

# Chapter 6

## Overview of Survey Responses

The National Board of Chiropractic Examiners (NBCE) has previously conducted surveys of the chiropractic profession and published the resulting reports entitled *Job Analysis of Chiropractic* (Christensen & Morgan, 1993), *Job Analysis of Chiropractic 2000* (Christensen, Kollasch, & Kerkoff, 2000), *Job Analysis of Chiropractic 2005* (Christensen, Kollasch, Ward, & Webb, 2005), and *Practice Analysis of Chiropractic 2010* (Christensen, Kollasch, & Hyland, 2010). This current report, *Practice Analysis of Chiropractic 2015*, presents data from a survey that was redesigned and conducted in 2014. Survey letters were mailed to 10,000 licensed chiropractors; 1,379 individuals practicing 20 or more hours per week completed the survey. In order to describe the prominent characteristics of chiropractors and their patients, this chapter summarizes and reports some of the data collected in the current and prior NBCE surveys; subsequent chapters present additional 2014 survey results.

### The “Typical” Chiropractor

According to the survey data, the typical full-time chiropractor is a White male who spends 30 to 40 hours per week in professional practice. Most chiropractors (65.1%) practice in a city or the suburbs and they co-manage patients with both medical doctors and complementary and alternative providers. Typically, doctors of chiropractic have a bachelor’s degree in addition to the degree of Doctor of Chiropractic (D.C.); 34% have worked toward and/or achieved certification in a clinical specialty area. The portion of respondents that have been in practice for more than 15 years has been steadily increasing, from one-quarter (24.6%) in 1991 to 35.1% in 1998, then 47.5% in 2003 to 51.1% in 2009, and now in 2014 to (63.8%). This trend of increasing years in practice has been continuous since the first survey, and may reflect sample bias due to older respondents that were more interested in completing our survey, and/or fewer recent graduates being willing to participate in this research (Table 6.1).

Years in Practice	1991	1998	2003	2009	2014
Fewer than 2 years	4.1%	7.0%	1.9%	2.2%	1.7%
2-4 years	14.2%	11.3%	8.3%	8.4%	7.8%
5-15 years	57.1%	46.6%	42.4%	38.3%	26.7%
16-25 years	24.6%	25.2%	32.1%	26.4%	25.5%
More than 25 years		9.9%	15.4%	24.7%	38.3%

Table 6.1 Years in Practice

### Routine Activities and Procedures

Based on data obtained in the 2014 Survey of Chiropractic Practice, chiropractors see patients with spinal subluxations and joint dysfunctions on a routine basis. In a typical week, chiropractors treat patients who have the following conditions: neurological problems such as headaches, radiculopathy, or neuralgia; joint problems including osteoarthritis, extremity subluxations, sprains, and intervertebral disc syndrome; and muscular problems such as strained or weak muscles and myofasciitis. Less frequently, chiropractors evaluate and/or treat patients with scoliosis, fibromyalgia, carpal tunnel syndrome, vertigo, and spinal stenosis/neurogenic claudication. A typical month may also include patients with obesity, high blood pressure, osteoporosis, allergies, diabetes, and menstrual disorders. Patients with respiratory infections, concussions, and asthma or emphysema are typically seen less than monthly (Table 6.2).

Several times per day chiropractors assess joint function, perform chiropractic adjustments, record progress notes, and provide self-care strategies. On a daily basis, chiropractic physicians perform customary case management functions such as developing diagnoses, prognoses, and management plans, reviewing this information with their patients and obtaining written informed consent for treatment. Daily activities also include monitoring patients' progress with patient-reported outcome measures, performing re-examinations, and providing nutritional and dietary recommendations (Table 6.3). Chiropractors report that there is **significant** risk to patients' health or safety if some of these procedures are either omitted or poorly performed (Table 6.4); moreover, when a daily activity carries significant risk, its Importance Value is amplified (Tables 9.1 - 9.8 in Chapter 9).

The typical practitioner now spends more than a quarter (26.3%) of his or her work time documenting patient care (Figure 6.1); this portion has increased substantially since the question was first asked in the 1998 survey, when it was reported to be 13.8%. Direct patient care and education consumes 56.4% of practice time, with the remaining time being used for business management and marketing.

