<u>Chapter 9</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 times risk.

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

		util	R ized i	lat n a	ing Scales ssessing acti	vities	
		FREQUENCY	x		RISK	=	IMPORTANCE
0	=	Never (does not apply)	0	=	No risk	0 =	Not important
1	=	Rarely (1-25%)	1	=	Little risk	4	
2	=	Sometimes (26-50%)	2	=	Some risk	8	
3	=	Frequently (51-75%)	3	=	Significant risk	12	\checkmark
4	=	Routinely (76-100%)	4	=	Severe risk	16 =	Extremely importan

TABLE 9.1

In addition, the practitioners were asked to indicate the **primary technique** used in their practices, i.e. upper cervical, full spine, or another technique.

Finally, the 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

As in other parts of the survey, zero-to-four rating scales were utilized, with the exception of the **Importance** factor, which could range from zero to 16.

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 **routinely** (category average of 3.61), presenting a **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.77).

Chiropractors routinely took an initial case history from a new patient, updated the case history for a patient whose condition had changed or who presented with a new condition, took Subjective, Objective, Assessment, Plan/Procedure (S.O.A.P.) notes on subsequent patient

FREQUENCY	RISK	IMPC	
			8 12 16
Activity	Frequency	Risk	Importance
Case History			
Take initial case history	3.99 Routinely	3.29 Significant	13.14
Identify condition from case history	3.52 Routinely	2.93 Significant	10.71
Perform focused case history	3.38 Frequently	2.75 Significant	9.78
Take S.O.A.P. or case progress notes	3.62 Routinely	2.36 Some	8.96
Determine technique/case manageme	ent 3.45 Frequently	2.44 Some	8.99
Update case history	3.71 Routinely	2.87 Significant	10.93

TABLE 9.2 Case History

visits, and identified the patient's condition based on the 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 9.2).

Physical Examination

Physical examination activities were performed **routinely** (category average of 3.63), and presented a **significant** risk to patient health and safety if the activities were performed poorly or omitted (category average of 2.86).

Chiropractors routinely performed all the physical examination activities listed in this category. Survey results also indicated that practitioners rated performing a physical examination on a new patient highest in importance in the physical exam area (Table 9.3).

FREQUENCY Never	RISK None>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	Frequency	Risk	Importance
Physical Examination			
Perform physical examination	3.77 Routinely	3.18 Significant	12.36
Assess general state of health	3.56 Routinely	2.71 Significant	10.08
Perform regional examination	3.60 Routinely	2.85 Significant	10.75
Update physical examination	3.57 Routinely	2.68 Significant	9.89

TABLE 9.3 Physical Examination

Neuromusculoskeletal Examination

Neuromusculoskeletal examination activities were performed **frequently** (category average of 3.43), presenting a **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.77).

Chiropractors routinely performed general orthopedic and neurological examinations on new patients, and frequently performed all other NMS exams listed in this category. They associated a significant risk to patient health and safety should any of these activities be performed poorly or omitted.

The highest importance values were associated with performing general orthopedic or neurological examinations on new patients, and with determining the additional laboratory, X-ray, and special studies that were indicated by the NMS exam (Table 9.4).



Activity	Frequency	Risk	Importance
Neuromusculoskeletal examination			
Perform orthopedic and/or neurological exam	3.57 Routinely	2.81 Significant	10.55
Perform focused orthopedic and/or neurological exam	3.33 Frequently	2.82 Significant	10.04
Determine patient condition using orthopedic/neurological exam	3.48 Frequently	2.74 Significant	10.07
Determine what additional lab/X-ray/special study, and/or referrals indicated	3.40 Frequently	2.90 Significant	10.51
Update orthopedic/neurological tests	3.35 Frequently	2.60 Significant	9.34

TABLE 9.4 Neuromusculoskeletal Examination

X-ray Examination

Update X-ray/perform new X-ray

X-ray Examination activities were **sometimes** performed (category average of 2.49), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.35).

