# Appendix A

THE AUSTRALASIAN COUNCIL ON CHIROPRACTIC AND OSTEOPATHIC EDUCATION LIMITED

Rog. Office: 941 Nepean Highway, Mornington, Victoria, 3931 Tel: (059) 75 3546 Int: + 61 58 753545

A.C.N. 006 318 104



Please reply to: Prof. A.M. Kleynhans, PO Box 96, Epping, Victoria 3076, Australia.

Dear Colleague,

I am pleased to advise that you have been selected to participate in a very important part of a major chiropractic research project being undertaken by the Australasian Council on Chiropractic and Osteopathic Education (ACCOE) with the kind collaboration of the U.S. National Board of Chiropractic Examiners. For the first time in the history of the chiropractic profession, a scientific study has been designed to document the tasks, duties and professional responsibilities of chiropractic practitioners on a national scale.

The National Office of Overseas Skills Recognition in the Department of Employment, Education and Training, has made a grant available to ACCOE to undertake a study to establish competency-based professional standards for chiropractors.

Part of this project consists of a Practice Analysis of chiropractors in which we invite YOU to participate. An easy to complete questionnaire will be sent to you within two weeks. We urge you to kindly complete it upon arrival and return it in a reply paid envelope which will be provided.

We are particularly fortunate to have the U.S. National Board of Chiropractic Examiners assist us with the Practice Analysis component of the project. The NBCE has spent a great deal of money and used the best available advice on the design of an excellent questionnaire which has already been completed by specially selected colleagues, like yourself, in the U.S.A. and Canada. Had it not been for the NBCE, we would not have been able to include this component in our research.

With your help, it will also be possible to compare chiropractic practice in Australia and New Zealand with that in the U.S.A. and Canada.

In order that results of this project reflect the practice of chiropractors across a wide range of practice settings, it is important that you return a completed questionnaire. In a few days, you will be receiving your survey. We look forward to your response.

Sincerely,

Professor Andy Kleynhans, Principal Investigator ACCOE Competency Standards Research Project

**Pre-Survey Letter** 

# Appendix B

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Reg. Office: 941 Nepeen Highway, Mornington, Victoria, 3931 Tel: (059) 75 3546 Int: + 61 59 753546

A.C.N. 005 315 104



Please reply to: Prof. A.M. Kleynbans, PO Box 98, Epping, Victoria 3076, Australia.

Dear Colleague,

As stated in a letter sent to you some days ago, you have been selected as a representative of chiropractors in your geographic area to participate in a milestone study of chiropractic practice.

Data from the enclosed questionnaire will serve to document what chiropractors across Australia and New Zealand are doing in their practices. Results of the survey will be used to prepare a comprehensive report describing the chiropractic profession and documenting future examination needs. No individual responses will be reported; responses will be reported on a group basis only.

As you are aware, a project of this magnitude will involve many weeks of analyses and reporting after all survey forms are returned to us and forwarded to the National Board in the U.S.A. The results of this survey will be included in the ACCOE Report #1 - Competency-based Professional Standards for Chiropractors, to be published at the end of the year.

If you have any questions, please feel free to call me on 03-468-2440 B/H or 03-715-1108 A/H (preferred).

Sincere appreciation is expressed to the U.S. National Board of Chiropractic Examiners for their tremendous assistance with the project to establish competency-based professional standards for chiropractors in Australia and New Zealand.

YOUR RESPONSE IS CRITICAL TO THE SUCCESS OF THIS IMPORTANT STUDY.

Please return your completed survey instrument to me as soon as possible, but preferably no later than 30TH BEPTEMBER, 1992, in the enclosed self-addressed, postage-paid envelope. Thank you very much for your assistance.

Yours sincerely, Kehamp

Professor Andy Aleynhans, Principal Investigator, ACCOE competency Standards, Research Project.

## NATIONAL BOARD OF HIROPRACTIC EXAMINERS

# Appendix C

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### **Survey of Chiropractic Practice**

questionnaire is part of a comprehensive study of chiropractic practice being conducted by the National Board of practic Examiners.

se use a soft (No. 1 or No. 2) lead pencil. DO NOT use a ball-point pen, nylon-tip or felt-tip pen, fountain pen, marker, lored pencil. Be careful to avoid making stray marks on the form.

: questions have several alternative answers. Choose the answer that best applies to your practice and blacken the > beside it. To change your answer, erase your first mark completely and then blacken the correct circle.

*w* questions ask you to write in information. Print your answer in the space following the question. Be careful to print ly in the space provided.

answers will be kept confidential. Your individual responses to the questions will not be released.

What trends or developments during the next decade would be most **beneficial** to the chiropractic profession?

Vhat trends or developments during the ext decade would be most detrimental to

ne chiropractic profession?

3. Have you ever worked full-time in an occupation other than chiropractic?

O	Yes
0	No

4. Are you currently in active full-time chiropractic practice?

O Yes () No

J NO

If you answered "No" to question 4, don't answer any further questions. Simply return the questionnaire in the postage-paid envelope. It's very important that you return the questionnaire. Please put it in the mail today.

5. How many hours per week do you practice chiropractic?

(Hours per week)

The final report describing the study will include a list of individuals who responded to this survey. Would you like us to include your name in the list?
 Yes

011880

O No

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> NATIONAL BOARD OF CHIROPRACTIC EXAMINERS 901 54th Avenue Greeley, Colorado 80634

> > PLEASE DO NOT MARK IN THIS AREA

### DEMOGRAPHIC DATA

In this section you are asked to provide background information that will be summarized to describe the group that completed this questionnaire. No individual responses will be reported.

1.	Sex
	O Male
	O Female
2.	Place of bi
	O Australia

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of birth

- Britain
- Canada
- China
- Europe
- New Zealand
- North America
- 00000000 Vietnam
- Õ Other
- 3. Highest level of non-chiropractic education attained:
  - O High School Diploma
  - Associate Degree
  - O Baccalaureate Degree
  - O Master's Degree
  - O Doctoral Degree
  - O Other
- Post-graduate chiropractic specialty board eligibility or certification: O None/Does not apply O American Chiropractic Board of Sports
  - Physicians
  - O American Board of Chiropractic Orthopedists
  - O American Chiropractic Academy of Neurology
  - O American Chiropractic Board of Radiology
  - O Chiropractic Rehabilitation Association
  - O American Chiropractic Board of Nutrition
  - O American Board of Chiropractic Internists
  - O ICA College on Chiropractic Imaging
  - O ICA College of Thermography
  - O ICA Council on Applied Chiropractic Sciences
  - O Other

- 5. Institution that conferred Doctor of Chiropractic Degree:
  - O Anglo-European College of Chiropractic
  - O Canadian Memorial Chiropractic College
  - O Cleveland Chiropractic College, Kansas City
  - O Cleveland Chiropractic College, Los Angeles
  - O Institut Francais de Chiropractie
  - O Life College, School of Chiropractic
  - O Life Chiropractic College, West
  - O Logan College of Chiropractic
  - O Los Angeles College of Chiropractic
  - O National College of Chiropractic
  - O New York Chiropractic College
  - O Northwestern College of Chiropractic
  - O Palmer College of Chiropractic
  - O Palmer College of Chiropractic, West
  - O Parker College of Chiropractic
  - O Pennsylvania College of Straight Chiropractic
  - O Phillip Institute of Technology, School of Chiropractic
  - O Sherman College of Straight Chiropractic
  - O Southern California College of Chiropractic
  - O Sydney College of Chiropractic.
  - O Texas Chiropractic College
  - O Western States Chiropractic College
  - O Other

### WORK ENVIRONMENT

## Which of the following best describes your position in the office where you work?

- O Individual practitioner/only doctor in office
- O One of two or more doctors in office
- O Junior associate or examining doctor
- O Other

Do you practice in more than one office location?

- O Yes
- O No

O No

- Do you ever deliver chiropractic care outside an office setting, such as in a patient's home?
   Yes
  - O No
- Do you have staff privileges at a hospital?
  - O Yes
  - O No
- 6. Have you received patient referrals from medical practitioners in the past two years?
  - O Yes
  - O No

### EXPERIENCE AND ORIENTATION

How long have you been practicing in the state in which you are currently located?

