

# Chapter 9

## Professional Functions and Treatment Procedures

The primary purpose of this practice analysis report is to inform and provide validity evidence for the content of the National Board of Chiropractic Examiners' written and practical clinical competency examinations. Specifically, those responsible for test development should have empirical evidence to inform the selection of test content. The 2009 Survey of Chiropractic Practice instructed respondents to indicate the **frequency** with which they perform professional functions and adjunctive care interventions; respondents were also asked to provide an opinion of the **risk** to a patient's health or safety if the function or care were omitted or poorly performed. An **Importance Value**<sup>1</sup> for each function was calculated from the practitioner's responses to the **frequency** and **risk** scales. **Importance Values** are commonly reported in practice, job, and task analyses because importance incorporates both frequency and risk. Although **Importance Values** in this study can range from 0 to 20, the significant information is the relative value of each professional function on each scale.

### Scales

The *Frequency of Professional Functions* section of the survey asked chiropractic practitioners to indicate how frequently during the last 12 months they had performed each of 46 professional functions. **Frequency** was reported on a 6-point scale ranging from **never** to **several times per day**. The *Risk Assessment of Professional Functions* section presented a context in which the respondent was asked to consider a patient who needed a chiropractor to perform each function. Then, the respondent was asked to assess the risk to a patient's health or safety if a chiropractor omitted or poorly performed the function. The respondent was instructed to assess risk independent of how frequently they may perform the function. **Risk** was assessed on a 5-point scale of **no risk** to **severe risk**. Multiplying **frequency** by **risk** yields an **Importance Value** that may range from 0 (not important) to 20 (extremely important). The percent of chiropractors utilizing each adjunctive care intervention was calculated from the respondents' frequency responses. The **frequency**, **risk**, and **importance** scales are presented in Figure 9.1.

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<sup>1</sup> All values in the tables in this chapter represent averages; further, some of the table values are the average of products. Mathematically, the product of averages is not always the same as the average of products. Thus, multiplying the listed value for each "frequency" by its corresponding "risk" will not generally produce the same result as the "importance" value shown in each table.

Frequency	x	Risk	=	Importance
0 = Never		0 = No risk		0 = Not important
1 = 1-6 times per year		1 = Little risk		4
2 = About once per month		2 = Some risk		8
3 = About once per week		3 = Significant risk		12
4 = About once per day		4 = Severe risk		16
5 = Several times per day				20 = Extremely important

**Figure 9.1** Rating Scales Used in Assessing the Frequency, Risk, and Importance of Chiropractic Functions

## Frequency and Risk Assessment of Professional Functions

The 46 professional functions were presented in a logical order in the survey beginning with the chiropractor initially obtaining a case history, followed by performing examinations, then performing or ordering additional studies and tests, and interpreting results. Next respondents considered the following professional functions: developing differential diagnoses, a prognosis, and a case management plan; obtaining informed consent for treatment and documenting each aspect of care. They then reported on case management functions such as providing care, monitoring a patient's progress, etc., and finally, releasing a patient from ongoing care. The professional functions, along with their **frequency**, **risk**, and **importance** ratings are presented twice in this chapter: first in survey question order (Table 9.1) and then ranked by **Importance Value** (Table 9.2).

### Case History Functions

Doctors of chiropractic obtain problem-focused case histories (question 26) **daily** and detailed or comprehensive case histories (question 27) **weekly** (frequency of 3.9 and 3.4 respectively). Omission of or poor performance when obtaining a case history represents a **significant** risk to a patient's health or safety (risk of 2.7 and 2.6 respectively).

### Physical and Orthopedic/Neurologic Examination Functions

Chiropractors perform a number of specific types of examinations (questions 28 through 35) as often as several times per day or as infrequently as a few times per year. Respondents indicated that they perform cervical, thoracic, lumbopelvic and/or extremity palpation examinations (question 35) **several times per day** (frequency of 4.7) and focused orthopedic/neurologic examinations (question 32) **daily** (frequency of 2.7). The risk to a patient's health or safety from a chiropractor's omission or poor performance of these examinations was assessed as **significant** (risk of 2.5 and 2.7 respectively). Less frequently performed examination functions were deemed to have less risk.