FREQUENCY Boutinely		evere Nor	IMPOR		
0 1.0 2.0 3.0 4.0 	0 1.0 2.0 3.0	4.0 0 -• •	4	8 12 16	
Activity		Frequency	Risk	Importance	
X-Ray Examination					
Perform X-ray on new patient		2.69 Frequently	2.60 Significant	7.89	
Determine presence of pathology, frac	cture, or other significant findings	3.27 Frequently	3.22 Significant	11.14	
Determine instability/joint dysfunction		1.80 Sometimes	2.00 Some	4.49	
Determine presence of subluxation		2.28 Sometimes	1.64 Some	4 97	

2.39

Sometimes

2.27

Some

6.23

Practitioners frequently 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 (Table9.5).

Laboratory and Special Studies

Laboratory and special studies examinations were **rarely** performed (category average of 0.84), presenting **some** risk to patient health and safety when performed poorly or omitted (category average of 1.69).

REQUENCY Never Boutinely	RISK None	vere None	IMPOR	
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 la	boratory procedures	0.16 Virtually Never	1.17 Little	0.31
Order laboratory tests		0.48 Virtually Never	1.34 Little	1.00
Refer patient for MRI, CT, EKG, etc.		1.03 Rarely	1.99 Some	2.52
Confirm diagnosis/health-threatenin	g condition	1.21 Rarely	2.04 Some	3.22
Augment history, examination, or X-	ray	1.32 Baroly	1.89	3.27

TABLE 9.6 Laboratory and Special Studies

Practitioners rarely confirmed a diagnosis or ruled out health-threatening conditions using information from laboratory results or specialized studies. The data indicate they perform so rarely the activities of ordering laboratory tests, drawing blood, collecting urine, or other laboratory procedures that these are categorized "virtually never." Overall, this category had the lowest importance values (Table 9.6).

Diagnosis

Diagnosis activities were performed **frequently** (category average of 3.19), presenting a **significant** risk to patient health and safety if performed poorly or omitted (category average of 2.65).

	FRE	QUE	NCY				RISK				IMPO	ORTA	ANCE	
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-			• +		+ +-	+ +	+ •

Activity	Frequency	Risk	Importance
Diagnosis			
Relate problems to process	3.12 Frequently	2.61 Significant	8.94
Distinguish between urgent/less urgent	3.37 Frequently	3.21 Significant	11.45
Predict effectiveness of chiropractic	3.44 Frequently	2.14 Some	7.88
Refer patient to other practitioner	2.35 Sometimes	2.61 Significant	6.67
Arrive at diagnosis/impression	3.67 Routinely	2.68 Significant	10.21

TABLE 9.7 Diagnosis

Chiropractors routinely arrived at a diagnosis or clinical impression on the basis of the patient's case history and examination findings. They frequently distinguished between life- or health-threatening conditions and less urgent conditions, and predicted the effectiveness of chiropractic care in treating the patient's condition.

The area rated highest in importance was distinguishing between life- or health-threatening conditions and less urgent conditions (Table 9.7).

Chiropractic Technique

Chiropractic techniques (excluding use of instruments) were **routinely** utilized (overall category average of 3.42 including instruments), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.14).

Practitioners indicated a significant risk to patient health and safety if a specific chiroprac-

FREQUENCY		evere None	IMPORT	
1.0 2.0 3.0 4.0		4.0 0	4 8	
Activity		Frequency	Risk	Importance
Chiropractic Technique				
Perform specific chiropractic examinati	on	3.84 Routinely	2.58 Significant	10.12
Utilize instruments		2.02 Sometimes	1.25 Little	3.57
Determine case management/techniqu	θ	3.71 Routinely	2.28 Some	8.77
Perform chiropractic adjustive techniqu	les	3.92 Routinely	2.33 Some	9.23
Update chiropractic examination		3.61 Routinely	2.27 Some	8.51

TABLE 9.8 Chiropractic Technique

tic examination of a patient were performed poorly or omitted; this same activity was rated highest in importance of activities listed in this category (Table 9.8).

Supportive Technique

Supportive techniques were performed **frequently** (category average of 2.82), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 1.67).

	RISK	Severe None	IMPOF	
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 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Frequency	Risk	Importance
Supportive Technique				
Evaluate patient condition		3.44 Frequently	2.10 Some	7.56
Determine use of supportive techniqu	0	3.32 Frequently	1.55 Some	5.17
Perform procedures other than adjust	ive	2.60 Frequently	1.57 Some	4.68
Refer patient to other practitioner		2.01 Sometimes	1.52 Some	3.63
Monitor effectiveness of non-adjustive	etechnique	2.74 Frequently	1.62 Some	5.18

TABLE 9.9 Supportive Techniques 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.

