

Chapter 10: Best Practices: Organizing the Chiropractic Clinical Evidence

Introduction

While some guidelines prefer to separate musculoskeletal and non-musculoskeletal (non-pain) conditions, this author believes separating the two entities represents an artificial categorization of human ailments. This is because the nervous system regulates growth and repair of all the body parts. However, those who prefer this categorization of musculoskeletal and non-musculoskeletal conditions do so to separate axial pain syndromes from the rest of human ailments. They do this in order to claim that Chiropractic care is only supported for musculoskeletal conditions. This arbitrary categorization of body parts assumes that the human body (or any animal body for that matter) can be separated into axial skeletal structures and non-axial skeletal structures and still function harmoniously. The human body is vastly complex and integration of information processed by the nervous system cannot be separated into non-congruent parts.

It seems quite illogical to believe Chiropractic Adjustments can affect pain and function in one region of the body (axial skeleton) and not the remainder of the body (organs, senses, etc), as if the body can be separated into dichotomous pieces. The vast majority of the human nervous system structure is used to sense data from connective tissue mechanoreceptive nerve organs, control the upright posture, and coordinate movements of the spine and limbs. For one to think this vast amount of brain and nerve structure can be influenced, by chiropractic adjustment, only in the axial skeleton and not in the viscera seems quite naïve.

Since 1895, Chiropractors have reported their successes on a multitude of patient ailments and diseases as Case Series and Case Reports in Chiropractic texts, newsletters, magazines, and non-indexed journals. These clinical studies were accomplished with, not only diversified spinal manipulation, but more often with a variety of different Chiropractic Technique adjusting maneuvers. Many of these clinical studies were written before indexing of the Chiropractic literature ever occurred.

Because of discrimination against Chiropractors by modern medicine until the Wilks et. al. lawsuit against the AMA, few Chiropractic clinical studies were published in the Index Medicus before 1985. More recently, Chiropractic clinical studies have been published in journals registered with Mantis, CINAHL, Index Medicus, and ICL (Index of Chiropractic Literature).

Therefore, searches in medical library data bases will find Chiropractic publications from 1985-present, but will not find the immense volumes of Chiropractic clinical studies published before 1985. Therefore, it is necessary to search for this evidence, by hand, in Chiropractic College' libraries. This necessitates an immense amount of effort and few guideline developers are inclined to expend the funds and effort necessary to find these 1895-1985 Chiropractic clinical studies. Recent Chiropractic guideline developers have ignored the vast majority of Chiropractic clinical evidence published before 1985. Likewise, these recent Chiropractic guidelines ignore case studies (Level 4), case series with controls (Level 3), and non-randomized trials (Level 2) evidence in favor of only the randomized clinical control trial (RCTs are Level 1). These selective literature searches have resulted in a skewed presentation of the literature toward conclusions from only RCT clinical studies reporting pain relief.

However, for these current ICA Best Practices and Practice Guidelines, the International Chiropractors Association did decide it was necessary to initiate a monumental effort to find these 1895-1985 published Chiropractic clinical studies to once-and-for-all have an available comprehensive database with this information.

The ICA believes Chiropractic spinal adjustments and spinal manipulation are a necessary part of the health care of pain sufferers. However, since spinal adjustments are known to affect the spinal

nerves and spinal cord, from the data collected during hand searches in Chiropractic College libraries from 1895-1985, Chiropractic care has been shown to be beneficial in a vast number of human ailments and diseases. This historical evidence indicates recent College curricula restrictions of Chiropractic Techniques to, “Diversified and Spinal Manipulative Therapy (SMT) Only”, are unjustified. This restriction to SMT has occurred due to the efforts of the Council on Chiropractic Education (CCE) to model all Chiropractic Colleges after National College’s curricula, with its suggestion of SMT for pain relief only while discrediting, “Named Techniques”, applications for any other health conditions.

Best Practices

This Chapter, ICA’s Best Practices, is a compilation of the Evidence for all Chiropractic Care. All levels of evidence (Levels 1-4) were included and all health conditions were included. In Chapter 11 in the next Section III, the actual ICA Practice Guidelines, based on these “Best Practices”, will be presented as Frequency and Duration of Care recommendations.

The idea of, “Best Practices”, seems to have originated in the business sector. Some business definitions of Best Practices are:

1. The processes, practices, and systems identified in public and private organizations that performed exceptionally well and are widely recognized as improving an organization's performance and efficiency in specific areas. Successfully identifying and applying best practices can reduce business expenses and improve organizational efficiency;¹
2. A case study considered to be a good example of a business discipline;²
3. A technique or methodology that, through experience and research, has been proven to reliably lead to a desired result.³

When applying these business definitions to healthcare, it appears obvious that the, “processes, practices, and systems”, and, “technique or methodology”, should be included in the definition of, “Best Practices”. However, in Chiropractic, some⁴ have claimed that Best Practices do not include Frequency and Duration of care, but in our opinion, these are part of, “processes, practices, and systems”, and, “technique or methodology”.

To date and to the best of our knowledge, the only other use of, “Best Practices”, in Chiropractic was by the Council on Chiropractic Guidelines and Practice Parameters (CCGPP).⁴ The findings and observations in this document strongly negate many CCGPP positions.

Analysis of ICA’s Data

It has always been ICA’s position that the health consumer must have the right to choose the type of care for his/her individual health condition. Since the beginnings of Chiropractic, Chiropractors have claimed the Chiropractic adjustment was beneficial in the vast majority of health conditions.

The supporting evidence for Chiropractic, as a consumer’s healthcare choice, is the vast number of manuscripts in ICA’s data base, which have Levels 1-4 evidence for over 300 named disease conditions. Besides providing the level of evidence, we provide the points assigned by the computer program as the ICA Committee member entered data from each manuscript.

The average RCT in our data base received a score of 16 out of a possible 25 points. It is nearly impossible for an RCT to receive 25 points as the requirements are quite comprehensive. To include Levels 2-4 evidence, as Sackett the father of Evidence medicine suggested, the ICA computer program rated each paper and totaled the points for each disease covered in our extensive list of approximately 1,400 publications. The total points are listed in Tables 1A-II below. Note the total points were divided by 16 (which is the average RCT score in our data base). This provided an RCT equivalent score for Chiropractic care support of each of 343 diseases listed in our data base. In light of the complexity of data analysis for this large a volume of work we chose to use RCT equivalent as a

framework by which to judge published papers. For example, “abdominal pain”, is one of the diseases listed in our ICA Best Practices data base in Table 1A. It has no level 1-3 evidence listed in the ICA data base, but has 11 Level 4 studies, with a total point score of 118. This 118 point total is divided by the average 16 points of an RCT, providing 7.4 equivalent RCT’s. Thus, Chiropractic care for abdominal pain is supported by 11 Level 4 studies and it has more points supported than 7 average published RCTs.