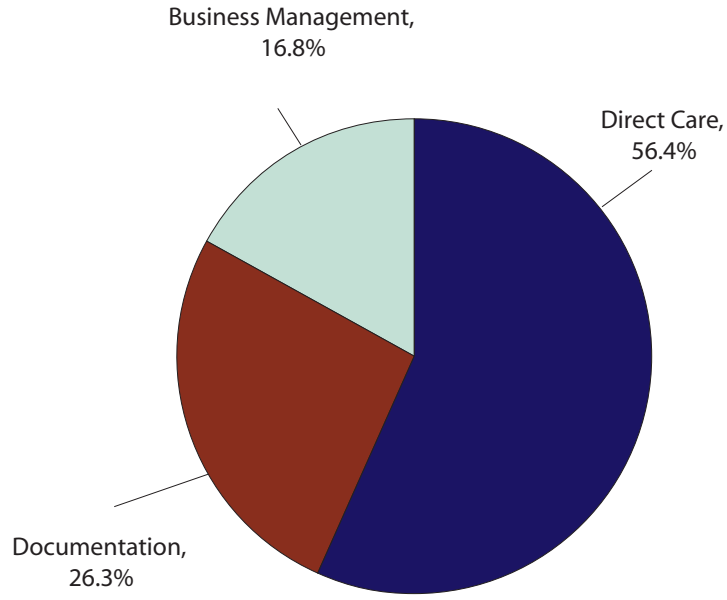


Figure 6.1 Components of Chiropractic Practice

### Patient Conditions

Table 6.2 shows the frequency with which various patient conditions are evaluated and/or treated in a typical chiropractic practice. Most conditions seen by chiropractors fall into the neuromusculoskeletal category, although concurrent health conditions that are common in the U.S., such as obesity, hypertension, and osteoporosis, are seen on a **monthly** basis. Chapter 8 of this report presents more comprehensive data regarding patient conditions, including management strategies, along with clinical discussions.

Patient Condition	Frequency
<b>Several times per day</b>	
Spinal subluxation/joint dysfunction	4.6
<b>Daily</b>	
Headaches	3.9
Osteoarthritis/degenerative joint disease	3.9
Sprain of any joint	3.7

Table 6.2 Patient Conditions by Frequency

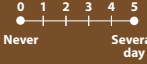
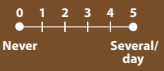
Patient Condition	Frequency 
<b>Daily (continued)</b>	
Muscle strain/tear	3.6
Extremity subluxation/joint dysfunction	3.6
Hypolordosis of cervical or lumbar spine	3.6
Intervertebral disc syndrome	3.5
Radiculitis or radiculopathy	3.5
<b>Weekly</b>	
Myofasciitis	3.4
Peripheral neuritis, neuralgia, or neuropathy	3.1
Hyperlordosis of cervical or lumbar spine	3.1
Kyphosis of the thoracic spine	2.8
Muscle weakness/atrophy	2.6
<b>Monthly</b>	
Spinal stenosis/neurogenic claudication	2.4
Tendinopathy	2.3
Bursitis or synovitis	2.3
Osteoporosis or osteomalacia	2.3
Fibromyalgia	2.3
Obesity	2.3
Functional scoliosis	2.2
Sinus condition	2.2
TMJ syndrome	2.2
Carpal or tarsal tunnel syndrome	2.1

Table 6.2 Patient Conditions by Frequency (continued)

Patient Condition	Frequency 
<b>Monthly (continued)</b>	
Hypertension/hypotension	2.1
Structural scoliosis	2.1
Vertigo/loss of equilibrium	1.9
Nutritional disorder	1.8
Thoracic outlet syndrome	1.8
Rheumatoid/inflammatory arthritis or gout	1.7
Pregnancy-related condition	1.7
Food/environmental allergies	1.7
Diabetes/metabolic syndrome	1.7
Menstrual disorder/PMS	1.5
Eye, ear, nose, or throat disorder	1.5
<b>Yearly</b>	
Sleep disorder	1.4
Menopause	1.4
Immune system dysfunction	1.3
Asthma, emphysema, or COPD	1.3
Hiatal hernia/esophageal reflux	1.2
Thyroid disorder	1.2
Childhood respiratory/ear infection	1.1
Concussion/head injury	1.1
Respiratory infection	1.0
Adrenal disorder	1.0