- O less than 2 years
- O 2-4 years
- O 5-15 years
- O more than 15 years

How long have you been in practice altogether, including your current state and other states or countries?

- O less than 2 years
- O 2-4 years
- O 5-15 years
- O more than 15 years

What kind of clinical orientation did you receive in your first field practice setting?

- O No formal orientation
- O A preceptorship/field internship
- O An associateship
- O A state-mandated training program
- O Other

4. Approximately what percentage of your time is spent on each of the following functions during a typical week?

76-100%					
51-75%					
26-50%					
1-25%					
0					
Business management	0	0	0	0	0
Direct patient care	0	0	0	0	0
Patient education	0	0	0	0	0
Research	0	0	0	0	0

### **TYPES OF PATIENTS**

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For every **100 patients** that you see in your practice, how many of these patients are from each of the following sex, age, ethnic, and occupational categories?

	4 = MOST/ALL (76-100%) 3 = MORE THAN HALF (51-75%) 2 = HALF OR LESS (26-50%) 1 = FEW/SOME (1-25%) 0 = NONE (0)			2	3	
SEX	<ul><li>MALE</li><li>FEMALE</li></ul>	000	00	00	000	00
AGE	<ul> <li>17 or younger</li> <li>18 to 30</li> <li>31 to 50</li> <li>51 to 64</li> <li>65 or older</li> </ul>	00000	00000	00000	00000	00000
ETHNIC ORIGIN	<ul> <li>ABORIGINAL</li> <li>CHINESE</li> <li>EUROPEAN DESCENT</li> <li>GREEK</li> <li>INDONESIAN</li> <li>ITALIAN</li> <li>UNITED KINGDOM</li> <li>VIETNAMESE</li> <li>OTHER</li></ul>	000000000000000000000000000000000000000	000000000	000000000	000000000	000000000
OCCUPATION	<ul> <li>Executive/Professional</li> <li>White collar/Secretarial</li> <li>Professional/Amateur athlete</li> <li>Tradesman/Skilled Labor</li> <li>Unskilled Labor</li> <li>Homemaker</li> <li>Student</li> <li>Retired or other</li> </ul>	00000000	00000000	00000000	00000000	00000000

ring the past two years in your productions?	practice, how often have you seen patients with the	following	g pres	enting	) or	
	4 = ROUTINELY (Daily)			_		
	0 = NEVER	0	1	2	3	4
<b>ARTICULAR/JOINT</b>	<ul> <li>spinal subluxation/joint dysfunction</li> <li>extremity subluxation/joint dysfunction</li> <li>sprain or dislocation of any joint</li> <li>vertebral facet syndrome</li> <li>intervertebral disc syndrome</li> <li>thoracic outlet syndrome</li> <li>hyperlordosis of cervical or lumbar spine</li> <li>kyphosis of thoracic spine</li> <li>aseptic necrosis or epiphysitis</li> <li>scoliosis</li> <li>congenital/developmental anomaly</li> <li>osteoarthritis/degenerative joint disease</li> <li>systemic/rheumatoid arthritis or gout</li> <li>bacterial infection of joint</li> <li>bursitis or synovitis</li> <li>carpal or tarsal tunnel syndrome</li> <li>TMJ syndrome</li> <li>joint tumor or neoplasm</li> <li>spinal canal stenosis</li> </ul>	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000
IEUROLOGICAL	<ul> <li>headaches</li> <li>peripheral neuritis or neuralgia</li> <li>ALS, multiple sclerosis or Parkinson's</li> <li>tearing or rupture of nerve/plexus</li> <li>stroke or cerebrovascular condition</li> <li>vertebrobasilar artery insufficiency</li> <li>cranial nerve disorder</li> <li>radiculitis or radiculopathy</li> <li>loss of equilibrium</li> <li>brain or spinal cord tumor</li> </ul>	000000000000000000000000000000000000000	0000000000	00000000000	00000000000	0000000000

**TYPES OF CONDITIONS** 

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(During the past two years)

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	4 = ROUTINELY (Daily) 3 = OFTEN (1 or 2 per week) 2 = SOMETIMES (1 or 2 per month) 1 = RARELY (1 or 2 per year) 0 = NEVER					
SKELETAL	<ul> <li>fracture</li> <li>osteoporosis/osteomalacia</li> <li>congenital/developmental anomaly</li> <li>endocrine or metabolic bone disorder</li> <li>bone tumor</li> </ul>	00000	1	2	3 0 0 0 0 0	4
MUSCULAR	<ul> <li>muscular strain/tear</li> <li>tendinitis/tenosynovitis</li> <li>muscular dystrophy</li> <li>muscular atrophy</li> <li>muscle tumor</li> </ul>	00000	00000	00000	00000	00000
CARDIOVASCULAR	<ul> <li>high or low blood pressure</li> <li>angina or myocardial infarction</li> <li>arterial aneurysm</li> <li>peripheral artery or vein disorder</li> <li>murmur or rhythm irregularity</li> <li>congenital anomaly</li> </ul>	000000	000000	000000	000000	000000
RESPIRATORY	<ul> <li>viral or bacterial infection</li> <li>asthma, emphysema or COPD</li> <li>occupational or environmental disorder</li> <li>atelectasis or pneumothorax</li> <li>tumor of lung or respiratory passages</li> </ul>	00000	00000	00000	00000	00000
INTEGUMENT	<ul> <li>acne, dermatitis or psoriasis</li> <li>bacterial or fungal infection</li> <li>herpes simplex or zoster</li> <li>pigment disorders</li> <li>skin cancer</li> </ul>	00000	00000	00000	00000	00000

	4 = ROUTINELY (Daily)	0	1	2	3	4
SASTROINTESTINAL	<ul> <li>bacterial or viral infection</li> <li>appendicitis, cholecystitis or pancreatitis</li> <li>ulcer of stomach, intestine or colon</li> <li>hiatus or inguinal hernia</li> <li>colitis or diverticulitis</li> <li>hemorrhoids</li> <li>tumor of gastrointestinal tract</li> </ul>	0000000	0000000	0000000	0000000	0000000
ENAL/UROLOGICAL	<ul> <li>infection of kidney or urinary tract</li> <li>kidney stones</li> <li>chronic kidney disease or failure</li> <li>tumor of the kidney or bladder</li> </ul>	0000	0000	0000	0000	0000
/IALE REPRODUCTIVE	<ul> <li>male infertility or impotency</li> <li>prostate disorder</li> <li>congenital anomaly</li> <li>tumor of reproductive system</li> </ul>	0000	0000	0000	0000	0000
EMALE EPRODUCTIVE )R BREAST	<ul> <li>female infertility</li> <li>pregnancy</li> <li>menstrual disorder</li> <li>non-cancerous disorder of breast</li> <li>tumor of breast or reproductive system</li> </ul>	00000	00000	00000	00000	00000
IEMATOLOGICAL/ YMPHATIC	<ul> <li>anemia</li> <li>immunological disorder</li> <li>hereditary disorder</li> <li>polycythemia</li> <li>cancer of the marrow or lymphatic system</li> </ul>	00000	00000	00000	00000	00000

(During the past two years)	
	4 = ROUTINELY (Daily) -
	3 = OFTEN (1 or 2 per week) -
	2 = SOMETIMES (1 or 2 per month) -
	1 = RARELY (1 or 2 per year) -
	0 = NEVER -
ENDOCRINE/	• obesity
METABOLIC	thyroid or parathyroid disorder
	<ul> <li>adrenal disorder</li> <li>pituitary disorder</li> </ul>
	<ul> <li>thymus or pineal disorder</li> </ul>
	diabetes
	endocrine tumor
CHILDHOOD	<ul> <li>upper respiratory or ear infection</li> </ul>
DISORDERS	<ul> <li>measles/German measles</li> </ul>
	<ul> <li>mumps</li> <li>chickenpox</li> </ul>
	<ul> <li>whooping cough</li> </ul>
	• parasitic
VENEREAL	herpes II
	• gonorrhea
	<ul> <li>chlamydia</li> <li>venereal warts</li> </ul>
	• syphilis
FENT	ave or vision disorder
	<ul> <li>eye of vision disorder</li> <li>ear or hearing disorder</li> </ul>
	<ul> <li>disorder of nose or sense of sme</li> </ul>
	<ul> <li>disorder of throat or larynx</li> <li>tumor of eye, ear, nose or throat</li> </ul>
MISCELLANEOUS	allergies
	nutritional disorders
	<ul> <li>eating disorders</li> <li>psychological disorders</li> </ul>
	AIDS-related complex

### ACTIVITIES PERFORMED

RUCTIONS: This section contains a list of activities that chiropractors may perform in their practices. Some of these ities may not apply to your practice. Please respond to the statements in terms of what you are <u>now</u> doing or have doing over the **past two years** in your practice.

