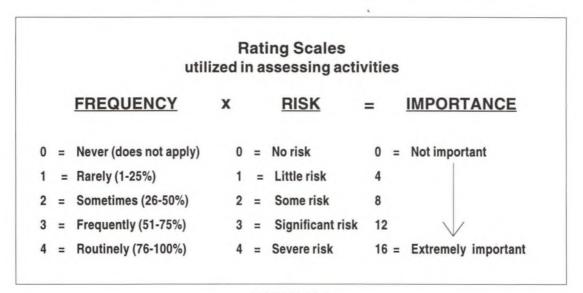
<u>Chapter 14</u> Practice Patterns

Presented in this chapter are the activities chiropractors performed in their practices. There are 45 activities divided into nine major categories, ranging from case history to case management.

The respondent practitioners were asked to rate the **frequency**, (how often they performed the activity) and the perceived **risk** to patient health and safety if the activity were performed poorly or omitted. The frequency and risk factor ratings for the activities were averaged by individual activity and by general category. From the frequency and risk scales the **importance** scale was generated by obtaining the product of frequency and risk.

Below are the rating scales for this section of the NBCE job analysis:



	TA	B	LE	14	1.1
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Practitioners were also asked to indicate the **primary technique** used in their practices, i.e. upper cervical, full spine, or another technique.

Finally, practitioners were asked to indicate which **adjustive and non-adjustive techniques** they had utilized in their practices during the past two years.

Rating the Activities

Consistent with other parts of the survey, zero-to-four rating scales were utilized. Values of the **importance** factor could range from zero to 16, due to the way in which they were derived.

The **importance** factor is commonly obtained in job analyses. It indicates the significance of an activity when taking into account both the frequency with which the activity is performed, and the risk to patients when the activity is performed poorly or omitted.

Case History

The survey results indicated that case histories were performed **frequently** (category average of 3.44), presenting a **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.51).

Chiropractors **routinely** took an initial case history from a new patient, and **frequently** performed all other activities in this category.

er	SK → Severe .0 3.0 4.0	None	$\xrightarrow{\text{BRTANCE}} \text{Extreme state} \xrightarrow{8 & 12 & 16 \\ \hline + & + & + & + & + & + \\ \hline \end{array}$
Activity	Frequency	Risk	Importance
Case History			
Take initial case history	Routinely 4.00	Significant 3.14	12.57
Identify condition from case history	Frequently 3.34	Significant 2.59	9.11
Perform focused case history	Frequently 3.23	Some 2.47	8.51
Take S.O.A.P. or case progress notes	Frequently 3.34	Some 2.14	8.03
Determine technique/case management	Frequently 3.30	Some 2.16	7.89
Update case history	Frequently 3.43	Significant 2.59	9.37

TABLE 14.2 Case History

The respondents indicated that the inadequate taking of or omission of an initial case history from a new patient would present a **significant** risk to patient health and safety and **rated this activity highest in importance of the 45 activities chiropractors performed.**

The other case history activities that rated high in **importance** were updating the case history from a patient whose condition had changed or who presented with a new condition, and identifying the nature of a patient's condition using the information from a case history (Table 14.2).

Physical Examination

Physical examination activities were performed **frequently** (category average of 3.45), and presented a **significant** risk to patient health and safety if the activities were performed poorly or omitted (category average of 2.66).

Chiropractors **routinely** performed a physical examination on a new patient. All other activities in this category were **frequently** performed. Survey results also indicated that practitioners rated performing a physical examination on a new patient highest in **importance** in the physical exam area (Table 14.3).

FREQUENCY //er>Routinely	RISK	evere None	RTANCE		
		4.0 0 4 •••••	8 12 16		
Activity	Fr	equency Risk	Importance		
Physical Examination					
Perform physical examination	F	Routinely Significant 3.77 2.99	11.74		
Assess general state of health	F	requently Significant 3.43 2.54	9.13		
Perform regional examination	F	requently Significant 3.27 2.54	9.03		
Update physical examination	F	requently Significant 3.34 2.56	8.96		

TABLE 14.3 Physical Examination

Neuromusculoskeletal Examination

Neuromusculoskeletal examination activities were performed **frequently** (category average of 3.11), presenting a **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.51).