**Table 6.2 Patient Conditions by Frequency (continued)**

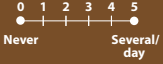
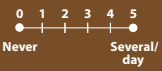
Patient Condition	Frequency 
<b>Yearly (continued)</b>	
Congenital/developmental anomaly	0.9
Psychological disorder	0.9
Infantile colic	0.9
Incontinence	0.9
ALS, multiple sclerosis, or parkinsonism	0.9
Dislocation of any joint	0.8
Fracture	0.8
Colitis or diverticulitis	0.8
Kidney or urinary tract infection	0.8
Cranial nerve disorder	0.8
Acne, dermatitis, or psoriasis	0.8
Peripheral artery or vein disorder	0.7
Anemia	0.7
Kidney stones	0.7
Heart murmur or rhythm irregularity	0.6
Gastrointestinal infection	0.6
Ulcer of stomach, small intestine, or colon	0.6
Eating disorder	0.6
Herpes simplex or herpes zoster	0.6
Infertility female/male	0.6
Benign prostatic hypertrophy	0.6
Skin cancer	0.5

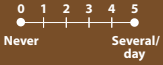
Table 6.2 Patient Conditions by Frequency (continued)

Patient Condition	Frequency 
<b>Yearly (continued)</b>	
Stroke or cerebrovascular condition	0.5
Inguinal hernia	0.5
Hemorrhoid	0.5
<b>Virtually Never</b>	
Infection of joint/disc/bone	0.4
Abdominal aortic aneurysm	0.4
Fibrocystic breast or polycystic ovary	0.4
Bone tumor/metastasis	0.4
Angina or myocardial infarction	0.4
Cholecystitis or pancreatitis	0.4
Avascular necrosis	0.3
Occupational/environmental lung disorder	0.3
Prostatic carcinoma	0.3
Tumor of lung or respiratory passages	0.2
Appendicitis	0.2
Kidney or bladder tumor	0.2
Sexually transmitted disease	0.2
Atelectasis or pneumothorax	0.1

**Table 6.2 Patient Conditions by Frequency (continued)**

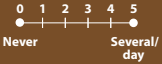
### Frequency of Professional Functions

Table 6.3 contains data from the 2014 survey listed according to the **frequency** with which the tasks are performed, based on a 6-point scale (values from 0-5). Chapter 9 presents these same functions, but lists **frequency**, **risk**, and **importance** in the same tables (Tables 9.1 - 9.8).

Professional Function	Frequency
	
<b>Several times per day</b>	
Perform a chiropractic adjustment of the occiput, spine and/or pelvis	4.9
Completely and legibly document each patient visit in SOAP note format	4.7
Perform a cervical, thoracic, lumbopelvic and/or extremity palpation examination	4.7
Perform an objective assessment of the involved joints' function immediately prior to a chiropractic adjustment	4.6
Perform an objective assessment of the involved joints' function immediately following a chiropractic adjustment	4.5
Provide self-care strategies	4.5
<b>Daily</b>	
Perform a chiropractic adjustment of an extra-spinal articulation	4.4
Perform physical fitness and exercise promotion activities	4.4
Completely and legibly document, on each visit, the patient's presentation in the PART format	4.2
Provide ergonomic or postural advice	4.2
Develop a prognosis	4.1
Make relaxation or stress reduction recommendations	4.1
Review with a patient his or her relevant case history and examination findings, diagnosis, prognosis, and case management plan options	4.0
Develop a case management plan	4.0
Create complete, readable documentation of a patient's case history and examination findings, the diagnosis and prognosis, and the case management plan	4.0

**Table 6.3 Frequency of Professional Functions**



Professional Function	Frequency 
<b>Daily (continued)</b>	
Provide nutritional and dietary recommendations	3.9
Perform a focused orthopedic/neurologic examination (limited to complaint)	3.9
Assess the existence of risk factors and contraindications to chiropractic care	3.8
Obtain a problem-focused case history	3.8
Develop a differential diagnosis or clinical impression	3.8
Obtain written informed consent for treatment	3.8
Obtain a detailed or comprehensive case history	3.7
Recommend changing risky or unhealthy behaviors	3.7
Monitor a patient's progress or response to treatment utilizing patient-reported outcome measures	3.7
Re-examine a patient with orthopedic/neurological examination procedures, either periodically or when the patient's condition materially changed	3.5
Re-examine a patient with physical examination procedures, either periodically or when the patient's condition materially changed	3.5
<b>Weekly</b>	
Review radiographic images to identify or rule out fracture, dislocation, and other pathology	3.1
Perform a gait analysis	3.1
Provide disease prevention and early screening advice	3.1
Perform a comprehensive orthopedic/neurologic examination (not limited to complaint)	3.0
Release a patient from active care	3.0
Recommend smoking cessation	2.7
Review radiographic images to determine the possible presence of a spinal listing and/or subluxation	2.7