#### Using the rating scale

ach item in this inventory, you are asked to make two judgments using the FREQUENCY and RISK FACTOR rating s presented below.

QUENCY:	How often do you perform the activity in a typical series of 100 patients or in a group of the type of
	patients specified?

- 0 Never (does not apply to my practice)
- 1 Rarely (1-25%)
- 2 Sometimes (26-50%)
- 3 Frequently (51-75%)
- 4 Routinely (76-100%)

CFACTOR: In your opinion, what would be the risk factor to public health or patient safety of poor performance or omission of the activity by a chiropractor?

- 0 No risk
- 1 Little risk
- 2 Some risk
- 3 Significant risk
- 4 Severe risk

	0 1 2 3 4	Never Rarely Some Freque Routin	(does) (1-25) times ( ently (5) hely (76)	not app %) 26-50% 51-75% 5-100%	lγ) .) )		0 No 1 Lin 2 So 3 Si 4 Se	o risk ttle risk ome risk gnificar overe ris	c nt risk sk	
AMPLES	0	1	2	3	4	0	1	2	3	4
Order or perform an electrocardiogram as part of an initial or routine physical examination.	•	0	0	0	0	0	•	0	0	0
Order an electrocardiogram or refer a patient with a suspected heart problem to a cardiologist.	0	0	0	0	•	0	0	0	0	•
Determine the appropriate placements of chest leads for an EKG.	•	0	0	0	0	•	0	0	0	0
nterpret an EKG tracing.	0	•	0	0	0	0	0	0	•	0

: You may perform a procedure rarely, but the risk factor may be significant if performed poorly or omitted. Conversely, you may perform a procedure frequently, but omission of the activity may not necessarily present a significant risk to public health or patient safety.

These examples are hypothetical and are not intended to influence your rating of the procedures.

### ACTIVITIES

#### Using the rating scale

For each item in this inventory, you are asked to make <u>two</u> judgments using the rating scales presented. In the colu labeled "FREQUENCY," use the scale provided to indicate how often you perform the activity in a typical series of 1 patients or in a group of the type of patients specified. In the column labeled "RISK FACTOR," use the scale to prov your opinion of what would be the risk to public health or patient safety of poor performance or omission of the activity a chiropractor.

		0 1 2 3 4	Never Rarely Some Freque Routin	(does i (1-25%) times (2 ently (5 nely (76	not app %) 26-50% 1-75%) 5-100%	ly) ;) )		0 No 1 Lit 2 So 3 Si 4 Se	o risk tle risk ome risk gnificar overe ris	k ntrisk sk		
CA	SE HISTORY		FRI	EQUEN	ICY		RISK FACTOR					
Cr	ASE HISTORY	0	1	2	3	4	0	1	2	3		
1.	Take an initial case history from a new patient.	0	0	0	0	0	0	0	0	0		
2.	Identify the nature of a patient's condition using the information from the case history.	0	0	0	0	0	0	0	0	0		
3.	Perform a focused case history in order to determine what additional examination procedures or tests may be needed.	0	0	0	0	0	0	0	0	0		
4.	Take S.O.A.P. notes or case progress notes on subsequent patient visits.	0	0	0	0	0	0	0	0	0		
5.	Determine the appropriate technique or case management procedure using the information from the S.O.A.P. notes or case progress notes.	0	0	0	0	0	0	0	0	0		
6.	Update case history for a patient whose condition has changed or who presents with a new condition.	0	0	0	0	0	0	0	0	0		
DL	IVSICAL EXAMINATION		FR	EQUEN	VCY			RIS	K FAC	TOR		
FF	ITSICAL EXAMINATION	0	1	2	3	4	0	1	2	3		
7.	Perform a physical examination on a new patient.	0	0	0	0	0	0	0	0	0		
8.	Assess the patient's general state of health using the information from the physical examination.	0	0	0	0	0	0	0	0	0		
9.	Perform a regional physical examination to futher define the nature of the patient's presenting complaint, or to determine what, if any, further testing procedures may be indicated.	0	0	0	0	0	0	0	0	0		
10.	Update certain physical examination procedures periodically or when patient's condition changes.	0	0	0	0	0	0	0	0	0		

	0 1 2 3 4	Never Rarely Some Frequ Routin	not app %) 26-50% 51-75% 5-100%		0 No 1 Lit 2 So 3 Sig 4 Se					
MS EXAMINATION		FR	EQUEN	ICY			RIS	K FAC	TOR	
Perform a general orthopedic and/or neurological examination on a new patient.	0	1	2	3	4	0	1	2	3	4
Perform a focused orthopedic and/or neurological examination based on the findings from the orthopedic and/or neurological survey.	0	0	0	0	0	0	0	0	0	0
Determine the nature of a patient's condition using information from the orthopedic and/or neurological examination.	0	0	0	0	0	0	0	0	0	0
Determine what additional laboratory, X-ray, special study, and/or referral may be indicated using information from the orthopedic and/or neurological examination.	0	0	0	0	0	0	0	0	0	0
Update appropriate orthopedic and/or neurological tests periodically or as patient's condition changes.	0	0	0	0	0	0	0	0	0	0
-RAY EXAMINATION		FRI	EQUEN	ICY			RIS	K FAC	TOR	
Perform an X-ray examination on new patients, and develop X-rays, either manually or with automatic processor.	0	0	0	0	0	0	0	0	0	0
Determine the presence of pathology, fracture, dislocations or other significant findings using information from an X-ray examination.	0	0	0	0	0	0	0	0	0	0
Determine areas of instability or dynamic joint dysfunction using information from a stress X-ray.	0	0	0	0	0	0	0	0	0	0
Determine the possible presence of a subluxation or a spinal listing using findings from an X-ray examination.	0	0	0	0	0	0	0	0	0	0
Update the X-ray examination or perform new X-rays on a patient whose condition has changed or who has a new condition.	0	0	0	0	0	0	0	0	0	0
BORATORY AND SPECIAL STUDIES	0	FRE		ICY	4	0	RIS	K FAC	TOR	4
Draw blood, collect urine, or perform laboratory or other specialized procedures in your office.	0	0	0	0	4	0	0	0	0	4
Order laboratory tests from hospital or private laboratory.	0	0	0	0	0	0	0	0	0	0
Refer patients for MRI, CT scan, EKG or other specialized procedure.	0	0	0	0	0	0	0	0	0	0
Confirm a diagnosis or rule out health-threatening conditions using information from laboratory or specialized studies.	0	0	0	0	0	0	0	0	0	0
Augment history, examination or X-ray findings using information from laboratory or specialized studies.	0	0	0	0	0	0	0	0	0	0