Adjustment of Subluxation

At this point, it must be reiterated that Chiropractors do not treat disease. The improvements in disease processes with Chiropractic care is attained by changes in the body’s homeostasis after a chiropractic adjustment is delivered to the spine or extremity. These improvements in diseases are attributed to improved function of the nervous system and the immune system. Chiropractors manipulate and adjust spinal subluxations to care for the patient and facilitate the body’s natural ability to heal. When the chiropractic care achieves this, then the nervous system function is improved.

In addition, Chiropractors use a number of modalities that are ancillary and/or preparatory to the adjustment. These modalities were discussed in the previous Chapter 9 and these modalities have numerous evidence-based published support papers.

Chiropractors do not deny the existence of viruses, bacteria, starvation, disabling injuries, projectile impacts of the body, long term degeneration of body parts, lack of exercise, poor mental health, motor vehicle crashes, etc., that cause disease and alterations of body organs. However, the list of over 300 diseases in Tables 1A-1I, that were improved after Chiropractic care, is the supporting evidence that Chiropractic spinal care can help the vast majority of disease states of the human body. Chiropractic is conservative care, adjustments of the spine, without the invasive methods of modern medicine, which include drugs (with side effects) and surgery (with often missing necessary body parts). The data in Tables 1A-1I is the supporting evidence for Chiropractic claims of helping beyond the treatment of low back pain. Note that patients often have multiple health conditions and multiple regions of their bodies exhibiting symptoms. Thus, the references in Tables 1-4 can have repeats and be quite a long list. Therefore, the references for Tables 1-4 have been placed in Appendix 2 of this document.

Additional Categorization of the ICA Data Base

Even though Chiropractors have broad rights to provide healthcare to the public in all States of the USA, all Provinces in Canada, and many countries worldwide, there have been efforts to restrict these privileges. Recently, these efforts of restriction have been by healthcare condition (e.g., headaches), body region (e.g., neck in Canada & extremities in New Jersey), and age group (pediatrics & geriatrics). Tables 2 and 3 indicate there is ample evidence support for chiropractic care of all regions and all age groups.

Additionally, within Chiropractic, faculty at some chiropractic colleges have condemned the use and teaching of, “named”, Technique methods. In Table 4 below, there are 28, “Named”, Techniques with published evidence for support of their use. However, the reader must keep in mind that in a previous chapter, ICA delineated that, in all States and Provincial practice laws, choice of Technique is a privilege of the licensed Doctor of Chiropractic.

Last, we present Tables 5 (infertility) and 6 (pregnancy), which may not be health conditions, but have a good amount of evidence support for chiropractic care. Chiropractic care has been shown to help women who were previously infertile become pregnant. Chiropractic care has been shown to ease the myriad of skeletal problems in women who are pregnant and have increasing postural distortions as the baby grows. Additionally, chiropractic care has been shown to decrease the labor pains during child birth.

Table 1A
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
1.	Abdominal Pain	0	0	0	11	118	7.4	B	1-11
2.	Acromegaly	0	0	0	1	11	.7	D	12
3.	ADD/ADHD	0	0	1	14	162	10.1	B	13-27
4.	Allergy	1	0	0	14	172	10.8	A	28-42
5.	Amyotrophic Lateral Sclerosis	0	0	0	1	12	.8	D	43
6.	Anemia	0	0	0	6	52	3.3	C	44-49
7.	Angina	0	3	0	5	84	5.3	B	50-57
8.	Ankle (Pain/Injury)	5	1	1	12	235	14.7	A	58-76
9.	Ankylosing Spondylitis	0	0	0	3	34	2.1	C	77-79
10.	Aneurysm	0	0	0	1	12	.8	D	80
11.	Anxiety	1	0	0	5	78	4.9	B	81-86
12.	Aphasia	0	0	1	3	33	2.1	C	87-90
13.	Apnea	0	0	0	2	21	1.3	D	91-92
14.	Appendicitis	0	0	0	4	38	2.4	C	93-96
15.	Arrested Development	0	0	0	1	6	.4	D	97
16.	Arteriosclerosis	0	0	0	1	12	.8	D	98
17.	Arthritis	0	0	1	16	176	11	B	99-115
18.	Asthma	4	0	2	32	430	26.9	A	116-153
19.	Auditory Neuropathy	0	0	0	1	9	.6	D	154
20.	Autism	2	0	0	5	83	5.2	A	155-161
21.	Autonomic Dysfunction	0	0	0	3	30	1.9	D	162-164
22.	Back Pain	72	6	14	198	3494	218.4	A	165-453
23.	Baker's Cyst	0	0	0	1	8	.5	D	454
24.	Behavioral Impairment	0	0	1	0	11	.7	D	455
25.	Bells Palsy	0	0	0	6	63	3.9	C	456-461
26.	Blocked Atlantal Nerve Syndrome	0	0	0	1	9	.6	D	462
27.	Blood Pressure	6	2	2	10	243	15.2	A	463-482
28.	Brain (Disorders, Injury, Tumor)	1	0	3	11	150	9.4	A	483-495
29.	Breathing - Difficulty	6	0	0	24	314	19.6	A	496-525
30.	Bronchitis	0	0	0	3	27	1.7	D	526-528
31.	Cancer	0	0	0	9	87	5.4	C	529-537
32.	Capsular Fibrosis	0	0	0	1	15	.9	D	538
33.	Cardiac Arrhythmia	0	0	0	1	11	.7	D	539
34.	Carpal Tunnel	1	1	1	7	131	8.2	A	540-549
35.	Cauda Equina	0	0	0	3	30	1.9	D	550-552

