CHAPTER 1. MEDICAL RECORDS: THEORY AND PRACTICE

I. INTRODUCTION

- § 1:1 Medical records and medical informatics—The winds of change
- § 1:2 Purposes served by keeping medical records

II. TRADITIONAL MEDICAL RECORDS

- § 1:3 Traditional medical patient chart
- § 1:4 Storing medical records—Individual and unit files
- § 1:5 Limitations on traditional record-keeping
- § 1:6 Intelligent use of the traditional medical record

III. PROBLEM-ORIENTED MEDICAL RECORDS (POMRS)

- § 1:7 Weed's problem-oriented approach
- § 1:8 Distinguishing feature—One-page summary
- § 1:9 Benefits of POMRs
- § 1:10 Flow-sheet approach
- § 1:11 Disadvantage of POMRs—Updating
- § 1:12 Current status of problem oriented medical records

IV. PRE-PRINTED MEDICAL RECORD FORMS

- § 1:13 Use as "prompts" to insure adequate record-keeping
- § 1:14 Designing of pre-printed forms
- § 1:15 Situations when pre-printed forms are especially useful

V. COMPUTER TECHNOLOGY AND MEDICAL RECORDS

§ 1:16 Advent of computer
 § 1:16.50 Electronic medical records—Definitions
 § 1:17 Advantages of computerization of medical information services
 § 1:18 Problems and solutions in computerizing medical records
 § 1:18.50 Requesting electronic medical records

§ 1:18.60 § 1:18.70	Electronic medical records—Discovery issues Sample orders granting plaintiff's motion re: electronic medical records, audit trails, and
	metadata
§ 1:19	Back-up dictation systems
§ 1:20	The institute of medicine 1991 report on computer-based health records (CHRs)
§ 1:21	The recommendations of the computer based patient record institute and currently available resources

VI. MEDICAL RECORD PRIVACY

§ 1:22	Electronic use and dissemination of medical records under the Health Insurance Portability and Accountability Act (HIPAA)
§ 1:23	Medical record privacy under the Health Insurance Portability and Accountability Act (HIPAA)
§ 1:23.10	The American Recovery and Reinvestment Act of 2009—The HITECH Act: Impact on protected health information and HIPAA privacy and security provisions
§ 1:24	Authorization—By insured—To physician—Cover letter accompanying authorization
§ 1:25	— — Release of medical records to insured's attorney
§ 1:26	— — Release for attorney to inspect psychotherapy notes
§ 1:27	— —For insurer to inspect medical records
§ 1:28	Release—By insured—To insurer—Information pertaining to medical treatment
§ 1:29	Defendant's HIPAA notice letter prior to sending subpoena or notice for deposition for medical records
§ 1:30	HIPAA notice letter accompanying subpoena
§ 1:31	Affidavit—By attorney—For issuance of subpoena duces tecum requiring plaintiff's doctor to produce documents
§ 1:32	Affidavit—In support of application for subpoena duces tecum requiring production of medical records—Personal injury
§ 1:33	HIPAA qualified protective order
§ 1:34	Petition or application—For writ of mandamus and prohibition—To set aside discovery order on ground that it violates physician-patient privilege—By hospital and physician
§ 1:34.50	Breach of physician's statutory and fiduciary duty to keep patient's medical information confidential without patient's consent—Generally

§ 1:35	Complaint, petition, or declaration—For damages and injunctive relief—Wrongful disclosure— Medical records
§ 1:36	Complaint, petition, or declaration—For damages—Wrongful disclosure—Medical records
§ 1:36.10	Wrongful disclosure of confidential medical information—Sample plaintiff's interrogatories
§ 1:36.20	—Sample defendant's interrogatories
§ 1:36.30	—Sample plaintiff's requests for admissions
§ 1:36.40	—Sample defendant's requests for admissions
§ 1:36.50	—Sample plaintiff's request for production of documents
§ 1:36.60	—Sample defendant's request for production of documents
§ 1:37	Notice for accounting of disclosures of protected health information
§ 1:38	HIPAA sample business associate contract provisions
§ 1:38.50	Medical information and creditors

VII. OBTAINING MEDICAL RECORDS

- § 1:39 Request—Production of documents for inspection and copying—Medical records
- § 1:40 Request—Production of documents for inspection and copying—Medical and education records
- § 1:41 Motion—To compel doctor's production of medical records for trial
- § 1:42 HIPAA and medical privacy laws—Statutory table
- § 1:43 Mass tort cases—Plaintiff information sheet
- § 1:44 —Sample order plaintiff information sheet—In Re: Acetaminophen—ASD-ADHD products liability litigation
- § 1:45 —Sample census form—Zantac (ranitidine) census plus

CHAPTER 2. MEDICAL RECORDS: TYPICAL DOCUMENTS

I. INTRODUCTION

§ 2:1	Importance of medical record for lawyers
§ 2:1.10	Attorney's brief initial analysis of the medical records
§ 2:1.20	Other considerations when initially analyzing medical records
§ 2:2	Documents comprising medical record
§ 2:2.10	Checklist—Hospital patient records
§ 2:2.20	—Other patient records