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/ day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Obtain a problem-focused case history (Questions: 26 & 72)	3.9 Daily	2.7 Significant	10.9
Obtain a detailed or comprehensive case history (Questions: 27 & 73)	3.4 Weekly	2.6 Significant	9.2
Perform a comprehensive physical examination (Questions: 28 & 74)	2.1 Monthly	2.2 Some risk	5.1
Perform a focused EENT examination (Questions: 29 & 75)	1.2 Yearly	1.4 Little risk	2.1
Perform a focused cardiopulmonary examination (Questions: 30 & 76)	0.9 Yearly	1.7 Some risk	1.8
Perform a focused abdominal examination (Questions: 31 & 77)	1.1 Yearly	1.6 Some risk	2.1
Perform a focused orthopedic/ neurologic examination (Questions: 32 & 78)	3.8 Daily	2.7 Significant	10.8
Perform a comprehensive orthopedic/ neurologic examination (Questions: 33 & 79)	2.9 Weekly	2.2 Some risk	7.0
Perform a gait analysis (Questions: 34 & 80)	3.0 Weekly	1.3 Little risk	4.2
Perform a cervical, thoracic, lumbopelvic and/or extremity palpation examination (Questions: 35 & 81)	4.7 Several/day	2.5 Significant	11.9
Take radiographs in your office (Questions: 36 & 82)	2.2 Monthly	2.3 Some risk	5.4
Order radiographs from an outside facility (Questions: 37 & 82)	1.9 Monthly	2.3 Some risk	4.2
Read imaging studies that you did <b>not</b> take or order (Questions: 38 & 87a)	2.3 Monthly	2.9 Significant	6.8
Draw blood, collect urine and/or perform other laboratory tests in your office (Questions: 39 & 83)	0.3 Virtually Never	1.6 Some risk	0.6

**Table 9.1** Frequency, Risk, and Importance of Professional Functions by Question Order

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/ day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Order blood, urine, or other laboratory tests from an outside facility (Questions: 40 & 83)	0.8 Yearly	1.6 Some risk	1.5
Order a nerve conduction velocity (NCV) and/or needle electromyography (EMG) study (Questions: 41 & 84)	0.6 Yearly	1.7 Some risk	1.2
Order an MRI or CT (Questions: 42 & 85)	1.7 Monthly	2.4 Some risk	4.3
Order a bone scan (Questions: 43 & 86a)	0.5 Yearly	2.4 Some risk	1.4
Perform other specialized studies (e.g., EKG, diagnostic or Doppler ultrasound, bone density, etc.) in your office (Questions: 44 & 86b)	0.1 Virtually Never	2.3 Some risk	0.4
Order other specialized studies (e.g., EKG, diagnostic or Doppler ultrasound, bone density, etc.) from an outside facility (Questions: 45 & 86b)	0.6 Yearly	2.3 Some risk	1.5
Develop a differential diagnosis or clinical impression (Questions: 46 & 89)	3.9 Daily	2.6 Significant	10.5
Develop a case management plan (Questions: 47 & 90b)	4.1 Daily	2.0 Some risk	8.1
Develop a prognosis (Questions: 48 & 90a)	4.1 Daily	1.9 Some risk	7.9
Create complete, readable documentation of a patient's case history and examination findings, the diagnosis and prognosis, and the case management plan (Questions: 49 & 91)	3.9 Daily	2.1 Some risk	8.5
Review with a patient his or her relevant case history and examination findings, the diagnosis, prognosis, and case management plan options (Questions: 50 & 92)	4.0 Daily	2.5 Significant	10.0
Obtain written informed consent for treatment (Questions: 51 & 92)	3.6 Daily	2.5 Significant	9.1