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		0 1 2 3 4	Never Rarely Some Freque Routin	(does r (1-25%) times (2 ently (5 nely (76		0 No risk 1 Little risk 2 Some risk 3 Significant risk 4 Severe risk				
	CNOSIS	FREQUENCY					RISK FACTOR			
DIA	10110313	0	1	2	3	4	0	1	2	3
26.	Relate problems identified in the history and examination findings to a pathologic, pathophysiologic, or psychopathologic process.	0	0	0	0	0	0	0	0	0
27.	Distinguish between life- or health-threatening conditions and less urgent conditions using information from the history and examination findings.	0	0	0	0	0	0	0	0	0
28.	Predict the effectiveness of chiropractic care for the individual patient using information from the history and examination findings.	0	0	0	0	0	0	0	0	0
29.	Refer patients to other health care practitioners based on information from the history and examination findings.	0	0	0	0	0	0	0	0	0
30.	Arrive at a diagnosis or clinical impression on the basis of history and examination findings.	0	0	0	0	0	0	0	0	0
			FRE	QUEN	ICY			RISK FACTOR		
UII		0	1	2	3	4	0	1	2	3
31.	Perform specific chiropractic examination procedures on patients with spinal or extra-spinal joint conditions.	0	0	0	0	0	0	0	0	С
32.	Utilize instruments unique to chiropractic or primarily in the chiropractic domain as part of the patient examination.	0	0	0	0	0	0	0	0	С
33.	Determine the appropriate chiropractic case management or technique using information from a chiropractic examination.	0	0	0	0	0	0	0	0	С
34.	Perform chiropractic adjustive techniques.	0	0	0	0	0	0	0	0	С
35.	Update chiropractic examination procedures on subsequent visits to determine appropriate use of technique or case management.	0	0	0	0	0	0	0	0	С
SIII		FREQUENCY					RISK FACTOR			
50		0 1 2 3 4				0 1 2 3				
36.	Evaluate the patient's condition to determine if procedures other than adjustive techniques may be indicated.	0	0	0	0	0	0	0	0	С
37.	Determine indications or contraindications for the use of a supportive technique.	0	0	0	0	0	0	0	0	C
38.	Perform treatment procedures other than adjustive techniques in the management of patient care.	0	0	0	0	0	0	0	0	C
39.	Refer patients to a physical therapist, massage therapist, nutritionist or other health care practitioner based on patient's condition.	0	0	0	0	0	0	0	0	(
40.	Monitor the effectiveness of non-adjustive techniques or therapeutic procedures.	0	0	0	0	0	0	0	0	(

				<ol> <li>Never (does not apply)</li> <li>Rarely (1-25%)</li> <li>Sometimes (26-50%)</li> <li>Frequently (51-75%)</li> <li>Routinely (76-100%)</li> </ol>						0 No risk 1 Little risk 2 Some risk 3 Significant risk 4 Severe risk				
CASE MANAGEMENT			FREQUENCY						RISK FACTOR					
_	or to E the transfer the transfer to the trans	0	1	2	3	4	0	1	2	3	4			
١.	Discuss alternative courses of action with patient based on assessment of patient's condition.	0	0	0	0	0	0	0	0	0	0			
<u>}</u> .	Recommend and/or arrange for services of other health professionals when patient's condition warrants.	0	0	0	0	0	0	0	0	0	0			
١.	Modify or revise case management as patient's condition improves or fails to improve.	0	0	0	0	0	0	0	0	0	0			
•	Encourage patient to make appropriate changes in habits or lifestyle that will result in prevention of reoccurrences or improvement of health.	0	0	0	0	0	0	0	0	0	0			
	Maintain written record of problem(s), goals, intervention strategies, and case progress.	0	0	0	0	0	0	0	0	0	0			

### **OTHER ESSENTIAL ACTIVITIES**

you feel that there are additional procedures that you use in your practice which are absolutely essential to the salth or safety of your patients, please describe these procedures in the space provided below.

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### TREATMENT PROCEDURES

Please indicate the primary technique approach that you use in your practice.

- O Upper cervical
- O Full spine
- O Other

-

 Please indicate whether or not you have used the following adjustive techniques in your practice during the past two yes

YES	NO	ADJUSTIVE TECHNIQUE
0	0	Activator
0	0	Applied kinesiology
0	0	Barge
0	0	Cox/Flexion-Distraction
0	0	Cranial
0	0	Diversified
0	0	Gonstead
0	0	Grostic
0	0	Life upper cervical
0	0	Logan Basic
0	0	Meric
0	0	NIMMO/Tonus receptor
0	0	NUCCA
0	0	Palmer upper cervical/HIO
0	0	Pettibon
0	0	Pierce-Stillwagon
0	0	SOT
0	0	Thompson
0	0	Toftness
0	0	Other

sase indicate whether or not you have used the following non-adjustive supportive techniques in your practice during the st two years.

YES	NO	NON-ADJUSTIVE TECHNIQUE
000000000000000000000000000000000000000	000000000000000000000000000000000000000	Acupressure or meridian therapy Acupuncture Biofeedback Bedrest Bracing with lumbar support, cervical collar, etc. Casting or athletic taping/strapping Corrective or therapeutic exercise . Diathermy - shortwave or microwave Direct current, electrodiagnosis or iontophoresis Electrical stimulation - TENS, high-volt, low-volt, EMS Foot orthotics or heel lifts Homeopathic remedies Hot pack/moist heat Ice pack/cryotherapy Infrared - baker, heat lamp or hot pad Interferential current Massage therapy Nutritional counseling, therapy or supplements Paraffin bath Traction Ultrasound Ultraviolet therapy Vibratory therapy Whirlpool or hydrotherapy Other

**HANK YOU** very much for your contribution to this important research study. If you wish to make any comments r suggestions, please use the space below.

# Epilogue

It is common for an abundance of newly acquired information to produce a proportionate number of questions. Given this trend, the questions raised by data from the NBCE *Job Analysis of Chiropractic in Australia and New Zealand* came as no surprise.

These questions include the obvious: "Who might use this new data, and how might it appropriately be applied?" Those closely connected with the study additionally asked such questions as, "Have we accomplished our objectives?" "What are the limitations of the data gathered?" and "Would we want to make any procedural modifications in similar studies conducted in the future?"

To a very large degree, the applications of the data will remain fluid, to be considered, weighed and implemented according to a broad set of needs found in disparate corners of society. Academicians may find the job analysis data useful for one purpose, while state/territorial and provencial registration authorities may find it useful for another. Individual health care providers may benefit by comparing the data to their own habits and knowledge.

In exploring the possibilities of further data applicability, the following criteria should be acknowledged: 1) the elements which were measured, and 2) the methods by which those elements were rated. The job analysis sought to determine the conditions the chiropractor typically encounters, the treatment he/she is likely to administer or recommend, and the risk associated with rendering this treatment.

A job analysis is equipped to provide information about the conditions and activities licensed chiropractic practitioners should be best prepared to handle -- those they encounter most often, and those which are accompanied by the greatest risk. This information can be quite valuable. For example:

• Chiropractic colleges typically seek to teach and thoroughly test student proficiency in the activities chiropractors will be called upon to perform routinely and those which carry a significant degree of risk.

 Registration authorities typically endeavor to assess registration candidates' knowledge and skills in areas that they as practitioners are likely to encounter, particularly those which carry a significant degree of risk.

As stated at the beginning of this report, the NBCE "sought to provide the health care field with the most credible, relevant, and accurate reference possible, one which documents chiropractic as it is defined by those who practice it as a full-time profession." Those who guided and conducted the job analysis project firmly believe this objective has been achieved.

It was not the NBCE's objective to define a chiropractic scope of practice; this is determined legislatively on a state, territorial or provencial basis. Nor was it the intention of the NBCE to establish guidelines for practice, to promote any particular philosophical doctrine, or to infer judgments.

In evaluating the limitations of this study, several areas surfaced during the project. Some of these --such as the accuracy of registration lists provided by the Chiropractors' Associations, the recollections of the respondents, and the number of individuals (approximately 35% in Australia, and approximately 25% in New Zealand) who failed to respond to the survey -- were largely outside NBCE control.

In other areas, the NBCE proceeded on the basis of job analysis research and procedural precedent. Areas inevitably accompanied by the possibility of imprecision included: the survey text upon which the resulting data hinged; the supposition that all respondents would similarly interpret the survey's rating scales and terms; and the interpretation of the importance factor within the study.

A wealth of information beyond that published in this text still lies within the data amassed by the NBCE job analysis survey instrument. Time, staff, and funding limitations required that this publication report the project findings in an abbreviated or summarized form.

The NBCE conducted similar job analyses in the United States and Canada as requested by various representatives of chiropractic licensure and education in those countries. A four-volume set including two volumes addressing chiropractic in the United States, a Canadian volume and an Australian/New Zealand volume are currently available from the NBCE.

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# Appendix D Listing of Survey Participants in Australia

The names of those job analysis survey participants who authorized their inclusion in this report appear below. A complete listing of participants is on file at NBCE headquarters.