**Table 6.3 Frequency of Professional Functions (continued)**

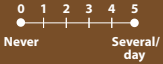
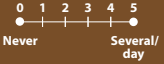
Professional Function	Frequency 
<b>Monthly</b>	
Search online databases for evidence to assist in patient management	2.4
Refer a patient to a specialist for consultation or co-management	2.3
Write a physical restriction order	2.3
Read imaging studies that you did not take or order	2.3
Obtain the results of a previously performed MRI or CT	2.3
Review MRI, CT, or bone scan images to identify or rule out pathology	2.2
Perform a comprehensive physical examination	2.1
Take radiographs in your office	2.0
Obtain the results of previously performed laboratory tests	1.8
Order radiographs from an outside facility	1.8
Write a narrative report (not daily notes)	1.7
Order an MRI or CT	1.7
Review laboratory studies and interpret the results	1.6
<b>Yearly</b>	
Monitor a patient's progress or response to treatment utilizing follow-up radiographic examinations	1.4
Obtain the results of other previous specialized studies	1.4
Obtain the results of a previously performed NCV or EMG study	1.2
Perform a focused EENT examination	1.1
Review specialized studies such as NCV, EMG, ECG, etc. and interpret the results	1.1
Perform a focused abdominal examination	1.0
Obtain the results of a previously performed bone scan	1.0

Table 6.3 Frequency of Professional Functions (continued)

Professional Function	Frequency 
<b>Yearly (continued)</b>	
Order blood, urine, or other laboratory tests from an outside facility	0.8
Perform a focused cardiopulmonary examination	0.8
Order a nerve conduction velocity (NVC) and/or needle electromyography (EMG) study	0.6
Order other specialized studies	0.6
<b>Virtually Never</b>	
Order a bone scan	0.4
Draw blood, collect urine and/or perform other laboratory tests in your office	0.3
Perform other specialized studies	0.1

**Table 6.3 Frequency of Professional Functions (continued)**

### Perceived Risk Associated with Professional Functions

The **perceived risk** that practitioners associated with the various professional functions is presented in this chapter in Tables 6.4 and 6.5 and also in Chapter 9. No professional functions were rated by respondents as having severe risk, but those listed in Table 6.4 pose a **significant** risk to a patient's health or safety if a chiropractor omits or poorly performs such functions.

Professional Function	Risk
<b>Significant Risk</b>	
Assess the existence of risk factors and contraindications to chiropractic care	2.9
Review MRI, CT, or bone scan images to identify or rule out pathology	2.8
Review radiographic images to identify or rule out fracture, dislocation, and other pathology	2.8
Read imaging studies that you did not take or order	2.8
Perform an objective assessment of the involved joints' function immediately prior to a chiropractic adjustment	2.7
Obtain a problem-focused case history	2.6
Refer a patient to a specialist for consultation or co-management	2.6
Perform a focused orthopedic/neurologic examination (limited to complaint)	2.6
Write a physical restriction order	2.6
Develop a differential diagnosis or clinical impression	2.6
Review with a patient his or her relevant case history and examination findings, diagnosis, prognosis, and case management plan options	2.6
Obtain written informed consent to treatment	2.6
Obtain a detailed or comprehensive case history	2.5

**Table 6.4 Professional Functions Having Significant Risk**

All of the professional functions listed in Table 6.4 document the need recognized by chiropractic physicians to obtain a thorough and valid professional assessment of the prospective patient to determine if this person is an appropriate candidate for chiropractic health care.

Virtually any professional function not listed in Table 6.4 could present some risk to a patient’s health or safety if a chiropractor omits or poorly performs such function. Most functions that present **some** risk address analyzing additional patient data, making a plan for health care, and then monitoring care.

Table 6.5 lists the professional functions which experienced practitioners perceive as having the least amount of risk. It is noteworthy that performing adjustments, after having previously determined appropriateness is the **least** risky of all professional functions.