Table 1B
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
36.	Cerebral Palsy	0	0	1	7	82	5.1	C	553-560
37.	Cervicobrachial Syndrome	1	0	0	1	24	1.5	D	561-562
38.	Cervicocranial Syndrome	0	0	0	2	16	1	D	563-564
39.	Cervicogenic Pain	6	0	1	7	193	12.1	A	565-578
40.	Chest Pain	0	0	0	16	146	9.1	B	579-594
41.	Chorioepithelioma	0	0	0	1	11	.7	D	595
42.	Chronic Fatigue	0	0	0	5	50	3.1	C	596-600
43.	Cirrhosis	0	0	0	1	13	.8	D	601
44.	Coccydynia	1	0	3	1	41	2.1	B	602-603, 652
45.	Colic	2	0	1	14	172	10.8	A	604-620
46.	Colitis	0	0	0	5	48	3	C	621-625
47.	Concussion	0	0	0	1	10	.6	D	626
48.	Congestive Heart Failure	0	0	0	1	10	.6	D	627
49.	Constipation	0	0	1	21	220	13.8	B	628-649
50.	Convulsions	0	0	0	2	20	1.3	D	650-651
51.	COPD	1	0	0	1	22	1.4	B	653-654
52.	Cough	0	0	0	2	23	1.4	D	655-656
53.	Cubital Tunnel Syndrome	0	0	0	1	10	.6	D	657
54.	Cystitis/UTI/Bladder Infection/Urinary Tract Infection	0	0	0	6	51	3.2	C	
55.	Dandruff	0	0	0	1	7	.4	D	658
56.	Deafness/Hearing Loss	0	0	0	9	78	4.9	C	659-673
57.	Dejerine-Sottas Disease	0	0	0	1	10	.6	D	674
58.	Dermatitis/Acne	0	0	0	5	54	3.4	C	675-679
59.	Developmental Delay	0	0	0	3	30	1.9	D	680-682
60.	Diabetes	0	0	0	14	157	9.8	B	683-696
61.	Diffuse Idiopathic Skeletal Hyperostosis (DISH)	0	0	0	1	14	.9	D	697
62.	Disc Degeneration/ Disc Disease/ Disc Lesion	2	0	0	18	205	12.8	A	698-717
63.	Disc Herniation/ Disc Rupture	0	1	1	34	386	24.1	A	718-753
64.	Disc Protrusion	0	0	0	4	40	2.5	C	754-757
65.	Dislocation	0	0	0	5	55	3.4	C	758-762
66.	Double Crush Syndrome	0	0	0	1	12	.8	D	763
67.	Down's Syndrome	0	0	0	3	20	1.3	D	764-766
68.	Duchenne Muscular Dystrophy	0	0	1	4	58	3.6	C	767-771
69.	Dysarthria - Cervical	0	0	0	1	10	.6	D	772

Table 1C
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
70.	Dysmenorrhea	1	0	0	6	62	3.9	B	776-782
71.	Dyspnea	0	0	0	2	21	1.3	D	783-784
72.	Ear Problems	1	0	1	23	252	15.8	A	785-809
73.	Eczema	0	0	0	3	34	2.1	C	810-812
74.	Ehlers-Danlos	0	0	0	1	13	.8	D	813
75.	Elbow Pain	2	0	0	8	118	7.4	A	814-823
76.	Emaciation	0	0	1	0	8	.5	D	824
77.	Emotional Well Being	1	0	0	0	16	1	B	825
78.	Encephalitis	0	0	0	2	25	1.6	D	826-827
79.	Encopresis	0	0	0	3	30	1.9	D	828-830
80.	Endometriosis	0	0	0	3	26	1.6	D	831-833
81.	Enuresis	1	0	1	6	83	5.2	B	834-841
82.	Epilepsy	0	0	0	10	114	7.1	B	842-851
83.	Erb's Palsy	0	0	0	2	24	1.5	D	852-853
84.	Eustachian Tube Blockage	0	0	0	2	24	1.5	D	854-855
85.	Eye Pain	0	0	0	4	31	1.9	D	856-859
86.	Facial Dysmorphism	0	0	0	1	10	.6	D	860
87.	Facial Weakness	0	0	0	1	9	.6	D	861
88.	Failed Back Surgery	0	0	0	3	35	2.2	C	862-864
89.	Fasciitis	1	0	0	2	39	2.4	B	865-867
90.	Fatigue	1	0	0	9	100	6.3	B	868-877
91.	Femoral Nerve Entrapment	0	0	0	1	8	.5	D	878
92.	Fever	0	0	0	11	103	6.4	C	879-889
93.	Fibromyalgia	1	0	0	5	63	3.9	B	890-895
94.	Foot Pain	1	0	0	14	172	10.8	A	896-910
95.	Fracture	0	0	1	22	233	14.6	B	911-933
96.	Frozen Shoulder	0	0	1	3	40	2.5	C	934-937
97.	Gall Bladder Conditions	0	0	0	1	12	.8	D	938
98.	Gangrene	0	0	0	1	10	.6	D	939
99.	Gastroenteritis	0	0	0	1	9	.6	D	940
100.	Gastroesophageal Reflux Disease	1	0	0	0	14	.9	C	941
101.	Gastrointestinal Disorders	2	0	1	49	548	34.3	A	942-993
102.	Gaucher's Disease	0	0	0	1	10	.6	D	994
103.	Genitourinary Disorders	0	0	0	2	19	1.2	D	995-996
104.	Glaucoma	0	0	0	1	13	.8	D	997

Table 1D
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
105.	Glenohumeral Impingement Syndrome	1	0	0	3	44	2.8	B	998-1001
106.	Goiter	0	0	0	2	18	1.1	D	1002-1003
107.	Groin Pain	0	0	0	3	33	2.1	C	1004-1006
108.	Gynecological Disorders	0	0	0	3	32	2	C	1007-1009
109.	Hallux Abductovalgus Bunion	1	0	0	0	19	1.6	B	1010
110.	Hallux Rigidus	0	0	0	2	27	1.7	D	1011-1012
111.	Hamstring Injury/Sprain	1	1	0	4	77	4.8	B	1013-1018
112.	Headache	16	0	5	95	1288	80.5	A	1019-1134
113.	Headache - Tension	2	0	0	9	131	8.2	A	1135-1145
114.	Heart Disease	0	0	0	1	12	.8	D	1146
115.	Hematuria	0	0	0	2	19	1.2	D	1147-1148
116.	Hemiparesis	0	0	0	1	11	.7	D	1149
117.	Hemivertebra	0	0	0	2	16	1	D	1150-1151
118.	Hemorrhoids	0	0	0	1	12	.7	D	1152
119.	Hernia	0	1	1	38	421	26.3	A	1153-1192
120.	Hiccups	0	0	0	2	25	1.6	D	1193-1194
121.	High Blood Pressure	6	2	2	10	243	15.2	A	1195-1214
122.	Hip Dysplasia	0	0	0	2	20	1.3	D	1215-1216
123.	Hip Pain	0	0	0	21	198	12.4	B	1217-1237
124.	Hirschsprung's Disease	0	0	0	1	12	.7	D	1238
125.	HIV	1	0	0	0	17	1.1	B	1239
126.	Hives	0	0	0	1	6	.4	D	1240
127.	Hodgkin's Disease	0	0	0	1	12	.8	D	1241
128.	Hot Flashes	0	0	1	2	37	2.3	C	1242-1244
129.	Hydrocephalus	0	0	0	2	16	1	D	1245
130.	Hypercholesterolemia	0	0	0	1	7	.4	D	1246
131.	Hypertension	1	1	1	7	118	7.4	A	1247-1257
132.	Hypertonia / Hyperreflexia	0	0	0	1	11	.7	D	1258
133.	Hypolordosis	0	1	1	7	111	6.9	B	1259-1267
134.	Immune Problems	3	0	0	10	128	8	A	1268-1281
135.	Impingement Syndrome	1	0	0	2	34	2.1	B	1282-1284
136.	Incoordination - Muscular	0	0	0	1	12	.8	D	1285
137.	Indigestion	0	0	0	2	20	1.3	D	1286-1287
138.	Infection	0	0	1	23	242	15.1	A	1288-1311
139.	Infertility	0	0	0	11	110	6.9	C	1312-1322