#### AUSTRALIAN TERRITORY

J M BEACHER D C NICOLAOS GONDZIOULIS D C CHARLES W KEYNES D C PAUL R LE-LIEVRE D C KEITH J MCDOWALL D C FIONA M MCKENZIE D C THEONI STATHIS D C MARK P TAPPER D C SHARON L WILLIAMS D C

#### NEW SOUTH WALES

ANTONIO ALESSI D C ROYCE ALLENSON D C PHILLIP T ARENTZ D C G NEIL AUSTIN D C MARIA BERNARD D C CLIVE R BOND D C ROSS B BRIDLE D C GEOFFREY E CAMERON D C LESLIE L CARROLL D C MARY ANN CHANCE-PETERS D C JOHN CICE D C COLIN D CLAREY D C PAUL M CONDON D C JOHN D COVETZ D C GRAHAM R DALGLISH D C ROBERT D DAVIS D C JOHN F DE VOY D C MARK P DEAL D C PHILLIP J DEVEREAUX D C KEVIN DU-VAL D C RONALD C DUNCAN D C CATHERINE ELKIN D C JOHN S FRANZI D C CHIK FUNG DC WAYNE D GARD D C PETER J GRIEVE D C MICHAEL HALL D C CHRISTOPHER D HEGGIE D C MICHAEL D HOARE D C RODERICK N HOOK D C DAVID P HUSBAND D C BRADLEY A HYNARD D C KLARA M INGALL D C W JOHN IRVINE D C JOHN L KELLY D C BERNARD LYLE D C ANDREW MACFARLANE D C FRANK MARCELLINO D C

JAMES R MARSH D C KEN MCAVINEY D C IAN MCLEOD D C LEONIE J MCMAHON D C ANTHONY B MEMMOLO D C DWAYNE R MINTER D C

#### NORTHERN TERRITORY

ROBERT K HACKETT D C GLENN LU D C PAUL D PRINGLE D C

#### QUEENSLAND

MURRAY B ANDERSON D C DARYL R ANSELL D C MICHAEL R AUCOTIN D C LEO BARNATHAN D C ALISTAIR E BAXTER D C NEVILLE J BEATTIE D C RUSSELL A BRADY D C SUSANNE L CALDECOTT D C JOHN CAPPOLA D C KEITH H CHARLTON D C SCOTT W CHAMPION D C JAMES D CROCKETT D C KENNETH A DAVEY D C PETER J DERIG D C DAVID J DOYLE D C WILLIAM A ECONE D C NOEL J ELLIOTT D C HARALD FALGE D C JAMES D FARMER D C JOHN FROELICH D C HOWARD FRYE D C DARYL E FURNESS D C STEVEN W GRIFFITH D C CARI J HAMILTON DC EARL E MURRAY D C GLENN R NOLAN D C HOWARD W O'MEARA D C GEORGE | PAPWORTH D C BRIAN L PARKER D C ROXANNE L PAYNE D C

#### SOUTH AUSTRALIA

JOSEPH BOND D C SIMON A BREEN D C STEPHEN P BROWN D C

ROBERT BURGESS D C BRENDON C CHAPMAN D C TERRY C CRISP D C MARY E DANIELS D C KYM R DAVIS D C BEVAN G DINNING D C PHILLIP R DONATO D C JOHN L DRAPER D C MICHAEL F GREIG D C PAUL D HANNAN D C ANTHONY J HEADLAND D C BRETT A HOULDEN D C KENNETH W HUGHES D C ANTHONY R HUMAN D C ALEXANDER JEFFERS D C VICTOR J JOPPICH D C KRISHNA KESWANI D C DAVID F KIMBER D C BRENTON KLEMM D C GERRY B KULBYS D C PAUL LAWRENCE D C GRAHAM E LE-LIEVRE D C JOHN E LONGBOTTOM D C JAMES G MADIGAN D C JONATHAN D MAN D C ROBERT MARIN D C DONALD K MCCLEARY D C SUZANNE J MCEWEN D C ANDRE D MENASH D C BERNARD NADOLNY D C KLAUS R NEBEL D C NAOMI PERRY D C ENRICO PIEROTTI D C GREGREY J PLADSON D C MARIA I POWELL D C DAVID A PRIEST D C ANICA RANT DC ODETTE T READER D C BERNARD C SETFORD D C CHRISTOPHER J SLAUGHTER D C SCOTT A SPRINGER D C DAVID B STAPLETON D C KEVIN A SZEKELY D C DEREK C THOMPSON D C MARK J TONKIN D C JOHN A TROWSE D C GRAHAM WATHERSTON D C KYM A WILLIAMS D C GLENN W WORTHINGTON-EYRE D C WESTERN AUSTRALIA WAYNE ADAMS DC CHARLES BRO D C SIMON B CARLIN D C GAVIN L COCKRAN D C PAUL D DILLON D C STEPHEN FARRELL D C ROSS E FUNNELL D C G BEVAN GOODREID D C ESYLTT GRAHAM D C BRADLEY R GRANT D C TERRENCE E HAYNES D C DENNIS D HEGLUND D C DOUGLAS L HERRON D C ANTHONY G IVORY D C ANDERS E JENSEN D C GRAEME B LOTON D C DAVID P LOURIE D C ROBERT L MATTIN D C DAVID R MINNS D C NOEL J PATTERSON D C LESLIE S PEREIRA D C GEOFFREY R PITMAN D C DENNIS N PLANE D C MONICA PLANE D C DAVID B PONTON D C MICHAEL POWDERLEY D C KATHLEEN B ROBERTS D C BRENNAN J ROSE D C ROBERT C SCOTT D C THOMAS A SCOTT D C PAUL G STAERKER D C ROBERT L TODD D C PHILIP J WILLIAMS D C DOUGLAS O WINTER D C SHIRLEY I WINTER D C TASMANIA

EVERETT M HORCH D C DENNIS MANSFIELD D C HANS J MUELLER D C PAUL R SEARLE D C GEOFFREY J STANTON D C D BRUCE THAYER D C SHANE J WATTERSON D C

#### VICTORIA

SHAWN ACKERS D C RICHARD A AMES D C FARNOUSH AZARIMARV D C RUSSELL BANKS D C STEPHEN J BARDSLEY D C ALEXANDER J BAXTER D C MICHAEL A BAY D C ROBIN F BIRCHALL D C DAVID A BLACK D C GRAEME F BLENNERHASSETT D C PAUL A BOUX D C WALTER G BOWERS D C PETER BRESNAHAN D C DOUGLAS C BRINSMEAD D C JUSTIN L BROWN D C ALAN J BRUCE D C PETER BRYNER D C DAVID N CAHILL D C

ASHLEY CAMPBELL-BIRD D C DONALD J CANNON D C ANTHONY G M CAPIAGHI D C SERGIO A CARLEI D C CRAIG S CARTER D C WAYNE M CHAMBERS D C JAN CHARLTON DC TIM W CLARE D C GREGORY J CONLAN D C GREG CONNELL D C JOHN A COOK D C PHILLIP T CORBETT D C ANTHONY J COXON D C ANDREW J CRAMB D C NICOLA N D'AMICO D C ANTHONY DAWSON D C IAN M DEITCH D C JOEL DIXON D C PHILIP J DRYSDALE D C PETER J DUN D C W BRUCE ELLIS D C KENNETH J EWEN D C JANUS J FAWKE D C PAUL G FISHER D C ANTHONY FORNO D C TIMOTHY FREE D C KENNETH R GIVEN D C PETER A GLYNN D C JOHN E GOWERS D C PETER D GRANT D C JACK GURMAN DC ROBERT J HENNESSEY D C KEVIN HORSEY D C MICHAEL E HOUGHTON D C R GRAHAM HUNT D C WARWICK A HUTCHINSON D C GEOFFREY A JACKSON D C FRANK M JOWETT D C PAUL D KELLY D C HELI KIVIMAA-WOOD D C CHRISTOS KOMINATOS D C GARY C KREW D C WILLIAM J LADSON D C ERNEST H LAWRENCE D C STAMATIS LIVERIADIS D C CHRISTOPHER J LONG D C LISA LOVETT D C LEO MAGUIRE D C ROSS W MCILVEEN DC HELEN MCKENZIE D C RODNEY MCVICAR DC DAVID A MORTON D C PAUL D MUDGE D C CAROLINE MUNDAY D C MARK J NAVIN D C JULIUS J NOVOTNY D C JOHN PANTAZOPOULOS D C ROBERT E PEACOCK D C FRANK O PEDERICK D C JOHN F PETTIT D C STANLEY POON D C PETER P PORTELLI D C STEVEN PRATT D C TIMOTHY J RAVEN D C IAN ROBERTSON D C