**Table 9.1** Frequency, Risk, and Importance of Professional Functions by Question Order, continued

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/ day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Completely and legibly document each patient visit in the SOAP note format (Questions: 52 & 95a)	4.7 Several/day	1.9 Some risk	9.1
Completely and legibly document, on each visit, the patient's presentation in the PART format (Questions: 53 & 95b)	4.0 Daily	1.7 Some risk	7.1
Monitor a patient's progress or response to treatment utilizing objective outcome measures (Questions: 54 & 95c)	3.6 Daily	1.6 Some risk	6.1
Monitor a patient's progress or response to treatment utilizing follow-up radiographic examinations (Questions: 55 & 96c)	1.2 Yearly	1.6 Some risk	2.3
Write a physical restriction order (Questions: 56 & 97)	2.3 Monthly	2.6 Significant	6.2
Write a narrative report (Questions: 57 & 98)	1.9 Monthly	2.2 Some risk	4.1
Assess the existence of risk factors and contraindications to chiropractic care (Questions: 58 & 93a)	3.8 Daily	3.0 Significant	11.7
Perform an objective assessment of the involved joints' function immediately prior to a chiropractic adjustment (Questions: 59 & 93b)	4.5 Several/day	2.7 Significant	12.2
Perform a chiropractic adjustment of the occiput, spine and/or pelvis (Questions: 60 & 94)	4.9 Several/day	0.9 Little risk	4.5
Perform a chiropractic adjustment of an extra spinal articulation (Questions: 61 & 94)	4.5 Several/day	0.9 Little risk	4.1
Perform an objective assessment of the involved joints' function immediately following a chiropractic adjustment (Questions: 62 & 93c)	4.5 Several/day	2.0 Some risk	9.0
Review radiographic images to identify or rule out fracture, dislocation, and other pathology (Questions: 63 & 87a)	3.4 Weekly	2.9 Significant	9.7

**Table 9.1** Frequency, Risk, and Importance of Professional Functions by Question Order, continued

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/ day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Review radiographic images to determine the possible presence of a spinal listing and/or subluxation (Questions: 64 & 88)	2.8 Weekly	2.0 Some risk	6.5
Review MRI, CT, or bone scan images to identify or rule out pathology (Questions: 65 & 87b)	2.4 Monthly	2.9 Significant	7.0
Review laboratory studies and interpret the results (Questions: 66 & 87c)	1.6 Monthly	2.3 Some risk	3.9
Review specialized studies such as NCV, EMG, EKG, etc. and interpret the results (Questions: 67 & 87d)	1.1 Yearly	2.3 Some risk	2.8
Re-examine a patient with physical examination procedures, either periodically or when the patient's condition materially changed (Questions: 68 & 96a)	3.5 Daily	2.2 Some risk	7.8
Re-examine a patient with orthopedic/neurologic examination procedures, either periodically or when the patient's condition materially changed (Questions: 69 & 96b)	3.5 Daily	2.2 Some risk	8.0
Refer a patient to a specialist for consultation or co-management (Questions: 70 & 86c)	2.1 Monthly	2.5 Significant	5.7
Release a patient from active care (Questions: 71 & 99)	2.9 Weekly	1.2 Little risk	3.4

**Table 9.1** Frequency, Risk, and Importance of Professional Functions by Question Order, continued

### Imaging, Laboratory, and Other Diagnostic Studies Functions

Doctors of chiropractic interpret radiographs, MRIs, and CTs more frequently than they take or order them; and they attribute more risk to omitting or poorly interpreting imaging studies than to the omission or poor performance of taking or ordering the images. Chiropractors take or order radiographs (questions 36 and 37), order MRIs or CTs (question 42) **monthly**, and order bone scans (question 43) **yearly** (frequency of 2.2, 1.9, 1.7 and 0.5 respectively) and attribute **some** risk to patients' health and safety due to the omission or poor performance of these functions (risk of 2.3, 2.3, 2.4 and 2.4 respectively). Respondents indicated that they review radiographs to identify or rule out fracture, dislocation, and other pathology **weekly**, and review MRIs or CTs for the same reasons **monthly** (questions 63 and 65; frequency of 3.4

and 2.4 respectively). Chiropractors review radiographs to determine the possible presence of a chiropractic spinal listing or chiropractic subluxation **weekly** (question 64; frequency of 2.8). Respondents assigned **significant** risk to the omission or poor performance of interpreting radiographs, MRIs, CTs, and bone scans (risk of 2.9 each). Other diagnostic studies functions (questions 44, 45, 66 and 67) were less frequently performed and assessed to have less risk due to a chiropractor's omission or poor performance of these functions.