Professional Function	Risk
<b>Little Risk</b>	
Perform a gait analysis	1.3
Release a patient from active care	1.2
Perform a chiropractic adjustment	0.9

**Table 6.5 Professional Functions Having Little Risk**

### Importance of Professional Functions

Tables 6.6 – 6.8 contain data from the 2014 Survey of Chiropractic Practice, which are also presented in Chapter 9 of this report concerning professional functions performed within chiropractic practices. These tables place professional functions in order based on **Importance Value**. The scientific literature addressing the analysis of professional surveys often recommends a multiplicative model for combining ratings from two scales (Kane, Kingsbury, Colton, & Estes, 1989). In the present study, **frequency** and **risk** were combined to form the **Importance Value**.

The Importance Value was derived by multiplying respondents’ ratings of frequency on a 6-point scale (values from 0 to 5) by their rating of risk on a 5-point scale (values from 0 to 4). This process yields a value between 0 (not important) and 20 (extremely important).

The Importance Value is based upon the professional function’s perceived risk each time it is performed and provides a meaningful interpretation of professional tasks. Importance Values obtained from the 2014 questionnaire ranged from 12.5 to 0.3 with an average value of 5.7 and a standard deviation of 3.3.

Table 6.6 presents the professional functions having the **highest** importance: all exceeded one standard deviation above the mean. These functions are all performed daily; additionally, all but two have significant risk associated with poor performance or failure to perform. These procedures require the chiropractor to: perform joint assessments and orthopedic exams, assess chiropractic care risk factors, review healthcare factors with the patient, develop a differential diagnosis, and obtain a case history and informed consent.

Professional Function	Importance
Perform an objective assessment of the involved joints' function immediately prior to a chiropractic adjustment	12.5
Assess the existence of risk factors and contraindications to chiropractic care	11.4
Perform a cervical, thoracic, lumbopelvic and/or extremity palpation examination	11.3
Review with a patient his or her relevant case history and examination findings, diagnosis, prognosis, and case management plan options	10.5
Perform a focused orthopedic/neurologic examination (limited to complaint)	10.4
Obtain a problem-focused case history	10.2
Develop a differential diagnosis or clinical impression	10.1
Obtain written informed consent for treatment	10.0
Obtain a detailed or comprehensive case history	9.5
Completely and legibly document each patient visit in SOAP note format	9.2
Perform an objective assessment of the involved joints' function immediately following a chiropractic adjustment	9.1
Review radiographic images to identify or rule out fracture, dislocation, and other pathology	9.1

**Table 6.6 Professional Functions Having Highest Importance**

Table 6.7 lists importance values which were above the mean but less than one standard deviation above the mean. The procedures that have **significant** importance include: assessing joints, reviewing radiographic images, documenting patient history and projected care, developing a case management plan and prognosis, re-examining the patient, reading imaging studies, monitoring progress, and writing a physical restriction order.

Professional Function	Importance
Create complete, readable documentation of a patient's case history and examination findings, the diagnosis and prognosis, and the case management plan	8.7
Develop a case management plan	8.1
Develop a prognosis	8.1
Re-examine a patient with orthopedic/neurological examination procedures, either periodically or when the patient's condition materially changed	7.9
Completely and legibly document, on each visit, the patient's presentation in the PART format	7.7
Re-examine a patient with physical examination procedures, either periodically or when the patient's condition materially changed	7.6
Perform a comprehensive orthopedic/neurologic examination (not limited to complaint)	7.2
Read imaging studies that you did not take or order	6.6
Review MRI, CT, or bone scan images to identify or rule out pathology	6.4
Monitor a patient's progress or response to treatment utilizing patient-reported outcome measures	6.4
Refer a patient to a specialist for consultation or co-management	6.3
Review radiographic images to determine the possible presence of a spinal listing and/or subluxation	6.1
Write a physical restriction order	6.0

**Table 6.7 Professional Functions Having Significant Importance**

Table 6.8 lists functions of **moderate** importance that are performed daily, weekly, monthly, or yearly, and whose importance value is just below the mean to one standard deviation below the mean.