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 (Table 9.9).

Case Management

Case Management activities were performed **frequently** (category average of 3.35), presenting **some** risk to patient health and safety if performed poorly or omitted (category average of 2.33).

Case management activities routinely performed included maintaining written records of case problems, goals, intervention strategies, and case progress; 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.

ever	$\begin{array}{c} \textbf{JENCY} & \textbf{RISK} \\ & & & \\ & & \\ 0 & 3.0 & 4.0 \\ & & & \\ \hline & & & \\ \hline & & & \\ \hline & & & \\ \end{array} \begin{array}{c} \text{None} & & \\ & & \\ 0 & 1.0 & 2.0 & 3.0 \\ & & \\ \hline & & & \\ \hline \end{array} $		None $\xrightarrow{\text{IMPORTANCE}}$ Extre		
Activity		Frequency	Risk	Importance	
Case Management		,			
Discuss alternatives with patient		2.93 Frequently	2.04 Some	6.33	
Recommend/arrange for other services		2.92 Frequently	2.49 Some	7.99	
Modify case management		3.57 Routinely	2.54 Significant	9.44	
Encourage patient to change habits/lifes	tyle	3.65 Routinely	2.13 Some	8.03	
Maintain written record		3.68 Routinely	2.46 Some	9.26	

TABLE 9.10 Case Management In the activities pertaining to case management, respondents indicated that modifying case management as conditions improved or failed to improve was rated highest in importance (Table 9.10).

Treatment Procedures

Practitioners were asked to indicate the primary technique approach they used in their practices. Results indicated 95.1% utilized **full spine**, while 2.1% used the **upper cervical** approach. **Other** was noted by 2.8% (Table 9.11).

Specific Adjustive Techniques

Results indicated that only the Diversified technique was used by a majority of practitioners (Table 9.11). All other techniques were used by 44% or fewer of the respondents. Results also indicated that the responding practitioners used an average of 4.7 specific adjustive techniques in their practices.

Non-Adjustive Techniques

As indicated in Table 9.11, approximately two-thirds or more of the practitioners utilized 8 of the supportive techniques listed. This begins with Corrective Exercises (96.5%) and ends with Acupressure (66.3%). Data indicated that the average number of supportive techniques utilized by practitioners was 10.3.

Obligance		Primary Approach %	
Chiropractic	Full S	pine 95.1	
Treatment	Uppe	r Cervical 2.1	
Procedures	Other	2.8	
Adjustive Techniques	%	Non-Adjustive Techniques	%
Diversified	87.3	Corrective/Therap, Exercises	96.5
SOT	44.2	Ice Pack/Cryotherapy	87.9
Activator	43.6	Bracing	80.9
Meric	37.7	Orthotics/Lifts	77.8
Gonstead	35.0	Nutritional Counseling	76.2
NIMMO/Tonus receptor	32.4	Massage Therapy	70.1
Applied kinesiology	31.0	Bedrest	67.0
Thompson	30.0	Acupressure/Meridian Therapy	66.3
Logan	25.9	Hot Pack/Moist Heat	59.1
Cox/Flexion-Distraction	22.4	Traction	58.0
Palmer upper cervical/HIO	22.3	Casting/Taping, Strapping	53.4
Cranial	22.2	Electrical Stimulation	44.9
Other	15.5	Vibratory Therapy	40.4
Pierce-Stillwagon	13.6	Ultrasound	37.6
Grostic	4.3	Interferential Current	27.4
Life upper cervical	2.9	Homeopathic Remedies	24.7
Toftness	2.2	Diathermy	15.0
Barge	1.6	Direct Current, etc.	14.0
Pettibon	1.3	Other	12.4
NUCCA	1.0	Acupuncture	12.2
		Infrared Baker, etc.	12.1
		Whirlpool/Hydrotherapy	8.0
		Biofeedback	5.7
		Paraffin Bath	1.9
		Ultraviolet Therapy	1.4

TABLE 9.11 Chiropractic Treatment Procedures