	MEDICAL INFORMATION SYSTEM ZI
§ 2:3 § 2:4 § 2:4.30 § 2:4.70	~ ·
	EDICAL HISTORY AND PHYSICAL KAMINATION
A.	IMPORTANCE OF HISTORY AND PHYSICAL (H & P)
§ 2:6	Many documents presuppose H & P Clinical importance of H & P Cull and abbreviated H & P
В.	TAKING OF MEDICAL HISTORY
\$ 2:8 \$ 2:9 \$ 2:10 \$ 2:11 \$ 2:12 \$ 2:13 \$ 2:14 \$ 2:15 \$ 2:15.10 \$ 2:15.20	
C.	PHYSICAL EXAMINATION
	General outline of physical examination Different approaches to physical examination Abbreviated physical examinations Distinguishing simple and complex cases
	MPORTANT DOCUMENTS IN HOSPITAL ECORD
A.	DOCUMENTS PRODUCED BY MEDICAL STAFF
§ 2:20 § 2:21 § 2:22	Discharge summary Admission note and admitting orders Progress notes
В.	DOCUMENTS PRODUCED BY NURSING STAFF
	1. Nurses' Notes
§ 2:23 § 2:24	Importance to lawyers of nurses' notes Nurses' notes as to pain and suffering

§ 2:57

§ 2:25 § 2:26 § 2:27	Nurses' notes as to psychiatric harm Nurses' notes as to recovery potential Problems relating to nurses' notes
5	2. Other Nurses' Documents
§ 2:28	Nurses' admitting forms
§ 2:29	Nursing plan
§ 2:30	Nurses' medication sheet
§ 2:31	Nurses' graphic chart
C.	DOCUMENTS RELATING TO SURGERY
§ 2:32	Surgical consent form
§ 2:33	Surgeon's operative record
§ 2:34	Nurses' surgical record
§ 2:35	Sponge and instrument count
§ 2:36	Recovery room record
D.	ANESTHESIA RECORDS
§ 2:37	Lawyers' difficulties with anesthesia records
§ 2:38	Preanesthetic record
§ 2:39	Anesthesiological and surgical opinions about advisability and timing of operations
§ 2:40	Role of certified nurse anesthetist (CRNA)
§ 2:41	Interdepartmental organization to avoid conflict
§ 2:42	American Society of Anesthesiologists (ASA) grading scale
§ 2:43	Planning anesthetic management and documenting plan
§ 2:44	Preanesthetic evaluation—Examination of airway
§ 2:45	Blind nasal intubation
§ 2:46	Endoscopic intubation
§ 2:47	Preanesthetic evaluation as communication device
§ 2:48	Component parts of anesthesia record
§ 2:49	Section 1 of anesthesia record—Patient identification
§ 2:50	Section 2 of anesthesia record—Relevant clinical data
§ 2:51	Section 3 of anesthesia record—Anesthetic events
§ 2:52	Section 4 of anesthesia record—Drugs, fluids, and gases
§ 2:53	Section 5 of anesthesia record—Monitoring information
§ 2:54	Section 6 of anesthesia record—General information
§ 2:55	Post-anesthetic record
§ 2:56	Post-anesthetic visit—Important physical findings
\mathbf{E}	DEPARTMENTAL RECORDS

Variety of departmental records

$\S 2:58$	Physical therapy departmental records
§ 2:59	Respiratory therapy departmental records
§ 2:60	Functions of psychotherapy department
§ 2:61	Psychiatry departmental records
§ 2:61.10) Emergency records
§ 2:62	Other departmental records
§ 2:63	Cardiopulmonary resuscitation (CPR) forms
F.	PRIVILEGED DOCUMENTS
§ 2:64	Why certain documents are privileged
§ 2:65	Incident reports
§ 2:66	Morbidity/mortality committee reports
§ 2:67	Quality assurance documents
§ 2:68	Questionable value of privilege

IV. MEDICAL RECORDS GENERATED OUTSIDE HOSPITAL

Treating privileged documents as attorney's work

§ 2:70	Traditional doctor's office record
§ 2:71	Discharge summaries
§ 2:72	Consultants' reports
§ 2:73	Use of pre-printed forms
§ 2:74	Records of medical clinics
§ 2:75	Records of mental health centers
§ 2:76	Records of functional capacity assessment (FCA) centers
§ 2:76.10	Nursing home records

V. DOCUMENTS

product

§ 2:69

§ 2:77	Patient identification
§ 2:78	Post-anesthetic progress note
§ 2:79	Nurse's operative note
§ 2:80	Recovery room record
§ 2:81	Physical therapy record—Teenage female
§ 2:82	Physical therapy record—Adult male

CHAPTER 3. MEDICAL RECORDS: A METHODICAL APPROACH

I. INTRODUCTION

§ 3:1	Usual arrangement of medical record
§ 3:2	Legal requirement—Integrated history
§ 3:3	Cases not requiring methodical approach

§ 3:28 § 3:29

§ 3:30

§ 3:31

§ 3:32

§ 3:33

TABLE OF	CONTENTS
	Cases requiring methodical approach Organizing medical records
II. Fl	LOW-SHEET METHOD
A.	METHODICAL APPROACH TO READING MEDICAL RECORD
§ 3:6 § 3:7 § 3:8 § 3:9 § 3:9.50	Page referencing entire record Use of discharge summary Reading of details of medical record Noting the important items in the medical record Checking for alterations of record
В.	FLOW-SHEET CONSTRUCTION
§ 3:10 § 3:11	Use of secretarial staff in producing flow sheet Constructing flow sheet—Accommodating future growth
§ 3:12 § 3:13	Use of discharge summary in flow sheet method Impact of computerization
C.	USES OF FLOW SHEETS
§ 3:14 § 3:15 § 3:16	A flow sheet advances understanding of the case Facilitating communication—Consultants A flow sheet analysis can be used to enhance presentation
III. I	OCUMENTS
§ 3:17 § 3:18 § 3:19	Ambulance call report—Ambulatory patient Ambulance call report—Non-ambulatory patient Doctor's case summary
§ 3:20 § 3:21 § 3:22	Doctor's emergency room notes (with translation) Emergency department flow sheet Nurse's admission history and assessment
§ 3:23 § 3:24 § 3:25	Doctor's admission note (with translation) Surgeon's operative note Pathology report
§ 3:26 § 3:27 § 3:28	Nursing care plan Nurse's notes (with explanations of abbreviations) Neurosurgeon's progress notes (with translation)
5 0.20	Treat obat Scott a brost cap motes (with manistation)