Table 1E
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
140.	Influenza	0	0	0	2	12	.8	D	1323-1324
141.	Insomnia	0	0	0	6	68	4.3	C	1325-1330
142.	Intracranial Hypotension	0	0	0	1	5	.3	D	1331
143.	Irritability	1	0	0	2	35	2.2	B	1332-1334
144.	Irritable Bowel Syndrome	0	0	0	1	9	.6	D	1335
145.	Jaundice	0	0	0	2	22	1.4	D	1336-1337
146.	Joint Pain	3	1	1	30	384	24	A	1338-1372
147.	Kidney - (Renal Problems)	0	0	0	8	65	4.1	C	1373-1380
148.	Klippel Feil Syndrome	0	0	0	5	44	2.8	C	1381-1385
149.	Knee Pain	2	1	0	15	194	12.1	A	1386-1403
150.	Kyphosis	0	1	2	23	311	19.4	A	1404-1429
151.	Lateral Epicondylitis/ Epicondylitis	1	0	0	2	35	2.2	B	1430-1432
152.	Lateral Sclerosis	0	0	0	2	24	1.5	D	1433-1434
153.	Lateral-Flexion Asymmetry	1	0	0	0	15	.9	D	1435
154.	Learning Impairment	0	0	0	1	7	.4	D	1436
155.	Leg Pain	5	0	1	49	628	39.3	A	1437-1491
156.	Lethargic	0	0	0	2	22	1.4	D	1492-1493
157.	Light Sensitivity / photophobia	0	0	0	3	34	2.1	C	1494-1496
158.	Liver Disease / Hepatic	0	0	1	10	114	7.1	B	1497-1507
159.	Locked Jaw	0	0	0	1	11	.7	D	1508
160.	Low Back Pain	67	6	12	182	3246	202.9	A	1509-1775
161.	Lower Sacral Nerve Root Compression	0	0	0	3	29	1.8	D	1776-1778
162.	Lung Disorders	5	0	1	37	468	29.3	A	1779-1821
163.	Lymphangioma	0	0	0	1	13	.8	D	1822
164.	Meningitis	0	0	0	2	16	1	D	1823-1824
165.	Menstrual Disorders	1	0	0	6	71	4.4	B	1825-1831
166.	Mental Disorders	1	0	2	15	184	11.5	A	1832-1849
167.	Meralgia Paresthetica	0	0	0	2	27	1.7	D	1850-1851
168.	Metabolic Disorders	0	0	0	3	29	1.8	D	1852-1854
169.	Metatarsalgia - Primary	2	0	0	0	34	2.1	A	1855-1856
170.	Microcytic Hypochromic Anemia	0	0	0	1	8	.5	D	1857
171.	Mid Back Pain	3	1	0	20	279	17.4	A	1858-1881
172.	Migraine	4	0	0	20	282	17.6	A	1882-1905
173.	Motion Asymmetry - Cervical	2	0	0	0	30	1.9	A	1906-1907
174.	Multiple Sclerosis	0	0	0	9	94	5.9	C	1908-1916

Table 1F
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
175.	Muscle Hypertrophy	0	0	0	1	15	.9	D	1917
176.	Musculoskeletal Pain	101	10	14	264	4745	296.6	A	1918-2306
177.	Myalgia / Muscle Pain	7	0	0	27	410	25.6	A	2307-2340
178.	Myasthenia Gravis	0	0	0	4	45	2.8	C	2341-2344
179.	Myelopathy	0	0	0	2	21	1.3	D	2344-2346
180.	Leukemia	0	0	0	1	6	.4	D	2347
181.	Myocardial Infarction	0	0	0	1	2	.1	D	2348
182.	Myofascial Pain Syndrome	3	0	1	16	224	14	A	2349-2368
183.	Neck Pain / Cervicalgia	28	4	7	98	1646	102.9	A	2369-2505
184.	Nephritis	0	0	0	1	12	.8	D	2506
185.	Nerve Damage	0	0	0	1	12	.8	D	2507
186.	Nerve Disorders	0	0	0	3	32	2	D	2508-2510
187.	Nervousness	0	0	0	3	28	1.8	D	2511-2513
188.	Neuralgia	0	0	0	15	156	9.8	B	2514-2528
189.	Neuritis	0	0	0	5	40	2.5	C	2529-2533
190.	Neurodystrophic Ulceration	0	0	0	1	8	.5	D	2534
191.	Neuroma	0	0	0	1	10	.6	D	2535
192.	Numbness	0	0	0	27	274	17.1	B	2536-2562
193.	Nursing - Difficulty	0	0	1	5	67	4.2	C	2563-2568
194.	Occupational Stress Syndrome	1	0	0	1	26	1.6	D	2569-2570
195.	Ochronotic Arthropathy	0	0	0	1	10	.6	D	2571
196.	Oculomotor Palsy	0	0	0	1	9	.6	D	2572
197.	Osgood-Schlatter's Disease	0	0	0	1	13	.8	D	2573
198.	Osteochondroma	0	0	0	1	9	.6	D	2574
199.	Osteomyelitis	0	0	0	1	9	.6	D	2575
200.	Osteoporosis	0	1	0	2	37	2.3	B	2576-2578
201.	Otitis Media / Ear Infection	2	0	1	22	270	16.9	A	2579-2603
202.	Paget's Disease	0	0	0	1	12	.8	D	2604
203.	Paralysis	0	0	0	20	196	12.3	B	2605-2624
204.	Parasites	0	0	0	1	12	.8	D	2625
205.	Paresthesia	0	0	0	1	9	.6	D	2626
206.	Parkinson's	0	0	0	3	37	2.3	C	2627-2629
207.	Patellofemoral Pain Syndrome	3	0	0	4	92	5.8	B	2630-2636
208.	Pelvic Pain	0	0	0	17	160	10	B	2637-2653
209.	Peurperal Fever	0	0	0	1	4	.3	D	2654