WILLIAM F RUSSELL D C LEE R SANDLEY D C WAYNE P SEDDON D C MORGAN G SIMMONDS D C GRAEME L SINCLAIR D C NEIL M SMITH D C MARK C SPEECHLEY D C KENNETH J STEWART D C OWEN E STORRIE D C DALE A SYNON D C ROHAN W TEASDALE D C BRUCE W THOMPSON D C EMIL S TURUDIA D C PETER D ULBRICK D C JOSEPHUS L VAN DEN HOEK D C PETER F VANWUNNIK D C NORMAN G VRADENBURG D C CHRIS WEBSTER D C JORGEN WILHELM D C MICHAEL WOOD DC BRIAN S YEE D C

# Appendix E Listing of Survey Participants in New Zealand

The names of those job analysis survey participants who authorized their inclusion in this report appear below. A complete listing of participants is on file at NBCE headquarters.

NEW ZEALAND D P BACKHOUSE D C TGRBRAUN DC W N BROWNE D C J M BRUIN D C P M BRUNTON D C C M BURKE D C JRBURT DC L P BUSCOMB D C A L CALDER D C PACAMPBELL DC R P CHEYNE D C A J CHIVERS D C M J CLIFFORD D C W D DICK D C J W DUGGAN D C B M DUNNINGHAM D C A G ELLEY D C L J GILMORE D C N J HALDANE D C CLHILL DC PRHILLIER DC BGIRELAND DC B F KELLY D C GRKING DC A MACAULAY D C B M MCKELLOW D C PLMCMASTER DC R L MORSE D C SRMORSE DC LCMUDGWAY DC D B MURPHY D C HWHPHELPS DC P F PLATT D C TJPOND DC G L RIXON D C REROE DC P V ROSE D C S C ROUGHAN D C PRSAWYER DC PNSCOTT DC DRSIM DC D M SISSONS D C RTSMITH DC DJDSNOW DC G D STEWART D C JW STINEAR DC R G TAYLOR D C EATIMINGS DC

R J TODD D C A TYNDALL D C P VAN ZWEEDEN D C J VODANE D C A S WADE D C G J WHITE D C W WILLIAMS D C

# Appendix F Glossary of Terms or References

#### ACCE

Australasian Council on Chiropractic Education.

#### activator technique

A system of adjustment using a hand held, manually assisted, spring-activated device which delivers a controlled thrust.

#### acupressure/Meridian therapy

The practice of applying digital pressure to stimulate certain sites on the skin to affect functional mechanisms of the body. This therapy is based on the belief that these sites are organized along meridians which carry the life force that innervates the body.

#### acupuncture

The practice of insertion of needles into specific exterior body locations to relieve pain, to induce surgical anesthesia, and for therapeutic purposes.

#### adjustment

A forceful thrust which is meticulously controlled as to its direction, amount of force employed, and the quickness with which it is applied.

#### adrenal disorder

A dysfunction of the adrenal gland which is located near the kidney.

#### AMA

American Medical Association

# amyotropic lateral sclerosis (ALS), multiple sclerosis or Parkinson's disease

Nervous system disorders characterized by demyelinization and degeneration of neural tissue.

#### angina pectoris

A condition marked by recurrent pain in the chest or left arm, caused by an inadequate blood supply to the heart muscle.

#### APA

American Psychological Association

#### applied kinesiology

Applied kinesiology focuses on the identification and correction of proprioceptive dysfunction of ligaments and of the muscle spindle cells and golgi tendons. In addition, applied kinesiology is concerned with the vascular, lymphatic, and other systems supporting proper muscle dynamics.

#### arterial aneurysm

An enlargement of one aspect of an artery caused by weakness in the arterial wall.

#### aseptic necrosis

A condition which is not a specific disease entity but caused by disruption in normal circulation to the involved bone. It can result in pain, loss of bone density, bone collapse or fracture. Some possible areas of involvement include the hip, shoulder, elbow, wrist, knee, or heel.

#### associateship

A practice arrangement between two or more chiropractors. Commonly entered into by recent chiropractic college graduates in order to gain clinical practice experience.

#### asthma

A condition marked by recurrent attacks of wheezing due to spasmodic contraction of the bronchi.

#### atelectasis or pneumothorax

Collapse of a part or the whole of the lungs due to absence of gas in the lung cavity or the presence

of air or gas in the pleural cavity located between the lung and chest wall.

#### **Barge technique**

A system of x-ray analysis, palpation, and adjusting procedures directed at correcting vertebral misalignments involving a shifting of the nucleus pulposus.

#### **B.E.S.T.** Technique

Bio-Energetic Synchronization Technique.

#### biofeedback

A training technique designed to enable an individual to gain some element of control over autonomic body functions. The technique is based on the learning principle that a desired response is learned when received information (feedback) indicates that a specific thought complex or action has produced the desired response.

#### bursitis or synovitis

Inflammation of the bursa or synovial membrane. Bursitis is occasionally accompanied by a calcific deposit in the underlying supraspinatus tendon.

#### carpal or tarsal tunnel syndrome

Peripheral nerve compression syndromes; carpal tunnel syndrome affects the median nerve in the carpal tunnel of the wrists; and tarsal tunnel syndrome affects the posterior tibial nerve or plantar nerves in the tarsal tunnel of the foot.

#### cervical spine

The first seven vertebra, the first of which articulates with the base of the cranium, and the seventh articulates with the uppermost vertebra of the thorax.

#### certification

A voluntary program that typically recognizes individuals that have the education or training beyond the basic level of competency necessary to practice in a profession.

#### chiropractic

Chiropractic is a branch of the healing arts which is concerned with human health and disease processes. Doctors of chiropractic are physicians who consider an individual to be an integrated being but give special attention to spinal mechanics, musculoskeletal, neurological, vascular, nutritional, and environmental relationships.

#### chlamydia

A sexually transmitted disease caused by the bacteria of the family chlamydiaceae.

#### colitis or diverticulitis

Inflammation of the colon or the diverticulum.

#### concurrent condition

A bodily condition which may include illness, malfunction, or disease for which the patient is not reporting to the chiropractor for care. The condition is called "concurrent" because it is present with another condition for which the person is seeking care.

#### congenital/developmental anomaly

An abnormality that is present at birth or appears in later development.

#### content-related evidence of validity

Evidence that shows the extent to which the content domain of a test is appropriate relative to its intended purpose. Such evidence is used to establish that the test includes a representative or critical sample of the relevant content domain and that it excludes content outside that domain.

#### COPD

Chronic Obstructive Pulmonary Disease. Generalized airway obstruction, particularly of small airways, associated with combinations of chronic bronchitis, asthma, and emphysema.

#### correlation coefficient

An index which can range from -1.00 through 0 to +1.00, indicating the extent to which two variables relate.

#### **Cox/Flexion-Distraction technique**

A system of procedures using distraction, or doctor-controlled tractive forces applied to a specific level of the spine with or without articular facet adjustment.

#### cranial nerve disorder

A condition affecting one or more of the twelve pairs of cranial nerves.

#### cranial technique

A technique to correct immobilities and asymmetries of the cranial bones.

#### cryotherapy

The use of cold as a treatment modality.

#### CT scan

Computed tomograms which combine the use of computers with advances in X-ray technology to produce sectional images in almost any anatomical plane of the body.

#### D.C.

Doctor of Chiropractic

#### **Delphi study**

A method of study originally developed by the RAND Corporation to arrive at reliable predictions about the future of technology; widely used when convergence of opinion through group consensus is needed.

#### dermatitis

Inflammation of the skin.