Medication administration record

Doctor's order sheet (with nurse's notes)

Doctor's case summary: De borde case

Flow sheet analysis: De borde case

Graphic chart of temperature, pulse, respiration

CHAPTER 3A. ERRORS AND LEGAL PITFALLS OF MEDICAL RECORD KEEPING

A. INTRODUCTION

§ 3A:1 Importance to attorneys of errors and legal pitfalls

B. ADVERSARIAL AND DEFENSIVE RECORDS

§ 3A:2	Adversarial and defensive records
§ 3A:3	Attacking a medical record as defensive
§ 3A:4	Rationalizing a poor medical outcome
§ 3A:5	Suggesting unlikely causes
§ 3A:6	Patient noncompliance
§ 3A:7	Protecting other people
§ 3A:8	Defensive wording
§ 3A:9	Editorial comments
§ 3A:10	Unusual emphasis on legally significant matters
§ 3A:11	Late changes in medical records

C. INFERENCES FROM POOR RECORD-KEEPING

§ 3A:12	Importance of inferences from poor record-keeping
§ 3A:13	Inconsistent record-keeping
§ 3A:14	Inadequate record-keeping
§ 3A:15	Inadequate documentation of relevant history and findings
§ 3A:16	Inadequate documentation of actions taken
§ 3A:17	Inadequate documentation of thought processes
§ 3A:18	Inadequate documentation of technical requirements
§ 3A:19	Excessively voluminous records
§ 3A:20	Poorly organized records
§ 3A:21	Illegible records
§ 3A:22	Unauthorized abbreviations

D. ERRONEOUS DATA

§ 3A:23	Erroneous data
§ 3A:24	Inaccurate notation
§ 3A:25	Uncommon meanings for judgmental words
§ 3A:26	Anticipatory record-keeping
§ 3A:27	Disagreement within medical records
§ 3A:28	Delayed documentation

E. ERRONEOUS OPINIONS AND CONCLUSIONS

§ 3A:29	Erroneous opinions and conclusions
§ 3A:30	Misrepresentation to secure insurance coverage

§ 3A:31	Reliance on unreliable data
§ 3A:32	Premature conclusions
§ 3A:33	Incompetent opinions
§ 3A:34	Hostility toward the patient
§ 3A:35	Hostility toward another clinician

F. EVIDENCE OF NEGLIGENT HEALTH CARE

§ 3A:36	Evidence of negligent health care
§ 3A:37	Insufficient frequency of record keeping
§ 3A:38	Apparent abandonment
§ 3A:39	Failure to sign a telephone or other verbal order
§ 3A:40	Failure to countersign records
§ 3A:41	Forgetting an incidental medical problem
§ 3A:42	Blame by another clinician

G. HIDDEN RECORDS

§ 3A:43 Hidden records

H. MEDICAL NONCOMPLIANCE BY PATIENTS

§ 3A:44	Investigation and proof of noncompliance
§ 3A:45	The health provider's responsibility for preventing
	noncompliance

CHAPTER 3B. DISABILITY

I. INTRODUCTION

§ 3B:1	Definition of disability
§ 3B:2	Consideration of objective medical evidence and other evidence
§ 3B:3	Social Security Disability—Independent medical examination
§ 3B:4	—Opinions and other evidence from sources who are not "acceptable medical sources" in disability claims
§ 3B:5	—Documenting and evaluating disability in young adults
§ 3B:6	—Childhood disability and documenting a child's impairment-related limitations
§ 3B:6.10	Determining whether person applying for benefits can perform any of their past relevant work
§ 3B:7	Americans with Disabilities Act—Independent medical examination
§ 3B:8	Social Security Disability—Request for reconsideration
§ 3B:9 [Rese	rved]

- § 3B:10 Workplace disability management
- § 3B:10.50 Life care plans

II. CHECKLISTS

- § 3B:11 Proof of disability for a Social Security Claim; checklist
- § 3B:12 Proof of disability under the Americans with Disabilities Act; checklist

III. FORMS

§ 3B:13 Letter—Requesting opinion of physician whether claimant's impairment meets or equals particular listing to qualify for social security disability benefits

CHAPTER 3C. INDEPENDENT MEDICAL EXAMINATIONS

- § 3C:1 Introduction
- § 3C:2 Showing required
- § 3C:3 Selection of examiner
- § 3C:4 Relationship between examinee and examiner
- § 3C:5 Presence of third parties at examination
- § 3C:6 Videotaping/Recording IME

CHAPTER 4. CENTRAL AND PERIPHERAL NERVOUS SYSTEMS: INJURIES AND DISABILITIES

I. INTRODUCTION

A. NERVOUS SYSTEM AND FUNCTIONS

- § 4:1 Definitions
- § 4:2 Functions—Generally
- § 4:3 —Neuroendocrine system
- § 4:4 —Peripheral nerves
- § 4:5 —Autonomic nervous system
- § 4:6 —Sympathetic nerves and parasympathetic nerves

B. LEGAL PERSPECTIVE

- § 4:7 Deficits associated with neurological damage
- § 4:8 How lawyers encounter neurological damage
- § 4:9 What lawyers need to know