Table 1G
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
210.	Psychological	0	0	0	1	12	.8	D	2655
211.	Placenta Previa	0	0	0	1	8	.5	D	2656
212.	Plagiocephaly	0	0	0	4	43	2.7	C	2657-2660
213.	Plantar Fasciitis	1	0	0	2	49	3.1	B	2661-2663
214.	PMS	0	0	0	8	78	4.9	C	2664-2671
215.	Pneumonia	0	0	0	3	23	1.4	D	2672-2674
216.	Polio	0	0	0	6	68	4.3	C	2675-2680
217.	Polyuria	0	0	0	1	12	.8	D	2681
218.	Posture - Problems	6	7	2	44	736	46	A	2682-2740
219.	Pregnancy	0	0	1	8	93	5.8	C	2741-2749
220.	Premature Ventricular Contractions / PVC	0	0	0	1	11	.7	D	2750
221.	Prostate Trouble	0	0	0	1	12	.8	D	2751
222.	Psoriasis	0	0	1	2	33	2.1	B	2752-2754
223.	Pubic Symphysis Dysfunction	0	0	0	1	12	.8	D	2755
224.	Quadraplegia	0	0	0	1	12	.8	D	2756
225.	Radial Head Subluxation	0	0	0	1	10	.6	D	2757
226.	Radicular Leg Pain	1	0	0	11	152	9.5	A	2758-2769
227.	Radicular Arm Pain	0	0	0	3	35	2.2	C	2770-2772
228.	Radiculitis/Radiculopathy	0	0	0	28	294	18.4	B	2773-2800
229.	Rectal Problems	0	0	0	1	12	.8	D	2801
230.	Reiter's Syndrome	0	0	0	1	9	.6	D	2802
231.	Restricted Movement	1	0	0	0	12	.8	D	2803
232.	Retropharyngeal Tendinitis	0	0	0	1	12	.8	D	2804
233.	Rett Syndrome	0	0	0	1	6	.4	D	2805
234.	Rheumatic Disease	1	0	0	9	104	6.5	B	2806-2815
235.	Rotator Cuff Tear	0	0	0	3	32	2	D	2816-2818
236.	Sacroiliac Problems	4	0	0	24	316	19.8	A	2819-2846
237.	Scalenus Anticus Syndrome	0	0	1	1	19	1.2	D	2847-2848
238.	Scarlet Fever	0	0	0	2	18	1.1	D	2849-2850
239.	Scheuermann	0	0	0	1	11	.7	D	2851
240.	Sciatic Neuritis	0	0	0	1	4	.3	D	2852
241.	Sciatica	3	0	0	24	270	16.9	A	2853-2879
242.	Scoliosis	2	0	1	25	302	18.9	A	2880-2907
243.	Seizures	0	0	0	12	132	8.3	B	2908-2919
244.	Severe Aural Symptoms	0	0	0	1	16	1	D	2920

Table 1H
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
245.	Severe Weight Loss	0	0	0	2	16	1	D	2921
246.	Shingles	0	0	0	1	7	.4	D	2922
247.	Short Leg Syndrome	0	0	0	1	7	.4	D	2923
248.	Shoulder Impingement Syndrome	1	0	0	4	54	3.4	B	2924
249.	Shoulder Injury	0	0	0	7	79	4.9	C	2925-2936
250.	Shoulder Pain	6	1	1	31	450	28.1	A	2937-2975
251.	Shoulder-Hand-Syndrome	0	0	0	1	13	.8	D	2976
252.	Sinusitis	0	0	0	10	120	7.5	B	2977-2986
253.	Skin Cancer	0	0	0	1	9	.6	D	2987
254.	Sleep Disorders	0	0	0	10	99	6.2	C	2988-2997
255.	Sore Throat	0	0	0	1	11	.7	D	2998
256.	Spasmodic Dysphonia	0	0	0	1	8	.5	D	2999
257.	Speech Impediment	0	0	0	1	9	.6	D	3000
258.	Spinal Cord Encroachment	0	0	0	1	14	.9	D	3001
259.	Spinal Pain	42	2	7	101	1864	116.5	A	3002-3153
260.	Spondylitic Radiculopathy	0	0	0	1	12	.8	C	3154
261.	Spondyloarthritis	0	0	0	1	10	.6	D	3155
262.	Spondylolisthesis	1	0	0	15	170	10.6	A	3156-3171
263.	Spondylosis	1	0	0	11	125	7.8	A	3172-3183
264.	Sprained Shoulder	0	0	0	1	7	.4	D	3184
265.	Stenosis - Spinal	0	0	0	9	85	5.3	C	3185-3193
266.	Stomach Problems	0	0	0	3	30	1.9	D	3194-3196
267.	Strabismus	0	0	0	3	25	1.6	D	3197-3199
268.	Stroke	0	0	0	1	12	.8	D	3200
269.	Subluxation	14	3	10	165	1996	124.8	A	3201-3392
270.	Suboccipital Pain	1	0	1	7	95	5.9	B	3393-3401
271.	Synchondrosis	0	0	0	1	10	.6	D	3402
272.	Synovial Cyst	0	0	0	2	22	1.4	D	3403-3404
273.	Syringomyelia	0	0	0	1	16	1	D	3405
274.	T4 Syndrome	0	0	0	2	19	1.2	D	3406-3407
275.	Tenderness	2	0	0	2	57	3.6	A	3408-3411
276.	Thoracic Nerve Root Injury	0	0	0	2	20	1.3	D	3412-3413
277.	Thoracic Pain	7	1	1	37	515	32.2	A	3414-3459
278.	Tic Douloureux	0	0	0	2	26	1.6	D	3460-3461
279.	Tinnitus	0	0	0	7	76	4.8	C	3462-3468