Chiropractors**routinely** performed general orthopedic and neurological examinations on new patients, and **frequently** performed all other NMS exams listed in this category. They indicated that poor performance or inappropriate omission of these activities presented **significant** or **some** risk to patient health and safety.

	FRE	QUE	NCY				RISK				IMPO	ORTA	NCE	
Never-			\rightarrow	Routinely	None			\rightarrow	Severe	None -			\rightarrow	Extreme
0	1.0	2.0	3.0	4.0	0	1.0	2.0	3.0	4.0	0	4	8	12	16
•		1	1	•		+	1		•	• +		1	+ + + +	•

Activity	Frequency	Risk	Importance
Neuromusculoskeletal Examination			
Perform orthopedic and/or neurological exam	Routinely 3.50	Significant 2.66	9.76
Perform focused orthopedic and/or neurological exam	Frequently 2.80	Some 2.47	7.51
Determine patient condition using orthopedic/neurological exam	Frequently 3.11	Significant 2.51	8.46
Determine additional lab/X-ray/etc.	Frequently 3.09	Some 2.49	8.30
Update orthopedic/neurological tests	Frequently 3.03	Some 2.40	7.83

TABLE 14.4 Neuromusculoskeletal Examination

The highest **importance** values were associated with performing general orthopedic or neurological examinations on new patients, and with determining the nature of a patient's condition using information from the orthopedic and neurological examinations (Table 14.4).

	FRE	QUE	NCY				RISK				IMPO	ORTA	NCE	
Never-			\rightarrow	Routinely	None			\rightarrow	Severe	None			\rightarrow	Extreme
0	1.0	2.0	3.0	4.0	0	1.0	2.0	3.0	4.0	0	4	8	12	16
•		1	1	•	•	+ +-	1 +	+ +	•			1		

Activity	Frequency	Risk	Importance
X-Ray Examination		1	
Perform X-ray on new patient	Routinely 3.63	Significant 2.90	11.09
Determine presence of pathology, fracture, etc	Routinely 3.76	Significant 3.30	12.49
Determine instability/joint dysfunction	Sometimes 2.31	Some 2.06	5.70
Determine presence of subluxation	Frequent.ly 3.20	Some 1.79	6.41
Update X-ray/perform new X-ray	Frequently 2.90	Significant 2.64	8.19

X-ray Examination

X-ray Examination activities were **frequently** performed (category average of 3.16), presenting **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.54).

Practitioners **routinely** took X-rays on new patients and determined the presence of pathology, fracture, dislocations, or other significant findings using information from an X-ray examination. Determining the presence of pathology, fracture, dislocations or other significant findings was rated highest in **importance** of the activities chiropractors performed in this category (Table 14.5).

FREQUENCY ver	RISK None	Severe None -	IMPOR	TANCE Extrer
0 1.0 2.0 3.0 4.0 • + + + + + + + •	0 1.0 2.0 3.0	4.0 0 →•	4 8	
Activity		Frequency	Risk	Importance
Laboratory and Special	Studies			
Draw blood, collect urine, or other labo	pratory procedures	Virtually never 0.17	Little 0.87	0.26
Order laboratory tests		Virtually never 0.46	Little 1.03	0.86
Refer patient for MRI, CT, EKG, etc.		Rarely 1.00	Some 1.60	2.10
Confirm diagnosis/health-threatening	condition	Rarely 0.94	Some 1.67	2.59
Augment history, examination, or X-ra	у	Rarely 1.11	Little 1.46	2.41

TABLE 14.6 Laboratory and Special Studies

Laboratory and Special Studies

Laboratory and special studies examinations were **rarely** performed (category average of 0.74), presenting **little** risk to patient health and safety if performed poorly or omitted (category average of 1.33).