II. NERVOUS SYSTEM ANATOMY AND PHYSIOLOGY

A. BRAIN AND RELATED STRUCTURES

§ 4:10	Scalp
§ 4:11	Skull vault
§ 4:12	Skull base
§ 4:13	Tentorium cerebelli
§ 4:14	Incisural hernias and tonsillar hernias
§ 4:15	Meninges
§ 4:16	Cerebral ventricles
§ 4:17	Cerebrospinal fluid (CSF)
§ 4:18	Cerebral hemispheres and diencephalon
§ 4:19	Cerebral cortex
§ 4:20	Gyri and sulci
§ 4:21	Brain stem
§ 4:22	Cerebellum
§ 4:23	Spinal cord
$\S 4:24$	Peripheral nerves

B. MICROSTRUCTURE OF NERVOUS SYSTEM

- § 4:25 Neurons and glial cells
- § 4:26 Typical neuron
- $\S~4:27$ Generation and transmission of electrical charges in neurons
- § 4:28 Myelinated and unmyelinated nerve cells
- § 4:29 Coverings of peripheral nerves

C. GRAY AND WHITE MATTER

- § 4:30 Gray matter and white matter—Generally
- § 4:31 —Distribution in central nervous system
- § 4:32 —Function
- § 4:33 —Deep gray matter
- § 4:34 —Hypothalamus
- § 4:35 —Brain stem and spinal cord
- § 4:36 —Spinal cord and peripheral nerves

D. FUNCTION AND MALFUNCTION OF BRAIN

- § 4:37 Importance of understanding brain function
- § 4:38 Location of cortical functions—Brain mapping
- § 4:39 —Motor cortex
- § 4:40 —Sensory cortex
- § 4:41 —Visual association areas
- § 4:42 —Speech centers
- § 4:43 —Other functions

§ § § §	4:45 4:46 4:47	—Silent areas —Brodmann's numbered charts —Hemispheric localization of functions —Limbic system —Memory —Stress response
I	II. I	NJURIES AND DISORDERS
	A.	NERVOUS SYSTEM DISORDERS—LEGAL AND MEDICAL APPROACHES
§ §	4:50 4:51 4:52 4:53	Spectrum of neurological disorders Neurology and neuropathology Consulting efficiently with medical experts Important topics in following sections
	В.	TRAUMATIC BRAIN DAMAGE
§ § §	4:54 4:55 4:56 4:57 4:58	Prevalence of head trauma Skull fractures—Medical and legal importance How skull fractures cause damage Classification of head injuries Types of brain damage—Local and global impairments
§	4:59 4:60 4:61	Penetrating or blunt trauma Whiplash Spectrum of global head injuries
§	4:62 4:62.50 4:63	Concussion—Definition and clinical features—
	4:64	Mechanisms of injury Impairments following mild trauma—Malingering and compensation neurosis
-	4:65 4:66	—High risk groups Legal problems relating to serious head injuries
Ū		BRAIN TRAUMA—INTRACRANIAL BLEEDING
§	4:67	Acute intracranial hemorrhage—Arterial and venous bleeding
§	4:68	Subacute bleeding—Subacute hygroma
§	4:69	Compensatory mechanisms in brain hemorrhage
	4:70	Signs of rising intracranial pressure
	4:71	Emergency treatment
	4:72	Diagnosis—Radionuclear imaging
§	4:73	Diagnosing—CT scan
§	4:74	—Magnetic resonance imaging (MRI)
§	4:75	Treatment

§ 4:76 Patient management—Lucid interval

§ 4:77 —Obser § 4:78 —Obser	vation at home vation in hospital
D. CERI	EBROVASCULAR DISORDERS
§ 4:79 Defin	itions
§ 4:80 Clinic	cal presentations of strokes
	stroke
	sification of strokes
	stigation of strokes and TIAs
	ment of strokes
	ment of TIAs
E. BRAI	N TUMORS
§ 4:85 Types of	brain tumors—Generally
	n brain tumors
§ 4:87 —Malign	nant brain tumors
§ 4:88 Diagnos	is of brain tumors
§ 4:89 Treatme	ent of brain tumors
F. BRAI	N INFECTIONS
§ 4:90 Classific	ation of cerebral infectious conditions
§ 4:91 Infection	ns of leptomeninges
§ 4:92 Encepha	ılitis
§ 4:93 Prion in	fections—Multiple sclerosis
	netal encephalitis
	atory encephalitis—Reye's syndrome
§ 4:96 Post vira	al syndromes—Myalgic encephalomyelitis
G. HYPO	OXIA
§ 4:97 Definit	ion
§ 4:98 Occurr	ence—During anesthesia and surgery
	iratory depression
§ 4:100 —Carb	on monoxide poisoning
Н. НҮРС	OGLYCEMIA
§ 4:101 Homeo in block	static mechanisms maintaining glucose levels
§ 4:102 Hypogl	ycemic coma in insulin-dependent diabetics
	ous situations for insulin-dependent diabetics
	glucose abnormalities affecting brain
I. ISCHI	EMIA OR HYPOVOLEMIA
§ 4:105 Definit	ions
, <i></i>	