Professional Function	Importance
Search online databases for evidence to assist in patient management	5.5
Obtain the results of a previously performed MRI or CT	5.2
Take radiographs in your office	5.1
Perform a comprehensive physical examination	5.0
Perform a chiropractic adjustment of the occiput, spine and/or pelvis	4.5
Perform a gait analysis	4.2
Perform a chiropractic adjustment of an extra-spinal articulation	4.0
Write a narrative report (not daily notes)	3.9
Order an MRI or CT	3.9
Order radiographs from an outside facility	3.9
Review laboratory studies and interpret the results	3.9
Release a patient from active care	3.7
Obtain the results of previously performed laboratory tests	3.1
Obtain the results of other previous specialized studies	2.9
Review specialized studies such as NCV, EMG, ECG, etc. and interpret the results	2.7
Monitor a patient's progress or response to treatment utilizing follow-up radiographic examinations	2.5

**Table 6.8 Professional Functions Having Moderate Importance**

Other functions having **lower** importance ratings include ordering: bone scans, other specialized studies, needle electromyography, and nerve conduction velocity studies. These tasks had some risk associated with them, but were generally performed infrequently.



## Treatment Procedures

Three-fourths (76.1%) of practitioners surveyed in 2003 indicated that a full spine and extremity adjusting approach were used in patient care. A typical chiropractor used 5 to 6 different adjusting techniques in practice. Ninety-six percent of chiropractors used diversified technique, and 71.5% of patients were treated with this technique.

Nearly all chiropractors provide health promotion and wellness care recommendations to their patients (Tables 9.9 and 9.10 in Chapter 9). The most frequently performed health promotion and wellness care functions are: providing self-care strategies to patients, performing physical fitness and exercise promotion activities, and providing ergonomic or postural advice.

The 2009 Survey of Chiropractic Practice revealed that more than three-quarters of practitioners use passive adjunctive care procedures including ice packs, trigger point therapy, braces, and electrical stimulation, while more than two-thirds utilize hot packs, massage therapy, and heel lifts. The percentage of chiropractors utilizing each of the 25 passive adjunctive care procedures as reported in the 2009 survey is displayed in Table 9.11 in Chapter 9.

Active adjunctive care procedures are very commonly used in chiropractic practice, according to data gathered in the 2009 survey. More than 90% of practicing chiropractors employ corrective and spinal rehabilitation exercises, and over 80% include extremity rehabilitation exercises as well as advice and training concerning activities of daily living (Table 9.12 in Chapter 9).

### Interprofessional Referrals and Weekly Patient Care

The 2009 Survey of Chiropractic Practice confirmed that referral of patients between chiropractors and other healthcare practitioners is common, and the typical doctor of chiropractic makes 13.6 referrals per month and receives about 7.7 referrals per month (Figure 7.5 in Chapter 7). The largest group of chiropractors (36.0%) treat between 50 and 99 individual patients each week, while approximately an equal number (35.9%) treat fewer than 50 individual patients per week (Figure 6.2).