Practitioners **rarely** confirmed a diagnosis or ruled out health-threatening conditions using information from laboratory results or specialized studies. The data indicated that they perform so **rarely** the activities of ordering laboratory tests, drawing blood, collecting urine, or other laboratory procedures that these are termed "virtually never." Overall, this category had the lowest **importance** values (Table 14.6).

Diagnosis FREQUENCY Never None None None None None None	→ Severe	None 4	RTANCE Extrem 8 12 16
Activity	Frequency	Risk	Importance
Diagnosis			
Relate problems to process	Frequently 2.67	Some 2.44	7.27
Distinguish between urgent/less urgent	Frequently 3.20	Significant 3.13	10.51
Predict effectiveness of chiropractic	Frequently 3.29	Some 1.56	5.39
Refer patient to other practitioner	Sometimes 2.09	Significant 2.50	5.51
Arrive at diagnosis/impression	Frequently 3.20	Some 2.27	7.99



Diagnosis activities were performed **frequently** (category average of 2.89), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.38).

Chiropractors **frequently** arrived at a diagnosis or clinical impression on the basis of the patient's case history and examination findings. They **frequently** distinguished between lifeor health-threatening conditions and less urgent conditions and predicted the effectiveness of chiropractic care in treating the patient's condition, and related problems identified in the history and examination findings to a pathologic, pathophysiologic or psychopathologic process. Chiropractors **sometimes** referred patients to other health care practitioners based on information from the history and examination findings.

The area rated highest in **importance** was distinguishing between life- or healththreatening conditions and less urgent conditions (Table 14.7).

FREQUENCY ver				TANCE Extre
1.0 2.0 3.0 4.0	0 1.0 2.0 3.0 •	4.0 0	4 4	8 12 16
Activity		Frequency	Risk	Importance
Chiropractic Technique)			
Perform specific chiropractic examin	nation	Routinely 3.81	Significant 2.53	9.96
Utilize instruments		Sometimes 2.13	Little 1.21	3.66
Determine case management/techn	Routinely 3.90	Some 1.99	7.76	
Perform chiropractic adjustive techr	niques	Routinely 3.97	Some 2.47	9.83
Update chiropractic examination		Routinely 3.63	Some 2.26	8.47

TABLE 14.8 Chiropractic Technique

Chiropractic Technique

Chiropractic techniques (excluding use of instruments) were **frequently** utilized (category average of 3.49 excluding instruments), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.09).

Instruments were **sometimes** utilized; all other activities in this category were **routinely** performed.

Practitioners indicated a**significant** risk to patient health and safety if specific chiropractic examination procedures on patients with spinal or extra-spinal joint conditions were

FREQUENCY ver	None	RISK	\longrightarrow	Severe	None		
0 1.0 2.0 3.0 4.0 + + + + + + + + + + + + + + + + + + +	0 1.0 • + -	2.0	3.0	4.0	0	4	8 12 16
Activity	1	T.V.o		Freq	uency	Risk	Importance
Supportive Technique							
Evaluate patient condition					quently 1.06	Some 1.89	6.30
Determine use of supportive technique					uently 1.03	Some 1.73	5.64
Perform procedures other than adjustiv	e				quently 2.74	Some 1.71	5.13
Refer patient to other practitioner					etimes .61	Some 1.53	2.93
Monitor effectiveness of non-adjustive	echnique				quently 2.54	Some 1.50	4.54

TABLE 14.9 Supportive Techniques

performed poorly or omitted; this same activity was rated highest in **importance** of activities listed in this category (Table 14.8).

Supportive Technique

Supportive techniques were performed **frequently** (category average of 2.60), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 1.67).

Chiropractors **frequently** evaluated the patient's condition to determine if procedures other than adjustive techniques were indicated. In addition, determining the use of supportive techniques, performing treatment procedures other than adjustive techniques, and monitoring the effectiveness of non-adjustive techniques or therapeutic procedures were also **frequently** performed. Referring patients to a physical therapist, massage therapist, nutritionist or other health care practitioner is **sometimes** exercised.

The survey respondents indicated **some** risk to patient health and safety should any of these supportive techniques be performed poorly or omitted.