Table II
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
280.	Tremor - Intention	0	0	0	2	24	1.5	D	3501-3502
281.	Traumatic Volar Dislocation	0	0	0	1	11	.7	D	3500
282.	Trenchmouth	0	0	0	1	11	.7	D	3503
283.	TMJ	0	0	1	10	129	8.1	B	3469-3479
284.	Tonsillitis	0	0	0	2	13	.8	D	3480-3483
285.	Torticollis	0	0	0	13	139	8.7	B	3484-3496
286.	Transient Neurological Disorder	0	0	0	1	10	.6	D	3497
287.	Transient Syncope	0	0	0	2	27	1.7	D	3498-3499
288.	Traumatic Volar Dislocation	0	0	0	1	11	.7	D	3500
289.	Tremour - Intention	0	0	0	2	24	1.5	D	3501-3502
290.	Trenchmouth	0	0	0	1	11	.7	D	3503
291.	Trigeminal Neuralgia	0	0	0	4	46	2.9	C	3504-3507
292.	Tumour	0	0	0	1	12	.8	D	3508
293.	Ulcers	0	0	0	8	79	4.9	C	3509-3516
294.	Ulnar Neuropraxia	0	0	0	1	10	.6	D	3517
295.	Unexpected Weight Loss	0	0	0	1	10	.6	D	3518
296.	Upper Extremity Plasy	0	0	0	1	5	.3	D	3519
297.	Urinary Incontinence	0	0	0	8	79	4.9	C	3520-3527
298.	Urinary Infection	0	0	0	2	18	1.1	D	3528
299.	Uterine Bleeding - Dysfunctional	0	0	1	0	13	.8	D	3529
300.	Uterine Cramps	0	0	0	1	6	.4	D	3530
301.	Uterine Fibroids	0	0	0	2	19	1.2	D	3531-3532
302.	Uveitis	0	0	0	1	14	.9	D	3533
303.	Varicose Veins	0	0	0	3	35	2.2	C	3534-3536
304.	Vertigo	1	0	1	20	219	13.7	A	3537-3558
305.	Vesicoureteral Relfux	0	0	0	1	10	.6	D	3559
306.	Visual Problems	0	0	0	1	12	.8	D	3560
307.	Vomiting	0	0	1	9	96	6	C	3561-3570
308.	Weakness	0	0	0	18	189	11.8	A	3571-3588
309.	Wedge Vertebra	0	0	0	2	22	1.4	D	3589-3590
310.	Whiplash	2	0	1	19	239	14.9	A	3591-3612
311.	Wrist Ganglion	0	0	0	1	10	.6	D	3613
312.	Xiphodynia	0	0	0	1	5	.3	D	3614
313.	TMJ	0	0	1	10	129	8.1	B	3469-3479
314.	Tonsillitis	0	0	0	2	13	.8	D	3480-3483
315.	Torticollis	0	0	0	13	139	8.7	B	3484-3496
316.	Transient Neurological Disorder	0	0	0	1	10	.6	D	3497
317.	Transient Syncope	0	0	0	2	27	1.7	D	3498-3499

Table 11
Organization of All the Evidence (R* = ICA's Rating from Chapter 8)

	Keywords	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
318.	Trigeminal Neuralgia	0	0	0	4	46	2.9	C	3504-3507
319.	Tumour	0	0	0	1	12	.8	D	3508
320.	Ulcers	0	0	0	8	79	4.9	C	3509-3516
321.	Ulnar Neuropraxia	0	0	0	1	10	.6	D	3517
322.	Unexpected Weight Loss	0	0	0	1	10	.6	D	3518
323.	Upper Extremity Plasy	0	0	0	1	5	.3	D	3519
324.	Urinary Incontinence	0	0	0	8	79	4.9	C	3520-3527
325.	Urinary Infection	0	0	0	2	18	1.1	D	3528
326.	Uterine Bleeding - Dysfunctional	0	0	1	0	13	.8	D	3529
327.	Uterine Cramps	0	0	0	1	6	.4	D	3530
328.	Uterine Fibroids	0	0	0	2	19	1.2	D	3531-3532
329.	Uveitis	0	0	0	1	14	.9	D	3533
330.	Varicose Veins	0	0	0	3	35	2.2	C	3534-3536
331.	Vertigo	1	0	1	20	219	13.7	A	3537-3558
332.	Vesicoureteral Relfux	0	0	0	1	10	.6	D	3559
333.	Visual Problems	0	0	0	1	12	.8	D	3560
334.	Vomiting	0	0	1	9	96	6	C	3561-3570
335.	Weakness	0	0	0	18	189	11.8	B	3571-3588
336.	Wedge Vertebra	0	0	0	2	22	1.4	D	3589-3590
337.	Whiplash	2	0	1	19	239	14.9	A	3591-3612
338.	Wrist Ganglion	0	0	0	1	10	.6	D	3613
339.	Xiphodynia	0	0	0	1	5	.3	D	3614

Table 2A
Publications by Body Regions
Evidence by Regions (R* = ICA's Rating from Chapter 8)

	Anatomic Regions	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
1.	Head:	21	2	6	144	1883	117.7	A	1-173
2.	Neck:	56	8	23	356	5221	326.3	A	174-617
3.	Eyes	0	1	0	15	155	9.7	B	618-633
4.	Face	2	1	0	34	386	24.1	A	634-670
5.	Ear	3	1	2	41	481	30.1	A	671-717
6.	Mouth	0	0	0	7	77	4.8	C	718-724
7.	Jaw / TMJ	0	0	1	13	162	10.1	A	725-738
8.	Scalene	0	0	1	2	27	1.7	D	739-741
9.	SCM	0	0	0	3	25	1.6	D	742-744
10.	Suboccipital	1	0	1	7	95	5.9	B	745-753
11.	Throat	0	0	0	5	45	2.8	C	754-758
12.	Vision	1	1	1	21	252	15.8	A	759-782
	Upper Extremity:								
13.	Arm / Brachial	2	1	0	46	540	33.8	A	783-831
14.	Carpal Tunnel	1	1	1	7	131	8.2	A	832-841
15.	Rotator Cuff	0	0	0	3	32	2	D	842-844
16.	Fingers	0	0	1	3	39	2.4	C	845-848
17.	Forearm / Elbow	2	0	0	13	176	11	A	849-863
18.	Hand	2	2	3	23	354	22.1	A	864-893
19.	Wrist / Carpal	1	1	1	12	179	11.2	A	894-908
20.	Shoulder (GH, AC)	6	1	1	57	730	45.6	A	909-973
21.	Supraspinatus	0	0	0	1	12	.8	D	974
22.	Teres	0	0	0	1	14	.9	D	975
23.	Thorax/Thoracic:	19	4	7	105	1506	94.1	A	976-1110
24.	Chest	2	1	0	25	279	17.4	A	1111-1138
25.	Costovertebral	0	0	0	1	9	.6	D	1139
26.	Diaphragm	0	0	1	1	19	1.2	D	1140-1141
27.	Esophagus	0	0	0	2	13	.8	D	1142-1143
28.	Heart / Cardiac	4	5	1	27	399	24.9	A	1144-1180
29.	Lungs / Pulmonic	5	0	1	36	468	29.3	A	1181-1222
30.	Ribs	2	0	1	3	66	4.1	A	1223-1228
31.	Scapula	2	0	0	2	55	3.4	A	1229-1232
32.	Scoliosis	2	0	1	25	302	18.9	A	1233-1260
33.	Trapezius	3	0	0	2	61	3.8	A	1261-1265
34.	Upper/Mid Back	15	3	3	71	1055	65.9	A	1266-1357

Table 2B
Evidence by Regions (R* = ICA's Rating from Chapter 8)