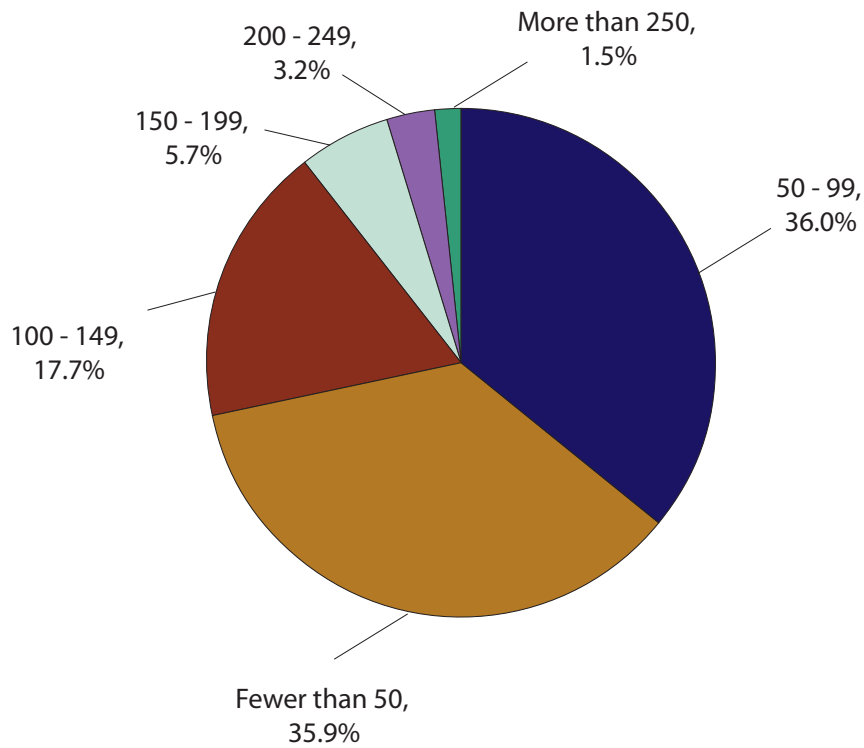
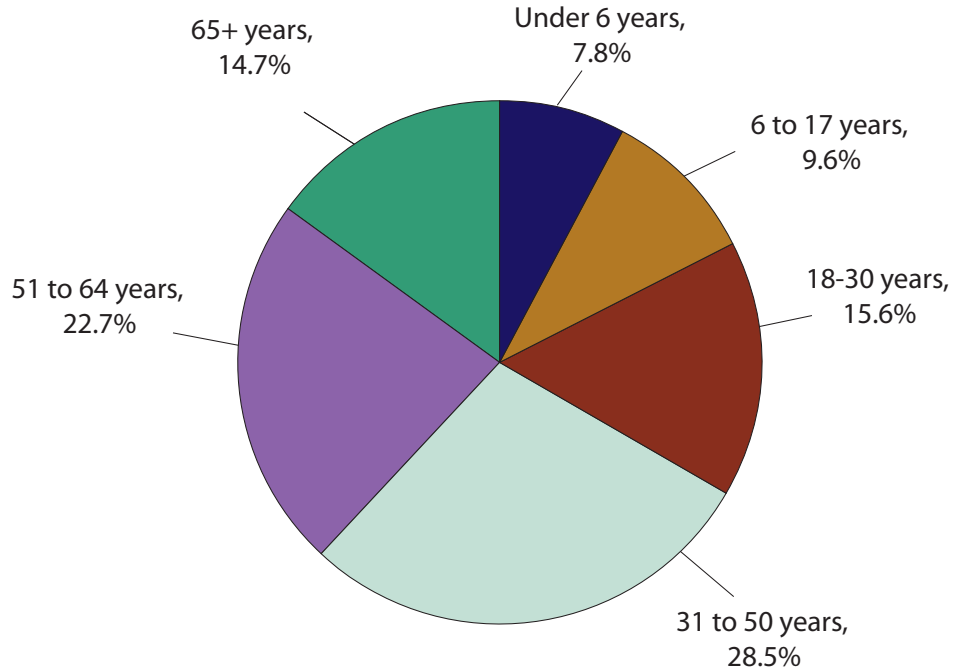


Figure 6.2 Number of Patients per Week (2014)