	WILDIOIL IN ORMITTON O
§ 4:106 § 4:107 § 4:108	Occurrences—Heart failure and arterial disease —Fainting and anaphylactic shock —Pituitary failure following childbirth
J.	OTHER BRAIN DISORDER
§ 4:109 § 4:110 § 4:111 § 4:112	Migraine Parkinson's disease (paralysis agitans) Lou Gehrig's disease (amyotrophic lateral sclerosis) Guillain Barré syndrome
K.	INJURIES AND DISORDERS AFFECTING SPINAL CORD
\$ 4:113 \$ 4:114 \$ 4:115 \$ 4:116 \$ 4:117 \$ 4:118	Conditions involving spinal cord Traumatic spinal cord injuries—Incidence and costs —Mechanisms of injury —Basic principles of injury —Management —Immunomodulatory therapy
L.	PERIPHERAL NERVE DISORDERS
\$ 4:119 \$ 4:120 \$ 4:121 \$ 4:122 \$ 4:123 \$ 4:124 \$ 4:125	Patterns and types of peripheral nerve damage Pressure injuries to peripheral nerves Entrapment neuropathies Sympathetic nerve pain Phantom limb syndrome Spontaneous recovery Surgical repair
	IPAIRMENTS ARISING FROM EUROLOGICAL INJURIES
A.	EVALUATION OF NEUROLOGICAL IMPAIRMENTS
\$ 4:126 \$ 4:127 \$ 4:128 \$ 4:129 \$ 4:130 \$ 4:131 \$ 4:132	Focus on brain damage Subtle brain deficits Deficits in right- and left-brain functions Importance of right-brain functions Indications of serious head injury—Duration of amnesia —Coma scales —Recovery from head injury
B.	NEUROLOGICAL DEFICITS
§ 4:133	Muscles—Weakness and wasting of muscle

§ 4:134 § 4:135 § 4:136 § 4:137 § 4:138	—Abnormalities of tone —Involuntary movement and tone Sensory deficits Coordination defects Epilepsy resulting from head injury
C.	MENTAL DEFICITS
\$ 4:139 \$ 4:140 \$ 4:141 \$ 4:142 \$ 4:143 \$ 4:144	Mental impairments—Generally —Memory function —Frontal lobe damage —Left hemisphere —Right brain —Psychiatric problems
D.	SPINAL CORD AND PERIPHERAL NERVE IMPAIRMENTS
§ 4:145 § 4:146 § 4:147	Disabilities—Generally —Peripheral nerve Dexterous and locomotor
V. OF	SJECTIVE EVIDENCE SUPPORTING A CLAIM
OF	'NEUROLOGICAL DAMAGE
OF A.	NEUROLOGICAL DAMAGE
	' NEUROLOGICAL DAMAGE
A. § 4:148	CLINICAL FINDINGS Patient history and physical examination Test reports
A. § 4:148 § 4:149	CLINICAL FINDINGS Patient history and physical examination Test reports
A. § 4:148 § 4:149 B. § 4:150 § 4:151 § 4:152 § 4:153 § 4:154 § 4:154.5	CLINICAL FINDINGS Patient history and physical examination Test reports DIAGNOSTIC IMAGING X-rays Ultrasound Radio-nuclear imaging (RNI) Computerized axial tomography (CT) Magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS) Diffusion Tensor Imaging—Motion to admit DTI evidence
A. § 4:148 § 4:149 B. § 4:150 § 4:151 § 4:152 § 4:153	CLINICAL FINDINGS Patient history and physical examination Test reports DIAGNOSTIC IMAGING X-rays Ultrasound Radio-nuclear imaging (RNI) Computerized axial tomography (CT) Magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS)
A. § 4:148 § 4:149 B. § 4:150 § 4:151 § 4:152 § 4:153 § 4:154 § 4:154.5 § 4:155	CLINICAL FINDINGS Patient history and physical examination Test reports DIAGNOSTIC IMAGING X-rays Ultrasound Radio-nuclear imaging (RNI) Computerized axial tomography (CT) Magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS) Diffusion Tensor Imaging—Motion to admit DTI evidence Positron emission tomography (PET) Single photon emission computerized tomography
A. § 4:148 § 4:149 B. § 4:150 § 4:151 § 4:152 § 4:153 § 4:154 § 4:154 § 4:155 § 4:155	CLINICAL FINDINGS Patient history and physical examination Test reports DIAGNOSTIC IMAGING X-rays Ultrasound Radio-nuclear imaging (RNI) Computerized axial tomography (CT) Magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS) Diffusion Tensor Imaging—Motion to admit DTI evidence Positron emission tomography (PET) Single photon emission computerized tomography (SPECT) ELECTRODIAGNOSTIC TESTING Electroneurodiagnosis—Nerve conduction testing and electroencephalography (EEG)
A. § 4:148 § 4:149 B. § 4:150 § 4:151 § 4:152 § 4:153 § 4:154 § 4:154 § 4:155 § 4:156 C.	CLINICAL FINDINGS Patient history and physical examination Test reports DIAGNOSTIC IMAGING X-rays Ultrasound Radio-nuclear imaging (RNI) Computerized axial tomography (CT) Magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS) Diffusion Tensor Imaging—Motion to admit DTI evidence Positron emission tomography (PET) Single photon emission computerized tomography (SPECT) ELECTRODIAGNOSTIC TESTING Electroneurodiagnosis—Nerve conduction testing and