*Frequency of Professional Functions* questions 38 and 65 addressed the same function, i.e., reading/reviewing imaging studies, but were phrased differently; nonetheless they received similar frequency ratings, 2.3 and 2.4 respectively. Their corresponding *Risk Assessment of Professional Functions*, questions 87a and 87b, received identical ratings of 2.9. These findings provide validity evidence for the survey instrument and results.

### Diagnosis and Case Management Functions

Chiropractors develop differential diagnoses, case management plans, and prognoses on a **daily** basis (questions 46, 47 and 48; frequency of 3.9, 4.1 and 4.1 respectively). Respondents deemed that omission or poorly developing differential diagnoses is a **significant** risk to a patient's health or safety (risk of 2.6) and that omission or poorly developing case management plans and prognoses represents **some** risk (risk of 2.0 and 1.9 respectively). Chiropractors monitor patients' progress or response to treatment utilizing objective outcome measures such as pain or disability questionnaires **daily**, and utilize follow up radiographs **yearly** (questions 54 and 55; frequency of 3.6 and 1.2 respectively); these functions received identical risk ratings of 1.6 representing **some** risk to a patient if these monitoring functions are omitted or poorly performed.

Doctors of chiropractic assess the risk factors and contraindications to chiropractic care of their patients **daily** and refer patients to specialists for consultation or co-management **monthly** (questions 58 and 70; frequency of 3.8 and 2.1 respectively); respondents rated the omission or poor performance of these functions as **significant** to the health and safety of patients (risk of 3.0 and 2.5 respectively). Re-examination of patients is performed either periodically according to a case management plan or when a patient's condition materially changes. Respondents indicated that they re-examine patients with physical or orthopedic/neurological examinations on a **daily** basis (questions 68 and 69; frequency of 3.5 each) and assign **some** risk to patients' health or safety if re-examinations are omitted or poorly performed (risk of 2.2 each). Respondents release patients from active care **weekly** (question 71; frequency of 2.9) and indicated that there is **little** risk to patients' health or safety for failing to do so in a timely manner (risk of 1.2).

### Documentation and Communication Functions

Consistent with performing chiropractic adjustment procedures **several times per day** (questions 60 and 61; frequency of 4.9 and 4.5 respectively), chiropractors completely and legibly document each patient visit in the SOAP note format (defined in Glossary) **several times per day** (question 52; frequency of 4.7). Likewise, chiropractors create complete and

readable documentation of each patient's case history and examination findings, the diagnosis and prognosis, and the case management plan on a **daily** basis (question 49; frequency of 3.9). Similarly, respondents create complete and legible documentation of each patient's presentation in the PART format (defined in Glossary) **daily** (question 53; frequency of 4.0). Respondents ascribed **some** risk to patients' health and safety for omitting or poorly creating each of these types of documentation (risk of 1.9, 2.1 and 1.7 respectively).

Also on a **daily** basis, chiropractors review with patients their relevant case history and examination findings, diagnosis and prognosis, and case management plan options (question 50; frequency of 4.0) and obtain written informed consent for treatment (question 51; frequency 3.6); the risk attributed to omitting or poorly performing these functions was rated as **significant** (risk of 2.5 each).