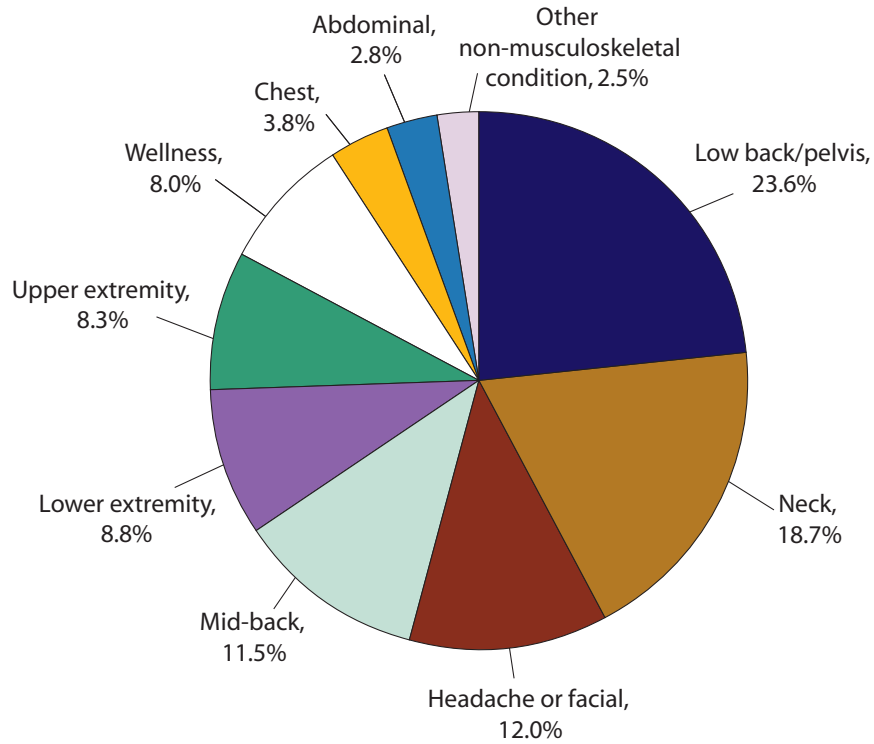
**The “Typical” Patient**

The typical chiropractic patient is characterized as an 18- to 64-year-old (Figure 6.3), 59% of whom are female (Chapter 7). However, chiropractors are managing young patients more frequently than reported in earlier surveys: the portion of patients under 17 years of age has increased from 9.7% to 17.4%, while the percentage of patients 65 years of age and over has remained approximately the same (13.3% and 14.7%) since the 1991 Survey of Chiropractic Practice.



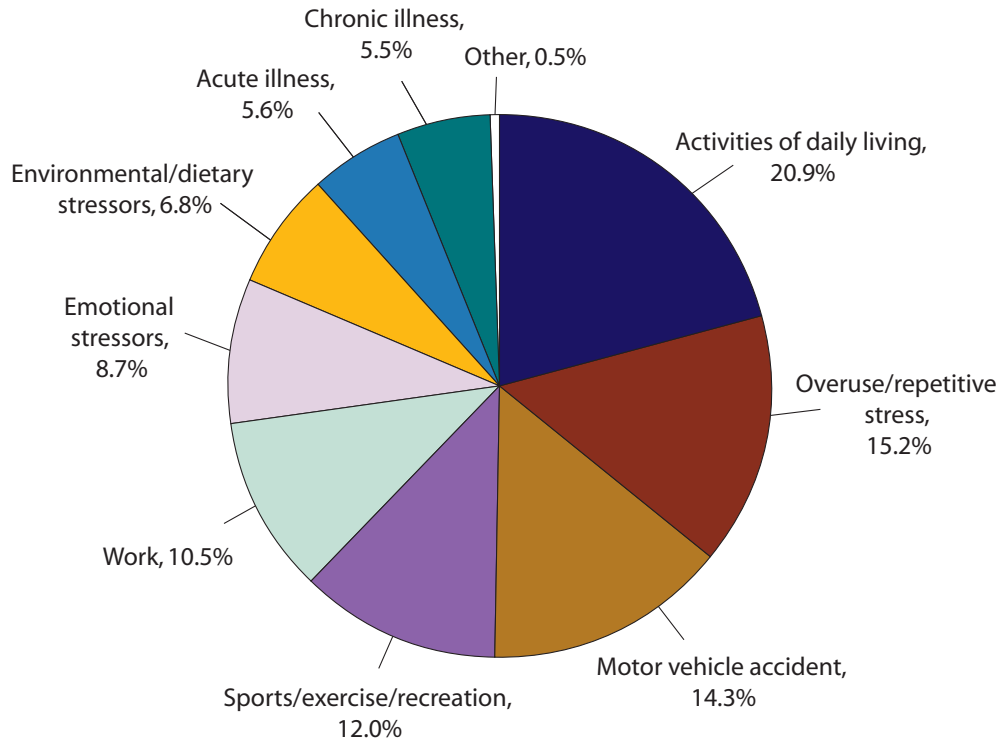
**Figure 6.3 Patient Age (2014)**

The 2003 Survey of Chiropractic Practice determined that patients' most frequent chief complaints concerned low back and neck problems; other common complaints were headache or facial pain or facial pain and mid-back pain/injury (Figure 6.4). Wellness/preventive care was the reason that 8% of patients presented for chiropractic treatment.



**Figure 6.4 Chief Complaint (2003)**

Regarding the cause of patients' health concerns, the 2003 survey determined that one-fifth (20.9%) of patients' problems arose from activities of daily living; the next two most common causes of patient complaints were overuse/repetitive stress (15.2%) and motor vehicle accidents (14.3%) (Figure 6.5).



**Figure 6.5 Etiology of Patient Condition (2003)**

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