#### diathermy

Therapeutic use of high-frequency electric current to produce a thermal effect (heat) in the deep tissues of the body.

#### direct current

An electrical current which flows in one direction only. When used medically it is called the galvanic current; this current has distinct and marked polarity and marked secondary effects. These secondary effects include thermal changes and pain control. Galvanic stimulation may also be used to move fluids, exercise muscles, and relax spasticity.

#### diversified technique

Full spine chiropractic adjustive technique designed to correct vertebral malpositions and fixations in the most efficacious manner possible with respect to the clinical circumstances. In general, each college teaches its own diversified technique.

#### electrical stimulation

The use of an electrical current in the 1-4000Hz range to elicit a desired physiologic response.

#### emphysema

A pathological accumulation of air in tissues or organs; applied especially to swelling of the alveoli or of the tissue connecting the alveoli in the lungs, accompanied by tissue atrophy and breathing impairment.

#### endocrine or metabolic bone disorder

Condition of the endocrine or metabolic system that produces a pathological effect on bone tissue.

#### epiphysitis

Inflammation of an epiphysis or of the cartilage that separates it from the main bone.

#### extra-spinal joint conditions

Conditions involving the joints not of the spinal column, e.g. ankle, knee, shoulder, fingers, etc.

#### extremity subluxation/joint dysfunction

Refers to an incomplete or partial dislocation in which the articular surfaces have not lost contact. A certain degree of joint fixation exists which prevents normal joint motion and a return of the joint to its normal juxtaposition. Extremity subluxation may involve static properties (malposition) and/or dynamic properties (joint fixation) both of which result in joint dysfunction.

#### FCER

Foundation for Chiropractic Education and Research

#### FCLB

Federation of Chiropractic Licensing Boards

#### field internship

Practicing under the license and/or direct supervision of one or more physicians in an existing fee-for-service practice.

#### field test

A trial test of the survey of chiropractic given to 30 practitioners. Used to identify and modify any problems participants may have had in understanding and completing the survey.

#### finite population correction term

A factor included in the standard error formula which reduces the standard error as the proportion of the population sampled increases.

#### frequency factor

The estimated number of times the practitioner completing the survey performed the specified activity.

#### full spine

A chiropractic treatment approach which assesses all spinal levels as compared to approaches which focus on selected areas of the spine.

#### **Gonstead technique**

A "full spine" chiropractic method developed by Dr. Clarence Gonstead which utilizes radiographic analysis, instrumentation, and palpation to locate and specifically determine the malposition of subluxated vertebrae, which are then corrected manually.

#### **Grostic technique**

An upper cervical technique developed by Dr. John D. Grostic, Sr. that utilizes a specific measured analysis of the cervical spine together with manual adjusting to re-establish biomechanical balance of the spine.

#### hiatus or inguinal hernia

The protrusion of a loop or a part of an organ or tissue through an abnormal opening.

#### нмо

Health Maintenance Organizations

#### homeopathic remedies

Substances which are capable of producing in healthy persons symptoms like those of the disease being treated. Extremely small dosages are used to stimulate the body's natural defenses against the disease.

#### hyperlordosis of cervical or lumbar spine

Increased anterior curvature of cervical or lumbar spine.

#### iatrogenic

A result of treatment by a doctor

#### ICA

International Chiropractic Association

#### impairment evaluation

An evaluation to determine if there is an impairment of a body part.

#### immunological disorder

Disorder of the immune system.

#### importance

In the analysis of the survey, Frequency and Risk were multiplied together and the resultant product was labeled "importance".

#### interferential current

A physiotherapy modality which consists of two medium frequency currents that cross deep within a body part, and in so doing, trigger the formation of a third current that radiates from the inside to the outside of the target tissue, providing therapeutic treatment to the tissues.

#### infrared baker lamp

A source of superficial heat utilizing radiation

with a wave length between 7,700 and 14,000 Angstroms. Units are generally classified as either luminous or nonluminous.

#### integument

The skin as the covering of the body. Also known as integumentum.

#### interim survey form

The survey form administered to a small sampling of chiropractors and used to refine the form used for the study called "Survey of Chiropractic Practice".

#### intervertebral disc syndrome

A conglomeration of signs and symptoms usually consisting of episodic low back pain with possible symptoms of unilateral sciatic pain, progressive buttock, thigh, calf, and heel pain. There may also be a "C" scoliosis away from the side of pain, splinting, and a flattening of the lumbar spine. Weakness, numbness, and decreased reflexes may be noted in the involved extremity. This is a clinical diagnosis of disc herniation not verified by surgical intervention.

#### job analysis

Any of several methods of identifying the tasks performed on a job or the knowledge, skills and abilities required to perform that job.

#### job inventory

A list of tasks and functions performed on a job. The basis for forming a job analysis.

#### kyphosis of thoracic spine

Increased posterior convexity of the thoracic spine.

#### LBP

Low back pain

#### licensure

The process of obtaining a license which is required by law in order to enter a profession. It is the most restrictive form of occupational regulation because it prohibits anyone from engaging in the activities covered by the scope of practice without permission from a regulatory agency.

#### Life upper cervical technique

An upper cervical technique that utilizes a specific measured analysis of the cervical spine and a mechanical adjusting instrument to re-establish biomechanical balance of the spine.

#### Logan basic

A full spine technique that utilizes a system of body mechanics and adjusting procedures developed by Dr. Hugh B. Logan.

#### lumbar spine

The portion of the spine between the thorax and pelvis; e.g. low back vertebrae.

#### manipulation

The therapeutic application of manual force. Spinal manipulative therapy broadly defined includes all procedures in which the hands are used to mobilize, adjust, manipulate, apply traction, massage, stimulate, or otherwise influence the spine and paraspinal tissues with the aim of influencing the patient's health.

#### mean

Arithmetic average.

#### Meric technique

A system of analysis and adjusting in which the body is divided into zones.

#### methodology

The design of a study or procedures utilized in a study.

#### MRI

Magnetic Resonance Imaging. A diagnostic imaging modality that uses a magnet, radio frequency transmission and reception, and has the ability to discriminate the location of a signal arising from the body of a patient in a threedimensional coordinate system.

#### muscular atrophy

Wasting away of muscle tissue.

#### muscular dystrophy

Degenerative genetic disease characterized by weakness and atrophy of muscles.

#### muscular strain/tear

Injury caused by an over-exertion or over-stretching of some part of the musculature and ligamentous structures.

#### National Advisory Committee

Committee composed of representatives from state examining boards, chiropractic educators, and private practitioners to offer guidance to the job analysis project.

#### National Board of Chiropractic Examiners (NBCE)

International testing agency for the chiropractic profession.

#### **NBCE Job Analysis Steering Committee**

Committee composed of representatives of the Board of Directors of the National Board of Chiropractic Examiners, given the responsibility of guiding the job analysis project.

#### neuralgia

Pain which extends along the course of one or more nerves.

#### neurological exam

Examination of the nervous system.

#### neuromusculoskeletal examination (NMS)

A series of specific tests performed to determine the structural integrity and functional capacity of the bones, muscles, and nerves of the body.

#### NIMMO/Tonus receptor technique

System of deep connective tissue and fascial manipulation developed by Dr. Raymond Nimmo.

#### NUCCA technique

An upper cervical technique developed and endorsed by the National Upper Cervical Chiropractic Association; the objective of this technique is to balance the pelvis and spinal column to the body's vertical axis.

#### NZCB

New Zealand Chiropractic Board.

#### objective structured clinical examination

An examination characterized by the use of standardized patients who are extensively trained to reliably portray a health condition.

#### orthopedic exam

Examination of structures involved in locomotion including joints, muscles, ligaments and connective tissue.

#### orthotics

An orthopedic appliance or apparatus used to support, align, prevent, or correct deformities or to improve the function of parts of the body.

#### osteoarthritis/degenerative joint disease

A disease occurring primarily in older people, characterized by degeneration of the cartilage and hypertrophy of bone. Generally accompanied by pain and stiffness.

