowe LJ, Essentials of Skeletal Radiology, Volume One; First Edition, Williams & Wilkins Pub., pg. 441, 1987
- <sup>20</sup> Hadley LA, Anatomico-Roentgenographic Studies of the Spine; Fifth Edition, Charles C. Thomas Pub. Pg. 127, 1981
- <sup>21</sup> Foreman SM, Croft AC, Whiplash Injuries, The Cervical Acceleration/Deceleration Syndrome; First Edition, Williams & Wilkins Pub. pg. 79, 1988
- <sup>22</sup> Orthopaedic Knowledge Update, Chapter 15, Imaging of the Musculoskeletal System. American Academy of Orthopaedic Surgeons, pg. 6, 2009
- <sup>23</sup> Fischgrund, J. Neck Pain: Monograph Series 27, American Academy of Orthopaedic Surgeons. Pg. 29, 2004
- <sup>24</sup> Jackson, R. The Cervical Syndrome, Fourth Edition; pg. 210-215, 1977
- <sup>25</sup> Cipriano JJ. Photographic Manual of Regional Orthopaedic and Neurological Tests, Second Edition; pg.,18-19, 1991
- <sup>26</sup> Foreman SM, Croft AC, Whiplash Injuries, The Cervical Acceleration/Deceleration Syndrome, First Edition, Williams & Willkins Pub. Pg. 144, 1988
- <sup>27</sup> Ibid.
- <sup>28</sup> Ibid.
- <sup>29</sup> V Koch, M Nygren A, Tingvall C: Impairment pattern in passenger car crashes, a follow-up of injuries resulting in long-term consequences. Presented at the 14<sup>th</sup> International Technical Conference on Enhanced Safety of Vehicles, Munchen, 1994.
- <sup>30</sup> Borchgrevink et al; National health insurance consumption and chronic symptoms following mild neck sprain injuries in car accidents. *Scand J Soc Med*; 1996
- <sup>31</sup> Deans et al; Neck sprain – a major cause of disability following car accidents. *Injury*; 1987
- <sup>32</sup> Viano DC: Influence of seat properties on occupant dynamics in severe rear crashes. *Traffic Inj Prev* Dec;4(4):324-36, 2003.

- <sup>33</sup> Zaloshnja E, Miller T, Council F, Persaud B: Comprehensive and human capital crash costs by maximum police reported injury severity within selected crash types. 48<sup>th</sup> Annual Proceedings of the Association for the Advancement of Automotive Medicine, Key Biscayne, FL, Sept 13-15, 251-264, 2004
- <sup>34</sup> Krafft M. A comparison of short and long term consequences of AIS 1 neck injuries, in rear impacts. International IRCOBI Conference on the Biomechanics of Impact. September 16-18, 235-248, 2002 Goteborg, Sweden
- <sup>35</sup> Krafft M: When do AIS 1 neck injuries result in long-term consequences? Vehicle and human factors. *Traffic Injury Prevention* 3(2):89-97, 2002
- <sup>36</sup> Charter Society of Physiotherapists. Clinical guidelines for the physiotherapy management of whiplash associated disorder. London, UK: Chartered Society of Physiotherapists; 2004
- <sup>37</sup> Bylund P-O, Bjornstig U: Sick leave and disability pension among passenger car occupants injured in urban traffic. *Spine* 23(9):1023-1028, 1998
- <sup>38</sup> V Koch, M, Nygren A, Tingvall C: Impairment pattern in passenger car crashes, a follow-up of injuries resulting in long-term consequences. Presented at the 14<sup>th</sup> International Technical Conference on Enhanced Safety of Vehicles, Munchen, 1994
- <sup>39</sup> Borchgrevink et al; National health insurance consumption and chronic symptoms following mild neck sprain injuries in car accidents. *Scan J Soc Med*; 1996
- <sup>40</sup> Temming, Zobel; Frequency and risk of cervical spine distortion injuries in passenger car accidents. International IRCOBI Conference on the Biomechanics of Impact; 1998
- <sup>41</sup> Berglund et al; Occupant and crash-related factors associated with the risk of whiplash injury. *Ann Epidemiol*; 2003
- <sup>42</sup> Richter et al; Whiplash type neck distortion in restrained car drivers: frequency, causes and long-term results. *European Spine Journal*; 2000
- <sup>43</sup> Krafft et al; Crash pulse recorders in rear-impacts-real life data. Swedish National Road Administration, IRCOBI Course on Whiplash Associated Disorders;1998
- <sup>44</sup> Otte, Rether; Risks and mechanisms of injuries to the cervical spine in traffic accidents. International IRCOBI/AAAM Conference on the Biomechanics of Impact; 1985
- <sup>45</sup> Deans et al; Neck sprain – a major cause of disability following car accidents. *Injury*; 1987
- <sup>46</sup> Winkelstein et al; Cervical Facet Joint Mechanics: Its Applications to Whiplash Injury. 43<sup>rd</sup> Stapp Car Crash Conference Proceedings; 1999
- <sup>47</sup> Winkelstein et al: The cervical facet capsule and its role in whiplash injury. A biomechanical investigation. *Spine*; 2000
- <sup>48</sup> Kumar S, Ferrari R, Narayan Y. Looking Away From Whiplash: Effect of Head Rotation in Rear Impacts. *Spine* 30(7):760-768, 2005
- <sup>49</sup> Radanov et al; Long-term outcome after whiplash injury: a two year follow-up considering features of injury mechanism and somatic, radiologi, and psychosocial factors. *Medicine*; 1995
- <sup>50</sup> Chartered Society of Physiotherapists. Clinical guidelines for the physiotherapy management of whiplash associated disorder. London, UK: Chartered Society of Physiotherapists; 2004
- <sup>51</sup> Winkelstein BA, Nightingale RW, Richardson WJ, et al. The cervical facet capsule and its role in whiplash injury: A biomechanical investigation. *Spine*, May 15, 25(10):1238-46, 2000.