	MIDDIOID INFORMATION DISTRI
§ 4:160 § 4:161	Special EEG techniques Computerized reading of standard EEGs
§ 4:162	Evoked potential EEG studies (EPs)
§ 4:163	Brain electrical activity monitoring (BEAM)
D.	PSYCHOLOGICAL TESTING
§ 4:164	Development and importance of psychological tests
§ 4:165	Neuropsychology—Origins and development
§ 4:166	—Usefulness to lawyers
§ 4:167 § 4:168	—Cost and value to patient
§ 4:168 § 4:169	Psychometric tests to show particular mental deficits Testing for emotional and personality problems
§ 4:170	Memory testing
§ 4:171	Supplemental complex memory tests
	LINICAL EXAMINATION OF NERVOUS
A.	EXAMINATION OF SENSORIUM
§ 4:172	Evaluation of mental state
§ 4:173	Inquiry about abnormal thoughts
§ 4:174	Testing intellectual functions
§ 4:175 § 4:176	Evaluating mood Limitations of montal state inquiry in neurological
8 4:170	Limitations of mental state inquiry in neurological examination
В.	EXAMINATION OF CRANIAL NERVES
§ 4:177	Cranial nerves—Traditional mnemonic
§ 4:178	—Olfactory nerves (c.n.i)
§ 4:179	—Ophthalmic nerves (c.n.ii) and visual pathways
§ 4:180	Eye movement—Third, fourth and sixth cranial nerves
§ 4:181 § 4:182	—Trigeminal (fifth cranial) nerve
§ 4:182 § 4:183	—Facial (seventh cranial) nerve—Acoustic (eighth cranial) nerve
§ 4.183 § 4:184	—Glossopharyngeal (ninth cranial) nerve
§ 4:185	—Vagus (tenth cranial) nerve
§ 4:186	—Accessory (eleventh cranial) nerve
§ 4:187	—Hypoglossal (twelfth cranial) nerve
§ 4:188	—Testing reflexes involving cranial nerves
C.	EXAMINATION OF PERIPHERAL NERVOUS SYSTEM
§ 4:189	Functions of peripheral nervous system
§ 4:190	Muscle power
	- F - · · ·

xxii

§ 4:191	Muscle tone
§ 4:192	Coordination
§ 4:193	Sensation
§ 4:193.10	Sample checklist—Nerve damage caused by lead poisoning
§ 4:194	Deep tendon reflexes
§ 4:195	Babinski (plantar) reflex

VII. DISABILITY DETERMINATION IN NERVOUS SYSTEM INJURIES AND DISORDERS

A. GENERAL PRINCIPLES

- § 4:196 Importance of ordered approach to describing damage § 4:197 Importance of lawyer's checklist in statutory compensation cases
 - B. EVALUATING NERVOUS SYSTEM IMPAIRMENTS
- § 4:198 Social security disability listings—Values
- § 4:199 —Limitations

§ 4:215

§ 4:215.30

§ 4:215.70

C. SUMMARY OF SOCIAL SECURITY DISABILITY LISTINGS

- § 4:200 **Epilepsy** § 4:201 Stroke impairment (vascular insult to the brain) § 4:202 Brain tumors (benign brain tumors) § 4:203 Parkinsonian syndrome Cerebral palsy § 4:204 Spinal cord disorders § 4:205 Multiple sclerosis § 4:206 Amyotrophic lateral sclerosis (ALS) § 4:207 § 4:208 Anterior poliomyelitis (Post-polio syndrome) § 4:209 Myasthenia gravis § 4:209.50 Muscular dystrophy Peripheral neuropathy (Peripheral neuropathies) § 4:210 Tabes dorsalis § 4:211 § 4:212 Subacute combined cord degeneration § 4:213 Assorted neurodegenerative conditions § 4:214 Cerebral trauma (Traumatic brain injury)
 - D. SOCIAL SECURITY REGULATION/ NEUROLOGICAL IMPAIRMENTS

Coma or persistent vegetative state

Motor neuron disorders other than ALS

Syringomyelia

§ 4:216 Disability tables to accompany social security listings on nervous system impairments

	Wildian IVI Olumnioiv Diolem 21
§ 4:216. § 4:216.	1 0
E.	PERCENTAGE DISABILITY DUE TO NERVOUS SYSTEM IMPAIRMENT
§ 4:217	Representing disabilities as percentages—Basic theory
§ 4:218 § 4:219	AMA guides and percentage disability determination Example—Percentage impairment of communication skills
§ 4:220 § 4:221 § 4:222 § 4:223	Combining different impairments using highest value Summing impairments using combined values chart Use of AMA guides in consulting with experts Glossary of terms
VIII.	SAMPLE FORMS
§ 4:224	Complaint, petition, or declaration—Against school district and activity association—Personal injury of pupil from concussion during school sports game—Negligence and infliction of emotional distress
§ 4:225	Sample examination: Injured player permitted to continue despite supervisors' knowledge of injury
§ 4:226	Defendant's discovery checklist—Multiple concussion injury litigation
	PTER 5. MENTAL DISORDERS AND BILITY
I. IN	TRODUCTION
§ 5:1	Nature of mental impairments
§ 5:2	How lawyers encounter psychiatric problems
§ 5:3	What lawyers need to know about psychiatry
§ 5:4	Fundamental difficulties in psychiatric theory
§ 5:5	Legal preference for treating psychiatric conditions as illnesses
§ 5:6	Scientific impropriety of "abnormality"
§ 5:7	Concepts and standards of normality
§ 5:8	Question of "organicity"
§ 5:9	Roles of various medical professionals
§ 5:10	Questions concerning psychiatric diagnosis
§ 5:11	Psychiatrists
§ 5:12	Clinical psychologists
§ 5:13	Differences between psychiatrists and clinical psychologists
§ 5:14	Psychiatric social workers

- § 5:15 Psychiatric nurses
- § 5:16 Psychiatric technicians

II. COMMON PSYCHIATRIC CONDITIONS

A. CLASSIFICATION OF PSYCHIATRIC ILLNESSES

- § 5:17 Need for uniform classification and standard nomenclature
- § 5:18 International classification of diseases (ICD)
- § 5:19 Diagnostic and statistical manual of mental disorders (DSM)
- § 5:20 ICD-10 and DSM-IV
- § 5:21 The main features of DSM-IV—Basic principles
- $\S 5:22$ Standard classifications of mental disorders in DSM-IV
- § 5:23 Features of DSM-IV—Multiaxial evaluation
- § 5:24 Features of DSM-IV—Hierarchical reporting
- § 5:25 DSM-ICD classifications and older terminologies
- § 5:26 Useful appendices in DSM-IV
- § 5:27 Usefulness of DSM-IV and ICD-10 to lawyers
- § 5:27.50 DSM-5
- § 5:27.70 ICD 10