	Anatomic Regions	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
35.	Toe	2	0	0	4	84	5.3	A	2317-2326
36.	Low back / Lumbar:	84	8	26	314	5067	316.7	A	1358-1789
37.	Buttock / Gluteal	3	0	1	11	167	10.4	A	1790-1804
38.	Paraspinal	0	0	0	1	6	.4	D	1805
39.	Quadratus Lumborum	0	0	0	4	39	2.4	C	1806-1809
40.	Abdomen / Stomach:	0	0	0	4	45	2.8	C	1810-1813
41.	Colon	0	0	0	5	48	3	C	1814-1818
42.	Digestive / Gastrointestinal / Intestine	2	0	1	51	567	35.4	A	1819-1872
43.	Genitourinary	1	0	1	24	254	15.9	A	1873-1898
44.	Liver	0	0	1	8	92	5.8	C	1899-1907
45.	Organs / Viscera	0	0	0	12	112	7	B	1908-1919
46.	Reproductive	2	0	3	23	288	18	A	1920-1947
47.	Spleen	0	0	0	1	10	.6	D	1948
48.	Pelvis:	1	0	0	49	500	31.3	A	1949-1998
49.	Acetabulum	0	0	0	2	22	1.4	D	1999-2000
50.	Pubic	0	0	0	2	18	1.1	D	2001-2002
51.	Sacrum / Sacroiliac	6	0	0	48	578	36.1	A	2003-2056
	Lower Extremity:								
52.	Calf	1	0	0	4	50	3.1	B	2057-2061
53.	Gastrocnemius	0	0	1	0	13	.8	D	2062
54.	Hamstrings	1	1	0	4	77	4.8	B	2063-2068
55.	Hip	1	0	2	35	392	24.5	A	2069-2106
56.	Leg	6	0	3	69	852	53.3	A	2107-2184
57.	Patella / Knee	3	1	0	27	338	21.1	A	2185-2215
58.	Peroneal	0	0	0	2	21	1.3	D	2216-2217
59.	Sartorius	0	0	0	1	9	.6	D	2218
60.	Sciatic	3	0	0	26	285	17.8	A	2219-2247
61.	Thigh	1	0	0	10	116	7.3	A	2248-2258
62.	Tibia	0	0	0	4	45	2.8	C	2259-2262
63.	Ankle:	5	1	1	12	235	14.7	A	2263-2281
64.	Mortus	0	1	0	0	11	.7	D	2282
65.	Talus	1	1	0	1	41	2.6	B	2283-2285
66.	Foot:	5	1	1	21	347	21.7	A	2286-2313
67.	Calcaneus	0	0	0	1	11	.7	D	2314
68.	Metatarsal	3	0	0	2	78	4.9	A	2315
69.	Tarsal	0	0	0	1	10	.6	D	2316

Table 3
List of Age Ranges in the ICA Data Base and the Number of Publications
 (R* = ICA's Rating from Chapter 8)

Age Ranges	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
0-1 Infant	4	0	2	47	543	33.9	A	1-53
2-10 Child	6	0	5	59	712	44.5	A	54-123
11-17 Adolescent	8	0	4	29	481	30.1	A	124-164
18-64 Adult	50	9	21	434	5794	362.1	A	165-680
65+ Geriatric	23	1	5	105	1611	100.7	A	681-814

Table 4
List of Techniques in the ICA Data Base and the Number of Publications
 (R* = ICA's Rating from Chapter 8)

Technique	Level I	Level II	Level III	Level IV	Total Points	RCT Equivalent	R*	References
Activator	6	0	3	28	428	26.8	A	1-37
ART	0	0	0	7	81	5.1	C	38-44
AK	0	0	0	7	71	4.4	C	45-51
Atlas Orthogonal	1	0	0	0	16	1	C	52
BEST	1	1	0	5	74	4.6	A	53-59
CBP	1	7	2	78	1077	67.3	A	60-147
Cox	5	0	1	28	396	24.8	A	148-181
Diversified/SMT*	61	3	18	194	3351	209.4	A	182-459
Gonstead	2	0	4	30	391	24.4	A	460-495
Graston	1	0	0	2	36	2.3	B	496-498
Grostatic	1	0	1	8	111	6.9	B	499-508
HIO	0	0	0	139	1452	90.8	B	509-647
Kale	0	0	0	1	14	.9	D	648
Life Cervical	0	0	1	14	154	9.6	B	649-663
Logan Basic	1	0	1	6	85	5.3	B	664-671
MUA	1	0	0	8	109	6.8	B	672-680
McTimmony Technique	0	1	0	0	17	1.1	D	681
Motion Palpation	4	3	1	17	292	18.3	A	682-706
Network	0	0	2	9	125	7.8	B	707-717
NUCCA	1	0	0	6	71	4.4	B	718-724
Orthospinology	0	0	0	5	62	3.9	C	725-729
Osteopathic	9	0	1	7	210	13.1	A	730-746
Pettibon	1	1	0	5	92	5.8	A	747-753
Pro Adjuster	1	0	0	2	32	2	C	754-756
SOT/Craniosacral	0	0	2	31	344	21.5	B	757-789
Thompson	0	0	1	14	162	10.1	B	790-804
Toftness	1	1	0	1	43	2.7	B	805-807
Toggle	7	0	1	18	307	19.1	A	808-833
Torque Release	0	0	0	6	60	3.8	C	834-839
Upper Cervical Specific	1	0	1	3	63	3.9	B	840-844

* Includes Diversified and all SMT/Mobilization methods from Osteopathy (such as Maitland), Manual Therapy, Physiotherapy, Medical Manipulation

Table 5
Infertility Studies (All Studies here are Level IV Studies)
(R* = ICA's Rating from Chapter 8)

Author	Points	Treatments	Weeks	Outcome Positive?
Adams, John P DC; 2003	9	88	88	Yes
Anderson-Peacock, E DC; 2003	11	24	10	Yes
Bedell, Leslie, DC; 2003	10	21	21.5	Yes
Blum, Charles L. DC; 2003	10	18	25.8	Yes
Kaminski, Tammy M DC; 2003	9	32	32	Yes
Lyons, Daniel D.; 2003	10	14	4	Yes
Nadler, Asher DC; 2003	8	17	5	Yes
Rosen, Martin G. DC; 2003	9		6	Yes
Senzon, S.A. MA DC; 2003	12	44	20	Yes
Shelley, Jessica DC; 2003	12	12	14	Yes
Vilan R; 2004	10	28	24	Yes
Total Points:	110			
Average Points:	10			
Total Treatments:	298	Ave Treatments	30	
Total Weeks:	250			
Average Weeks:	23			
RCT Equivalent:	6.9	R*: C		

Table 6
Pregnancy Studies (R* = ICA's Rating from Chapter 8)