- <sup>52</sup> Panjabi MM, Ivancic PC, Maak TG, et al. Multiplanar cervical spine injury due to head-turned rear impact. *Spine*, Feb. 15, 31(4):420-9, 2006
- <sup>53</sup> Kumar S, Ferrari R, Narayan Y. Electromyographic and kinematic exploration of whiplash-type rear impacts: effect of left offset impact. *The Spine J* 4, 656-668, 2004
- <sup>54</sup> Harder S, Veilleux M, Suissa S. The effect of socio-demographic and crash-related factors on the prognosis of whiplash. *J Clin Epidemiol* 51(5):377-84, 1998
- <sup>55</sup> Parmar HV, Raymakers R. Neck injuries from rear impact road traffic accidents: Prognosis in persons seeking compensation. *Injury* 24:74-78, 1993
- <sup>56</sup> Ryan et al; Neck strain in car occupants: injury status after 6 months and crash-related factors. *Injury*; 1994
- <sup>57</sup> Sturzenegger et al; Presenting symptoms and signs after whiplash injury: the influence of accident mechanics. *Neurology*; 1994
- <sup>58</sup> Dolinis; Risk factors for 'whiplash' in drivers. *Injury*; 1997

- 
- <sup>59</sup> Siegmund GP, Sanderson DJ, Myers BS, et al. Awareness effects the response of human subjects exposed to a single whiplash-like perturbation. *Spine*, Apr 1, 28(7):671-9, 2003
- <sup>60</sup> National Safety Council. Buckle Up. The Safety Center, a chapter of the NSC. Sacramento, Calif: NSC; 3(7) 1991.
- <sup>61</sup> Stemper BD, Pintar FA, Rao RD. The influence of morphology on cervical injury characteristics. *Spine* Dec1;36(25 Suppl):S180-6, 2011
- <sup>62</sup> Clay W, van Kampen L, Hogerzeil H. Injury and disability effects of motor car accidents. *Int Disabil Stud* 9:145-8, 1987.
- <sup>63</sup> Chapline et al; Neck pain and head restraint position relative to the driver's head in rear-end collisions. *Accident Analysis and Prevention*; 2000
- <sup>64</sup> Hell et al; Cervical spine distortion injuries in various car collision directions and injury incidence of different care types in rear-end collisions. *International IRCOBI Conference on the Biomechanics of Impact*; 2003
- <sup>65</sup> Borchgrevink et al; National health insurance consumption and chronic symptoms following mild neck sprain injuries in care accidents. *Scand J Soc Med*; 1996
- <sup>66</sup> Satoh et al; An examination of reasons for prolonged treatment in Japanese patients with whiplash injuries. *J Musculoskeletal Pain*; 1997
- <sup>67</sup> Dolinis; Risk factors for 'whiplash' in drivers. *Injury*; 1997
- <sup>68</sup> Stemper BD, Yoganandan N, Pintar FA. Gender-and region-dependent local facet joint kinematics in rear impact: Implications in whiplash injury. *Spine*, Aug. 15 29(16):1764-71, 2004
- <sup>69</sup> Romilly DP, Thomson RW, Navin FPD, et al. Low speed rear impacts and elastic properties of automobiles In: *Proceedings of the 12<sup>th</sup> International Technical Conference of Experimental Safety Vehicles*. Washington, DC: National Highway Traffic Safety Administration; 2:1199-1204, 1989 US Dept. of Transportation.
- <sup>70</sup> Nygren A. Injuries to car occupants: Some aspects of the interior safety of cars. A study of five-years material from an insurance company. *Acta Oto-Laryngol* 395(Suppl):1-164, 1984
- <sup>71</sup> Langenfeld et al; Prognostic Factors for Recurrences in Neck Pain Patients Up to 1 Year After Chiropractic Care. *J Manipulative Physiol Ther*; 38:458-464, 2015
- <sup>72</sup> Borenstein DG, Wiesz SW, Boden SD: *Neck Pain: Medical Diagnosis and Comprehensive Management*. Philadelphia, PA, WB Saunders, 1996.
- <sup>73</sup> Khan et al; Prognosis following a second whiplash injury. *Injury-International Journal of the Care of the Injured*; 2000
- <sup>74</sup> Croft AC: Treatment paradigm for cervical acceleration/deceleration injuries (whiplash). *Am Chiro Assoc J Chiro* 30(1):41-45, 1993
- <sup>75</sup> Guidelines for Chiropractic Quality Assurance and Practice Parameters: *Proceedings of the Mercy Center Consensus Conference*, Aspen Publishers, Gaithersburg, Maryland, 1993
- <sup>76</sup> Chartered Society of Physiotherapists. *Clinical guidelines for the physiotherapy management of whiplash associated disorder*. London, UK: Chartered Society of Physiotherapists;2004
- <sup>77</sup> Oregon Board of Chiropractic Examiners, *Guide to Policy & Practice Questions*, Updated May 23, 2013