### Chiropractic Technique Functions

Doctors of chiropractic perform chiropractic adjustments of axial and extremity articulations **several times per day** (questions 60 and 61; frequency of 4.9 and 4.5 respectively) and also perform objective assessments of the patients' involved joints immediately prior to and following chiropractic adjustments (questions 59 and 62; frequency of 4.5 each). Question 94 of the survey was the corresponding risk assessment question for frequency questions 60 and 61 regarding performance of chiropractic adjustments. The context of question 94 was phrased as an act of commission, not omission: specifically, "Consider a patient whose presentation indicates the need for a chiropractic adjustment and for whom there are no contraindications. What is the risk to the patient's health or safety if a chiropractor performs a chiropractic adjustment?" Respondents assigned **little** risk to patients for the performance of axial and extremity chiropractic adjustments (risk of 0.9 each). Respondents indicated that there is **significant** risk to a patient's health or safety for omission or poor performance of an objective assessment of the involved joints immediately prior to an adjustment (question 59; risk of 2.7). There is **some** risk for omission or poor performance of an objective assessment of the involved joints' function immediately after a chiropractic adjustment (question 62; risk of 2.0). These findings, when combined with the **significant** risk attributed to the omission or poor performance of assessing the existence of risk factors and contraindications to chiropractic care (question 93a; risk of 3.0), are interpreted to mean that, in the absence of contraindications, there is **little** risk to patients' health or safety if a chiropractor performs a chiropractic adjustment of any articulation.

### Importance of Professional Functions

Twenty-nine of the forty-six professional functions surveyed received a mean rating of 2.5 or above on at least one of the frequency or risk scales. A 2.5 on the **frequency** scale corresponds to about once per week or **weekly** and a 2.5 on the **risk** scale corresponds to **significant** risk. Only two functions were reportedly performed so infrequently that the mean frequency value was less than 0.5 or **virtually never**. No tasks were rated to have no risk. Table 9.2 displays the 46 professional functions surveyed in rank order by **Importance Value**.

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Perform an objective assessment of the involved joints' function immediately prior to a chiropractic adjustment (Questions: 59 & 93b)	4.5 Several/day	2.7 Significant	12.2
Perform a cervical, thoracic, lumbopelvic and/or extremity palpation examination (Questions: 35 & 81)	4.7 Several/day	2.5 Significant	11.9
Assess the existence of risk factors and contraindications to chiropractic care (Questions: 58 & 93a)	3.8 Daily	3.0 Significant	11.7
Obtain a problem-focused case history (Questions: 26 & 72)	3.9 Daily	2.7 Significant	10.9
Perform a focused orthopedic/neurologic examination (Questions: 32 & 78)	3.8 Daily	2.7 Significant	10.8
Develop a differential diagnosis or clinical impression (Questions: 46 & 89)	3.9 Daily	2.6 Significant	10.5
Review with a patient his or her relevant case history and examination findings, the diagnosis, prognosis, and case management plan options (Questions: 50 & 92)	4.0 Daily	2.5 Significant	10.0
Review radiographic images to identify or rule out fracture, dislocation, and other pathology (Questions: 63 & 87a)	3.4 Weekly	2.9 Significant	9.7
Obtain a detailed or comprehensive case history (Questions: 27 & 73)	3.4 Weekly	2.6 Significant	9.2
Obtain written informed consent for treatment (Questions: 51 & 92)	3.6 Daily	2.5 Significant	9.1
Completely and legibly document each patient visit in the SOAP note format (Questions: 52 & 95a)	4.7 Several/day	1.9 Some risk	9.1
Perform an objective assessment of the involved joints' function immediately following a chiropractic adjustment (Questions: 62 & 93c)	4.5 Several/day	2.0 Some risk	9.0