Study Type	Author	Points	Treatments	Weeks	Outcome Positive?
Level III	Diakow, Peter R DC; 1991	14			Yes
Level IV	Adams, John P DC; 2003	9	88	88	Yes
Level IV	Bedell, Leslie, DC; 2003	10	21	21.5	Yes
Level IV	Cohen, Eddy; 1995	5	8	8	Yes
Level IV	Fallon, Joan; 1994	12	20	24	Yes
Level IV	Guadagnino III MR; 1999	13	84	34	Yes
Level IV	Kanu, Pene L; 1999	10			Yes
Level IV	Krauss, Lori DC; 1995	8	22	12	Yes
Level IV	Lisi, Anthony J DC; 2005	8	15	9	Yes
Level IV	Lisi, Anthony J.; 2005	10			Yes
Level IV	Senzon, S.A. MA DC; 2003	12	44	20	Yes
Level IV	Skaggs, Clayton D. DC; 2006	5			Yes
Level IV	Vilan R; 2004	10	28	24	Yes
Level IV	Viti JA; 2000	7	8	4	Yes
	Total Points:	133			
	Average Points:	10			
	Total Treatments:	338	Ave Treatments	34	
	Total Weeks:	245			
	Average Weeks:	24			
	RCT Equivalent:	8.3	R*: B		

Comparison of CCGPP and ICA Best Practices

CCGPP⁴ organized their work into seven chapters: low back, thorax, neck, upper extremity, lower extremity, soft tissue, and non-musculoskeletal. Six out of seven (86%) of the CCGPP chapters cover musculoskeletal/pain conditions.

Using the CCGPP Non-Musculoskeletal Chapter as an example, it was reported the search for studies resulted in 276 source documents, 93 of which were case reports. The oldest study cited in this Non-Musculoskeletal Chapter was 1985. While the case reports were included in the references, they were not included in the analysis and synthesis of their Best Practices formulation.

The CCGPP Non-Musculoskeletal Chapter search methods resulted in a limited number of source documents (n=293). In contrast, the ICA Committee searched the entire chiropractic literature (1895-present) and identified over 1400 clinical papers. While this ICA Best Practices document, was not divided into the same categories as CCGPP (non-musculoskeletal category in this case), we would estimate that the CCGPP search resulted in less than 10% of the total studies that ICA has reviewed under this topic. Therefore, a more thorough hand search of every chiropractic journal should have been performed by CCGPP. This is precisely what the ICA has done in its literature search and source document retrieval process.

Additionally, ICA believes another important thing to note about the CCGPP Non-musculoskeletal chapter is the short list of procedures receiving an A or B rating in their “Summary of Recommendations”. These 6 things are listed in Table 7:

Table 7
CCGPP’s A and B Ratings of Non-Musculoskeletal Conditions

Condition/Treatment	Rating
Counseling tobacco users to quit	A
Counseling sedentary patients to engage in physical activity	A
Counseling on breastfeeding	A
Limiting use of antibiotics for otitis media	A
Diagnostic test in pregnant women-SLR	B
Counseling for Physical activity	A

Although Chiropractors may counsel patients on the above mentioned topics, practicing DCs are not counselors by training. No guidelines, RCTs, systematic reviews or meta-analyses on these counseling topics have been performed in chiropractic. Note everything else got a “C”, “D” or “I” rating in the CCGPP document. This would include manipulation/adjustment for LBP in older adults, manipulation/adjustment for health promotion, manipulation/adjustment for children for any condition the child may have. Additionally, manipulation/adjustment of adults for any condition other than LBP, neck pain, headaches and extremity conditions were rated low. Thus, these CCGPP non-musculoskeletal guidelines are, “restrictive”, by condition.

ICA believes this limited list of, “supported”, conditions is due to design flaws in the evidence gathering, and selective literature review. The CCGPP 2007 Introductory Chapter states that *non-randomized controlled trials* would be included for review, but the majority of these papers were not. The CCGPP Introduction chapter states that *cohort studies* would be included for review, but they were not. The CCGPP Introduction chapter states that *case series* would be included for review, but they were not. While the CCGPP introductory chapter stated that, “*The preeminence of the randomized clinical trial (RCT), generally a positive factor for population health questions when high quality RCTs exist, can be a significant negative factor misguiding care decisions*”, CCGPP did not offset this *negative factor* by including all levels of evidence.

The omission of Levels 2-4 evidence was one of the most significant issues raised in the State Association critiques of the CCGPP’s Low Back Draft released in 2006 and 2007. While there was

discussion of this problem in the new 2007 CCGPP Introduction, the problem was not corrected and it remained the single biggest problem with the 2007 documents.

As an example, on page 11 of the CCGPP Non-Musculoskeletal Chapter, the Team Lead discussed the, “Rating Statements”, and summarized the studies that were actually reviewed. There were 28 systematic reviews and RCTs that were included for review with 14 rated as “high”, while 248, “other studies”, were rated as low and not worthy of consideration. So, again, only RCTs and systematic reviews were included in the review as shown in their CCGPP Evidence Table 3.

In contrast, this ICA Best Practices lists all the diseases in our data base (see Tables 1A-1I). All of the evidence, from the RCT to the single case report, was included in the synthesis of the evidence tables. It is the position of the ICA that the accumulated results from reviewed case reports outweighs the accumulated opinion of a, “consensus panel”, some of whom have no clinical experience and have never practiced. This position that the ICA holds is also the position of the United States government regarding the hierarchy of levels of evidence.

This comparison was made here because these two guidelines are being completed at, relatively, the same time in history. Additionally, there are many shortcomings of the initial CCGPP Chapters, as pointed out by 95% of the State Associations, which helped guide the development of the ICA document. A summary of the comparison of the CCGPP document and the ICA Best Practices document is presented in Table 8:

Table 8
Comparison of CCGPP and ICA Best Practices

Comparison Topic	CCGPP	ICA
Team Leads: Possible conflicts of interest	Yes	No
Team Members: Possible conflicts of interest	Yes	No
Majority of Committee members in active practice	No	Yes
Included literature before 1985	No	Yes
Included Level 2-4 evidence	No	Yes
Included all Chiropractic Techniques’ publications	No	Yes
Reported support evidence for modalities	No	Yes (Chap 9)
Selective literature searches (1985-2008)	Yes	No
Reported frequency & duration suggestions	No	Yes (Chap 11)
Emphasis mainly on spinal pain conditions	Yes	No
Besides pain, reported care evidence for diseases/health conditions	3	> 300
Reported Care Evidence for all age groups (pediatrics, adults, seniors)	No	Yes
Reported Counseling treatment by DCs	Yes	No
Except for pain, rated all Chiropractic care as C, D, or I	Yes	No
Relied on Cochrane systematic reviews for quality scores	Yes	No

References (See Appendix 2 for references for Tables 1-6)

1. <http://www.gao.gov/special.pubs/bprag/bprgloss.htm>
2. www.dmreview.com/rg/resources/glossary.cfm
3. www.searchsoftwarequality.techtarget.com/sDefinition/0,,sid92_gci498678,00.html - 55k
4. Council on Chiropractic Guidelines and Practice Parameters (CCGPP). www.ccgpp.org/view.htm