B. COGNITIVE DISORDERS

- § 5:28 Generally
- § 5:29 —Delirium
- § 5:30 —Dementia
- § 5:31 —Amnestic disorders

C. ANXIETY DISORDERS

- § 5:32 Anxiety disorders—Nature of anxiety
- § 5:33 —Types of disorders
- § 5:34 —Panic attacks and panic disorder
- § 5:35 —Phobic disorders
- § 5:36 —Obsessive-compulsive disorders
- § 5:37 —Post-traumatic stress disorder
- § 5:38 —Generalized anxiety disorder

D. SOMATOFORM DISORDERS

- § 5:39 Somatoform disorders—Classification
- § 5:40 —Undifferentiated somatoform disorder
- § 5:41 —Conversion disorder
- § 5:42 —Somatoform pain disorder
- § 5:43 —Hypochondriasis

	8	5:44	—Bodv	dysmorphic	disorder
--	---	------	-------	------------	----------

E. DISSOCIATIVE DISORDERS

- § 5:45 Dissociative disorders—Classification
- § 5:46 —Dissociative amnesia
- § 5:47 —Dissociative fugue
- § 5:48 —Dissociative identity disorder
- § 5:49 —Depersonalization and derealization disorders

F. PERSONALITY DISORDERS

- § 5:50 Personality disorders—Nature and significance
- § 5:51 —Diagnostic criteria
- § 5:52 —Classification
- § 5:53 —Cluster A disorders
- § 5:54 —Cluster B disorders
- § 5:55 —Cluster C disorders
- § 5:56 —Other personality disorders

G. MOOD DISORDERS

- § 5:57 Mood disorders—Definitions
- § 5:58 —Mania and hypomania
- § 5:59 —Bipolar disorders
- § 5:60 —Depression
- § 5:61 —Dysthymia

H. PSYCHOTIC DISORDERS

- § 5:62 Psychotic disorders—Definition
- § 5:63 —Classification
- § 5:64 —Schizophrenia
- § 5:65 —Schizophreniform disorder
- § 5:66 —Schizoaffective disorder
- § 5:67 —Delusional disorder
- § 5:68 —Other psychotic conditions

III. PROOF OF PSYCHOLOGICAL DAMAGE

A. CLINICAL RECORDS AND EXPERT OPINION

- § 5:69 Proof of mental harm—Importance of clinical materials
- § 5:70 —Reliability of expert opinion
- § 5:71 —Importance of standard classifications

B. PSYCHOLOGICAL TESTING

- § 5:72 Psychological testing—Varieties of tests
- § 5:73 —Processing and scoring inventories

xxvi

TABLE OF	Cormerance
TABLE OF	CONTENTS

Table of	CONTENTS
§ 5:74	—Reliability generally
§ 5:75	—Reliability, validity and sensitivity
§ 5:76	—Testing for validity
§ 5:77	—Interpretative protocols
§ 5:78	—Minnesota multiphasic personality inventory (MMPI-1 and MMPI-2)
§ 5:79	What lawyers need to know about psychological tests
C.	
	ELECTRODIAGNOSIS
§ 5:80	Uses of structural and functional imaging to show psychiatric harm
§ 5:81	Imaging modalities and uses
§ 5:82	Electrodiagnostic studies and uses
IV. P	SYCHIATRIC HISTORY AND MENTAL STATUS
E	XAMINATION
§ 5:83	Comparison of—Psychiatric and general medical histories
§ 5:84	Mental status examination—Structured and unstructured approaches
§ 5:85	—General appearance
§ 5:86	—Specific enquiries
§ 5:87	—Clinical testing during interview
§ 5:88	—Evaluation
§ 5:89	—Importance of clinician's feelings and impressions
	VALUATION OF SOCIAL SECURITY CLAIMS OR MENTAL IMPAIRMENT
г	
A.	GENERAL CONSIDERATIONS
§ 5:90	Mental disability claims—Basic principles
§ 5:91	—Special provisions
§ 5:92	—Meaning of marked impairment
§ 5:93	Duty to provide explanation
D	DIA CALOGRICA CARROCODIEG OF MENMAI

B. DIAGNOSTIC CATEGORIES OF MENTAL IMPAIRMENT

§ 5:94	Diagnostic categories—Organic mental disorders
	(neurocognitive disorders)
§ 5:95	Diagnostic categories—Schizophrenic, paranoid and other
	psychotic disorders (Schizophrenia spectrum and other
	psychotic disorders)
§ 5:96	Diagnostic categories—Organic mental disorders—
	Affective disorders (Depressive, bipolar, and related
	disorders)

§ 5:97	Diagnostic categories—Organic mental disorders—Mental retardation and autism (Intellectual disorders)
§ 5:98	Diagnostic categories—Organic mental disorders—Anxiety related disorders (Anxiety and obsessive-compulsive disorders)
§ 5:99	Diagnostic categories—Organic mental disorders— Somatoform disorders (Somatic symptom and related disorders)
§ 5:100	Diagnostic categories—Organic mental disorders— Personality disorders (Personality and impulse-control disorders)
§ 5:101	Diagnostic categories—Organic mental disorders— Substance addiction disorders
§ 5:101.20	Diagnostic categories—Organic mental disorders—Autism spectrum disorders
§ 5:101.40	Diagnostic categories—Organic mental disorders— Neurodevelopment disorders
§ 5:101.60	Diagnostic categories—Organic mental disorders—Eating disorders
§ 5:101.80	Diagnostic categories—Organic mental disorders—Trauma and stressor-related disorders