#### osteopath

A healthcare practitioner whose treatment is based on the theory that the body is capable of making its own remedies against disease and other toxic conditions. Osteopaths in North America utilize generally accepted physical, medicinal, and surgical methods of diagnosis and therapy, while placing emphasis on the importance of normal body mechanics and manipulative methods of detecting and correcting faulty structure. Osteopaths in Australia and New Zealand almost exclusively use manipulation in treatment, while medicinal and surgical methods are not utilized.

#### osteoporosis/osteomalacia

Conditions marked by softening or degenerating of the bone mass sometimes accompanied by pain, tenderness, muscular weakness, leading to bone fractures with minimal trauma.

#### Palmer upper cervical/HIO technique

A technique that utilizes specific x-ray analysis and adjusting procedures developed by Dr. B.J. Palmer for correction of subluxations in upper cervical vertebrae only.

#### paraffin bath

The therapeutic application of melted paraffin wax that has been diluted with mineral oil in a predetermined ratio (eg. 4:1). A form of superficial heat transferred by conduction.

#### pathology

The structural and functional manifestations of disease.

#### peripheral neuritis

Inflammation, pain, and tenderness of a peripheral nerve.

#### Pettibon technique

An upper cervical technique that is based on spinal biomechanics and engineering physics theories developed by Dr. Burl Pettibon. The technique utilizes specific x-ray analysis and manual adjusting techniques as well as a mechanical adjusting instrument.

#### Pierce-Stillwagon technique

A full spine technique that utilizes specific X-ray analysis procedures, instrumentation procedures and adjusting procedures developed by Dr. Walter Pierce and Dr. Glenn Stillwagon.

#### pigment disorders

A skin disorder characterized by abnormal skin coloring.

#### pilot test

A preliminary survey conducted by the NBCE to help determine the appropriate format and content of the Survey of Chiropractic Practice.

#### pituitary disorder

A disorder of the pituitary gland most commonly originating in the anterior lobe of the pituitary gland or in the neurohyophysis.

#### polycythemia

An increase above normal in the number of red cells in the blood.

#### practical exam

An exam that requires licensure candidates to perform tasks or procedures which might commonly be required in practice.

#### **Practice Model Log**

An instrument developed for self-administration by practicing chiropractors. Doctors provided information on each of 10 consecutive patient visits. Data from the survey were used as an additional source of information about the profession as well as a basis for developing the Interim Survey Form.

#### preceptorship

Undergraduate and graduate programs in which the chiropractic college may place a student chiropractor or a recent graduate in a licensed chiropractor's office to learn clinical procedures and patient management methods under guidelines established by the sponsoring chiropractic college.

#### presenting condition

One or more symptoms or other concerns for which the patient is seeking care or advice.

#### proportional sampling

A form of sampling in which the number selected is a percent of the population.

#### psoriasis

A condition which produces dry, scaling patches of skin sometimes associated with a distinctive arthritis.

#### radiculitis or radiculopathy

Inflammation or disease of the root of the spinal nerve.

#### RAND

A nonprofit institution that seeks to improve public policy through research and analysis.

#### rating scales

Rating scales attempt to obtain appraisals on a common set of attributes for all raters and ratees and to have these expressed on common quantitative and qualitative scales.

#### reliability

The degree to which test scores are free of errors of measurement.

#### return rate

Percent of practitioners selected to complete the Survey of Chiropractic Practice who either returned the survey form or who were accounted for in another manner.

#### research protocols

Procedures to be followed in a research study.

#### risk factor

The degree of risk to public health or patient safety perceived by survey respondents relative to omission or poor performance of 45 activities listed in the Survey of Chiropractic Practice.

**RMIT University-**(Incorporated under former Phillip Institute of Technology) Royal Melbourne Institute of Technology.

#### roentgenology

The branch of radiology that deals with the diagnostic and therapeutic use of roentgen rays.

#### sampling design

The specified method by which individuals are selected to be surveyed.

#### SMT

Spinal manipulative treatment

#### S.O.A.P.

Subjective, Objective, Assessment Plan/Procedure. A method of recording information in a patient's record based on a problem-oriented clinical approach.

#### S.O.T. technique

A system of soft tissue, reflex, diagnostic and adjusting techniques developed by Dr. M.D. DeJarnette; this technique emphasizes the close physiological and biomechanical relationships between the sacrum and the occiput.

#### SPEC

Special Purposes Examination for Chiropractic. The SPEC is designed to assess licensed or previously licensed chiropractic practitioners in areas reflecting clinical conditions encountered in general practice. The SPEC is now available.

#### spinal adjustment

The art of replacement of subluxated vertebrae to their normal position for the purpose of relieving impingement of the structures transmitted by the intervertebral foramen, thus restoring to the parts supplied by these nerves their normal innervation. This replacement of subluxated vertebrae usually is accomplished by the application of a definite thrust by the hands of the chiropractor in contact with the subluxated vertebra.

#### spinal canal stenosis

A significant reduction in diameter of the spinal canal which may result in symptoms of spinal cord or nerve root compression.

#### standard deviation

The standard deviation is a measure of variability, spread or dispersion of a set of scores around their mean value.

#### standard error

This is an abbreviation for standard error of estimate, which indicates the accuracy of a score. The standard error of estimate is the standard deviation divided by the square root of the sample size, and corrected for sampling from a finite population.

#### subluxation

A subluxation is the alteration of the normal dynamics, anatomical, or physiological relationship of contiguous articular structures.

#### survey instrument

Refers to the questionnaire developed by the NBCE for the Survey of Chiropractic Practice job analysis.

#### systemic/rheumatoid arthritis or gout

Inflammation of the joints which tends to be chronic and progressive, leading to deformities and disability.

#### "t-test"

A statistical procedure used to determine whether two means (arithmetic averages) differ significantly from each other.

#### tendinitis/tenosynovitis

Inflammation of a tendon or inflammation of a tendon and its enveloping sheath.

#### **Thompson technique**

A system of analytical and adjusting techniques developed by Dr. J. Clay Thompson that emphasizes the use of a Thompson terminal point adjusting table.

#### thoracic outlet syndrome

Compression of the brachial plexus or subclavian artery by attached muscles in the region of the first rib and clavicle.

#### thymus or pineal disorder

The thymus gland is associated with cell-mediated immunity. Pineal gland dysfunction may be responsible for some cases of hypo or hypergonadism but speculation as to the gland's actual function still exists.

#### thyroid or parathyroid disorder

Dysfunction of the thyroid or parathyroid glands, producing abnormally high or low concentrations of the circulating hormone levels which control the body's metabolic functions.

#### **TMJ syndrome**

Those various symptoms of discomfort, pain, or pathosis stated to be caused by loss of vertical dimension, lack of posterior occlusion, or other malocclusion, trismus, muscle tremor, arthritis, or direct trauma to the temporomandibular joint.

#### **Toftness technique**

A system of analysis and adjustment of the spine developed by Dr. I.M. Toftness.

#### traction

Therapeutic technique utilizing axial tension applied to a body segment.

#### ulcer of stomach, intestine or colon

A lesion on the inner mucous surface of the digestive tract caused by superficial loss of tissue, usually with inflammation.

#### ultrasound

Therapeutic technique that utilizes high frequency sound waves to produce micromassage and deep heating effects in a body segment.

#### ultraviolet therapy

Modality that produces radiation with strong actinic properties and is used to produce photochemical effects.

#### upper cervical vertebrae

The most superiorly located bones of the spine, usually referring to the first and second cervical vertebrae.

#### validity

The degree to which inferences from test scores are appropriate, meaningful or useful.

#### vertebral facet syndrome

A condition in which symptoms arise from inflamed, damaged, or dysfunctional vertebral facets; often accompanies increased spinal lordosis and may be secondary to intervertebral disc failure or degeneration.

#### vertebrobasilar arterial insufficiency

Lack of adequate blood flow through the verte-

bral arteries or their union which forms the basilar artery, ultimately resulting in cerebral ischemia or decreased blood flow to the brain.

#### vibratory therapy

The use of fingers or a mechanical device to produce oscillations in body tissues or to stimulate proprioceptive nerve functions.

#### weighting factor

A number used when aggregating data from individuals or subgroups such that the aggregated sample accurately represents the population.

#### whirlpool/hydrotherapy

Modality that may utilize cold or heated water to produce various mechanical and/or physiological effects on the body or a portion of the body.

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