**Table 9.2** Frequency, Risk, and Importance of Professional Functions by Importance Order

Professional Function	Frequency	Risk	Importance
	 0 1 2 3 4 5 Never Several/day	 0 1 2 3 4 No risk Severe risk	 0 10 20 None Extreme importance
Create complete, readable documentation of a patient's case history and examination findings, the diagnosis and prognosis, and the case management plan (Questions: 49 & 91)	3.9 Daily	2.1 Some risk	8.5
Develop a case management plan (Questions: 47 & 90b)	4.1 Daily	2.0 Some risk	8.1
Re-examine a patient with orthopedic/neurologic examination procedures, either periodically or when the patient's condition materially changed (Questions: 69 & 96b)	3.5 Daily	2.2 Some risk	8.0
Develop a prognosis (Questions: 48 & 90a)	4.1 Daily	1.9 Some risk	7.9
Re-examine a patient with physical examination procedures, either periodically or when the patient's condition materially changed (Questions: 68 & 96a)	3.5 Daily	2.2 Some risk	7.8
Completely and legibly document, on each visit, the patient's presentation in the PART format (Questions: 53 & 95b)	4.0 Daily	1.7 Some risk	7.1
Perform a comprehensive orthopedic/neurologic examination (Questions: 33 & 79)	2.9 Weekly	2.2 Some risk	7.0
Review MRI, CT, or bone scan images to identify or rule out pathology (Questions: 65 & 87b)	2.4 Monthly	2.9 Significant	7.0
Read imaging studies that you did <b>not</b> take or order (Questions: 38 & 87a)	2.3 Monthly	2.9 Significant	6.8
Review radiographic images to determine the possible presence of a spinal listing and/or subluxation (Questions: 64 & 88)	2.8 Weekly	2.0 Some risk	6.5
Write a physical restriction order (Questions: 56 & 97)	2.3 Monthly	2.6 Significant	6.2
Monitor a patient's progress or response to treatment utilizing objective outcome measures (Questions: 54 & 95c)	3.6 Daily	1.6 Some risk	6.1

**Table 9.2** Frequency, Risk, and Importance of Professional Functions by Importance Order, continued

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Refer a patient to a specialist for consultation or co-management (Questions: 70 & 86c)	2.1 Monthly	2.5 Significant	5.7
Take radiographs in your office (Questions: 36 & 82)	2.2 Monthly	2.3 Some risk	5.4
Perform a comprehensive physical examination (Questions: 28 & 74)	2.1 Monthly	2.2 Some risk	5.1
Perform a chiropractic adjustment of the occiput, spine and/or pelvis (Questions: 60 & 94)	4.9 Several/day	0.9 Little risk	4.5
Order an MRI or CT (Questions: 42 & 85)	1.7 Monthly	2.4 Some risk	4.3
Order radiographs from an outside facility (Questions: 37 & 82)	1.9 Monthly	2.3 Some risk	4.2
Perform a gait analysis (Questions: 34 & 80)	3.0 Weekly	1.3 Little risk	4.2
Write a narrative report (Questions: 57 & 98)	1.9 Monthly	2.2 Some risk	4.1
Perform a chiropractic adjustment of an extra spinal articulation (Questions: 61 & 94)	4.5 Several/day	0.9 Little risk	4.1
Review laboratory studies and interpret the results (Questions: 66 & 87c)	1.6 Monthly	2.3 Some risk	3.9
Release a patient from active care (Questions: 71 & 99)	2.9 Weekly	1.2 Little risk	3.4
Review specialized studies such as NCV, EMG, EKG, etc. and interpret the results (Questions: 67 & 87d)	1.1 Yearly	2.3 Some risk	2.8
Monitor a patient's progress or response to treatment utilizing follow-up radiographic examinations (Questions: 55 & 96c)	1.2 Yearly	1.6 Some risk	2.3
Perform a focused abdominal examination (Questions: 31 & 77)	1.1 Yearly	1.6 Some risk	2.1
Perform a focused EENT examination (Questions: 29 & 75)	1.2 Yearly	1.4 Little risk	2.1