The highest importance rating was given to the evaluation of the patient's condition to determine if procedures other than adjustive techniques are indicated (Table 14.9).

FREQUENCY ver	RISK	→ Severe	None			
0 1.0 2.0 3.0 4.0 	0 1.0 2.0 3.0		0 4 • + +			
Activity		Frequency	/ Risk	Importance		
Case Management						
Discuss alternatives with patient		Frequently 2.60	Some 1.90	5.31		
Recommend/arrange for other services		Frequently 2.56	Significant 2.67	7.44		
Modify case management		Routinely 3.50	Some 2.46	8.81		
Encourage patient to change habits/life	style	Routinely 3.60	Some 2.26	8.37		
Maintain written record		Frequently 3.46	Some 2.14	8.00		

TABLE 14.10 Case Management

Case Management

Case Management activities were performed **frequently** (category average of 3.14), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.29).

Case management activities **routinely** performed included encouraging the patient to make appropriate changes in habits or lifestyle to prevent reoccurrences of the condition, and modifying or revising case management as the patient's condition improved or failed to improve. All other activities in this category were performed frequently.

In the activities pertaining to case management, respondents indicated that modifying or revising case management as the patient's condition improved or failed to improve was rated highest in **importance** (Table 14.10).

Treatment Procedures

Practitioners were asked to indicate the primary technique approach they used in their practices. Results indicated that 100% utilized **full spine** as a primary approach, while **upper cervical** and **other** were not noted by any of the respondents (Table 14.11).

Specific Adjustive Techniques

Results indicated that 50 to 90% of the respondents utilized 9 of the adjustive techniques, ranging from diversified to cranial. Palmer Upper Cervical Technique was utilized by approximately 46% of the respondents (Table 14.11). All other techniques were utilized by less than one-quarter of the practitioners. Results also indicated that the responding practitioners used an average of 7.4 specific adjustive techniques in their practices.

Non-Adjustive Techniques

As indicated in Table 14.11, approximately two-thirds or more of the practitioners utilized 4 of the supportive techniques listed. The range begins with Corrective Exercises (88.6%) and ends with Bed Rest (67.1%). A majority of the practitioners also utilized foot orthotics, acupressure, bracing and massage therapy. Data indicated that the average number of supportive techniques utilized by practitioners was 7.5.

Chiropractic Treatment Procedures in New Zealand Adjustive Techniques	Full S	Primary Approach%Spine100.0%er Cervical-0-r-0-	
	%	Non-Adjustive Techniques	%
Diversified	91.4	Corrective or Therapeutic Exercise	88.6
Gonstead	91.4	Ice Pack/Cryotherapy	70.0
NIMMO/Tonus Receptor	74.3	Nutritional Counseling	68.6
Applied Kinesiology	72.9	Bedrest	67.1
SOT	70.0	Foot Orthotics/Lifts	62.9
Logan Basic	60.0	Acupressure/Meridian Therapy	61.4
Thompson	58.6	Bracing	58.6
Activator	54.3	Massage Therapy	55.7
Cranial	50.0	Traction	45.7
Palmer Upper Cervical/HIO	45.7	Hot Pack	44.3
Cox/Flexion-Distraction	22.9	Casting/Taping	42.9
Pierce-Stillwagon	18.6	Homeopathic Remedies	30.0
Meric	14.3	Vibratory Therapy	15.7
Other	14.3	Other	12.9
Toftness	2.9	Electrical Stimulation	8.6
Life Upper Cervical	1.4	Acupuncture	4.3
Barge	0.0	Whirlpool/Hydrotherapy	4.3
Grostic	0.0	Biofeedback	2.9
NUCCA	0.0	Diathermy	2.9
Pettibon	0.0	Infrared Baker	1.4
		Interferential Current	1.4
		Ultrasound	1.4
		Ultraviolet Therapy	1.4
		Direct Current	0.0
		Paraffin Bath	0.0

TABLE 14.11

Percent of Chiropractic Practitioners Utilizing Various Chiropractic Treatment Procedures