**Table 9.2** Frequency, Risk, and Importance of Professional Functions by Importance Order, continued

Professional Function	Frequency	Risk	Importance
	0 1 2 3 4 5 Never Several/ day	0 1 2 3 4 No risk Severe risk	0 10 20 None Extreme importance
Perform a focused cardiopulmonary examination (Questions: 30 & 76)	0.9 Yearly	1.7 Some risk	1.8
Order blood, urine, or other laboratory tests from an outside facility (Questions: 40 & 83)	0.8 Yearly	1.6 Some risk	1.5
Order other specialized studies (e.g., EKG, diagnostic or Doppler ultrasound, bone density, etc.) from an outside facility (Questions: 45 & 86b)	0.6 Yearly	2.3 Some risk	1.5
Order a bone scan (Questions: 43 & 86a)	0.5 Yearly	2.4 Some risk	1.4
Order a nerve conduction velocity (NCV) and/or needle electromyography (EMG) study (Questions: 41 & 84)	0.6 Yearly	1.7 Some risk	1.2
Draw blood, collect urine and/or perform other laboratory tests in your office (Questions: 39 & 83)	0.3 Virtually Never	1.6 Some risk	0.6
Perform other specialized studies (e.g., EKG, diagnostic or Doppler ultrasound, bone density, etc.) in your office (Questions: 44 & 86b)	0.1 Virtually Never	2.3 Some risk	0.4

**Table 9.2** Frequency, Risk, and Importance of Professional Functions by Importance Order, continued

## Adjunctive Care

Respondents were instructed to indicate how frequently they perform each of 25 passive adjunctive care procedures, 7 active adjunctive care procedures, and 8 health promotion and wellness interventions; they were also asked to “provide an opinion of the risk to a patient’s health or safety due to a chiropractor’s poor performance” of each. Previous NBCE surveys of chiropractic practice asked “for what percentage of patients during the past year did respondents utilize... adjunctive procedures?” Although the survey questions differed, the percent of respondents who indicated they utilize each of the adjunctive procedures was calculated from the data obtained from each of the surveys. The results of the calculations from the present survey and the previous surveys are presented in Tables 9.3, 9.4, and 9.5.

### Passive Adjunctive Care

Respondents indicated how frequently they perform 25 passive adjunctive care procedures and rated the risk to a patient's health or safety due to a chiropractor's poor performance of the activity. Frequency means for the 25 procedures ranged from 0.1 or **virtually never** to 3.7 or **daily**. Two methods of ranking the passive adjunctive procedures were used. First, the percentage of respondents who use each passive care procedure was ranked from highest to lowest. Next, the frequency with which each passive care procedure is employed in practice was ranked from highest to lowest. The outcomes of these two methods were virtually identical; thus, for consistency and ease of comparison, only the percentage data are presented in table form (Table 9.3 on page 134). Only two passive adjunctive procedures received a risk rating greater than 1.4 or **little** risk: mechanically assisted traction/decompression and ultrasound each had a mean risk rating of 1.6 or **some** risk.

### Active Adjunctive Care

Respondents indicated how frequently they perform 7 active adjunctive care procedures and rated the risk to a patient's health or safety due to a chiropractor's poor performance of each activity. As previously discussed under the topic of *Passive Adjunctive Care*, we analyzed the data using two methods of ranking. Because the outcomes of both methods were very similar, only the percentage data are presented in table form (Table 9.4 on page 135). Respondents reported that they instruct their patients in corrective or therapeutic exercise, rehabilitation/stabilization exercises of the spine and extremities, and activities of daily living on a **daily** basis (frequencies of 4.0, 3.7, 2.8 and 3.0 respectively). All active adjunctive procedures received a risk rating between 0.8 and 1.4 or **little** risk to a patient's health or safety if performed poorly.

### Health Promotion/Wellness Care

Respondents indicated how frequently they perform 8 health promotion and wellness care interventions and rated the risk to a patient's health or safety due to a chiropractor's poor performance of each activity. As previously discussed under the topic of *Passive Adjunctive Care*, we analyzed the data using two methods of ranking. Because the outcomes of both methods were virtually identical, only the percentage data are presented in table form (Table 9.5 on page 135). Respondents reported that they provide their patients the following interventions **daily**: ergonomic/postural advice (frequency of 3.9), physical fitness/exercise promotion (frequency of 4.0), changing risky/unhealthy behaviors (frequency of 3.6), nutritional/dietary recommendations (frequency of 3.6), relaxation/stress reduction (frequency of 3.6) and self-care strategies (frequency of 3.8). All health promotion/wellness care procedures received a risk rating between 0.9 and 1.2 or **little** risk to a patient's health or safety if performed poorly.

Passive Adjunctive Procedure	Percentage of Chiropractors Utilizing Procedure			
	1991	1998	2003	2009
Ice pack/cryotherapy	92.6%	93.9%	94.5%	89.9%
Trigger point therapy	No Data	90.9%	91.0%	86.8%
Bracing with lumbar support, cervical collar, etc.	90.8%	90.1%	86.3%	83.1%
Electrical stimulation/therapy	73.2%	76.2%	77.3%	76.6%
Hot pack/moist heat	78.5%	82.1%	81.9%	71.3%
Massage therapy	73.0%	83.0%	84.9%	68.7%
Heel lifts	79.2%	75.1%	69.2%	67.7%
Mobilization therapy	No Data	74.5%	76.2%	63.9%
Flexion/Distracton	No Data	No Data	No Data	63.7%
Bed rest	82.0%	75.7%	64.8%	63.0%
Ultrasound	68.8%	70.3%	66.1%	62.7%
Mechanically assisted traction/decompression	No Data	No Data	No Data	48.3%
Traction	73.2%	79.0%	80.6%	No Data
Taping/strapping	48.2%	48.7%	43.5%	45.2%
Acupressure or meridian therapy	65.5%	66.1%	58.2%	41.1%
Homeopathic remedies	36.9%	53.1%	46.4%	38.6%
Vibratory therapy	42.0%	44.1%	42.8%	35.8%
Cold laser	No Data	No Data	No Data	23.5%
Infrared-baker, heat lamp, or hot pad	19.0%	17.5%	20.9%	17.7%
Acupuncture with needles	11.8%	10.8%	13.6%	13.0%
Diathermy-shortwave or microwave	26.7%	22.0%	17.0%	11.5%
Direct current or iontophoresis	26.9%	25.9%	26.2%	11.5%
Paraffin bath	6.9%	11.6%	14.7%	9.3%
Biofeedback	7.1%	8.6%	8.4%	8.4%
Whirlpool or hydrotherapy	12.7%	13.1%	15.1%	7.6%
Other	9.6%	6.8%	14.0%	6.0%
Casting	No Data	8.8%	8.7%	5.7%

**Table 9.3** Percentage of Chiropractors Utilizing Passive Adjunctive Procedures

Active Adjunctive Procedure	Percentage of Chiropractors Utilizing Procedure			
	1991	1998	2003	2009
Corrective or therapeutic exercise	95.8%	98.0%	98.3%	96.8%
Rehabilitation/Stabilization exercises - Spine	No Data	No Data	No Data	92.3%
Rehabilitation/Stabilization exercises - Extremity	No Data	No Data	No Data	84.3%
Rehabilitation/spinal or extremity joint stabilization	No Data	83.1%	87.8%	No Data
Activities of daily living	No Data	93.6%	96.6%	84.6%
Foot orthotics	79.2%	75.9%	81.8%	72.1%
Work hardening	No Data	52.4%	58.6%	30.3%
Back school (formal program)	No Data	35.4%	39.6%	20.9%

**Table 9.4** Percentage of Chiropractors Utilizing Active Adjunctive Procedures

Health Promotion and Wellness Care Procedure	Percentage of Chiropractors Utilizing Procedure	
	2003	2009
Ergonomic/postural advice	97.3%	97.1%
Physical fitness/exercise promotion	98.3%	96.5%
Changing risky/unhealthy behaviors	96.6%	95.7%
Nutritional/dietary recommendations	97.7%	94.4%
Relaxation/stress reduction recommendations	96.4%	92.7%
Self-care strategies	96.6%	92.4%
Disease prevention/early screening advice	90.8%	81.5%
Smoking cessation	No Data	77.9%

**Table 9.5** Percentage of Chiropractors Utilizing Health Promotion and Wellness Care Procedures

Although the wording of the questions was different in the 2009 survey, it appears that many adjunctive procedures are being used less by chiropractors when compared to previous survey results (Tables 9.3, 9.4, 9.5). If these results are valid, the decreases may be partly attributed to changes in reimbursement policies of health insurance and managed care plans.