VI. PSYCHIATRIC DISORDER DISABILITY

A. GENERAL CONSIDERATIONS

§ 5:102 Difficulties evaluating mental impairments—Generally
 § 5:103 —Providing numerical evaluation for mental impairments
 § 5:104 —Feasibility of reliable evaluations

B. AMA GUIDES TO EVALUATION OF PERMANENT IMPAIRMENT

- § 5:105 AMA guides—Basic principles
- § 5:106 —System for evaluating mental impairments
- § 5:107 Estimating percentage impairments
- § 5:108 Glossary of terms

CHAPTER 6. MUSCULOSKELETAL SYSTEM: INJURIES AND DISABILITIES

I. INTRODUCTION

- § 6:1 Compensation questions arising from musculoskeletal problems
- § 6:2 The difference between legal and medical interests
- § 6:3 Important legal items and emphases—Rehabilitation medicine

§ 6:4 The importance of rehabilitation medicine for lawyers

II. BASIC ANATOMY AND VOCABULARY

A .	\sim	OF		_	-	\ \XX
Λ	<i>(</i>)	<u></u>	ישי	/ N)GY
~	` '	' -	יייו	•		ΛТΙ

§ 6:5	The importance of knowing the names of bones
§ 6:6	The nature of bony tissue
§ 6:7	Functions of bone—Body support and movement
§ 6:8	Changes in bones during growth
§ 6:9	Functions of bone—Bone marrow
§ 6:10	—Reservoir for essential minerals

B. STANDARD PLANES AND MOVEMENTS

D.	STANDARD PLANES AND MOVEMENT
§ 6:11	Standardized orthopedic terminology
§ 6:12	The anatomical position
§ 6:13	Sagittal, transverse, and coronal sections—Median
	plane
§ 6:14	Anatomical terms—The longitudinal axis
§ 6:15	—Cephalad and caudad
§ 6:16	—Proximal and distal
§ 6:17	—Medial and lateral
§ 6:18	—Rotation
§ 6:19	—Flexion and extension
§ 6:20	—Abduction and adduction
§ 6:21	Movements of the neck
§ 6:22	Positions and movements of the hand
§ 6:23	Movements of the foot

C. JOINTS AND JOINT MOVEMENTS

§ 6:24	Classification of joints according to their structure
§ 6:25	Classification of joints by their movements
§ 6:26	Active and passive range of motion (ROM)

D. AXIAL SKELETON

§ 6:27	Vertebral bones
§ 6:28	Spinal curvatures
§ 6:29	Size and special features of vertebral bones
§ 6:30	Parts of typical vertebral bone
§ 6:31	Congenital defects—Pars interarticularis and
	transitional vertebra
§ 6:32	The spinal canal and related structures
§ 6:33	Intervertebral discs
§ 6:34	Functions of the intervertebral discs and longitudinal
	ligaments
§ 6:35	Herniations of the nucleus pulposus

E. APPENDAGES OF AXIAL SKELETON

4	D · I	α
1.	Rih	Cage
⊥.	TUD	Vago

§ 6:36	Ribs and costal cartilages
§ 6:37	Functions of ribs
8 6.90	Limb gindles Chaulden gind

- Limb girdles—Shoulder girdle § 6:38
- § 6:39 Acromion bursa and bursitis
- Scapula and glenoid fossa § 6:40
- § 6:41 Humerus and upper arm
- § 6:42 Olecranon process and the elbow joint
- Bones of the forearm—Radius and ulna § 6:43
- § 6:44 Fractures and other problems of the wrist and hand-Carpal tunnel syndrome

Pelvic Girdle

- § 6:45 Iliac, ischial, and pubic bones
- § 6:46 Ischial spines and ischial tuberosities
- Pubic bones and symphysis pubis § 6:47
- § 6:48 Acetabulum and hip joint
- § 6:49 Head and neck of femur—Structure
- § 6:50 —Fracture
- § 6:51 Femoral shaft—Fractures
- § 6:52 Knee joint and lower leg-The cruciate ligaments
- § 6:53 Ankle mortise and ankle movements
- Fracture of ankle § 6:54
- Hands and feet § 6:55
- Phalanges and interphalangeal joints § 6:56

III. DISEASES AND DISORDERS OF THE MUSCULOSKELETAL SYSTEM

SIGNIFICANT AND INSIGNIFICANT MUSCULOSKELETAL AILMENTS

- § 6:57 Injuries to bones, joints and soft tissues—Legal viewpoint
- § 6:58 Rheumatological diseases—Legal viewpoint
- § 6:59 Musculoskeletal diseases of particular interest to lawyers

INTERVERTEBRAL DISCS AND RELATED В. **STRUCTURES**

- § 6:60 Structure of intervertebral disc
- § 6:61 Structure and function of nucleus pulposus
- § 6:62 Structure and function of annulus fibrosus
- § 6:63 Tissues which absorb force—Posterior longitudinal ligament

Table of	Contents
§ 6:64	Nerves supplying disc area—Stretch and pain receptors
§ 6:65	Nerves supplying intervertebral joints
§ 6:66	Discs as bradykinetic tissues
§ 6:67	Metabolic activity in discs
C.	DEGENERATIVE PROCESSES IN DISCS AND SURROUNDING TISSUES
§ 6:68	Degenerative changes in the nucleus pulposus
§ 6:69	Degenerative changes in annulus fibrosus
§ 6:70	Degenerative disease of the spine (DDS)
§ 6:71	Effect of degenerative change on the facet joints
§ 6:72	Nerve entrapment syndromes
§ 6:73	Compression of the spinal cord
D.	CLINICAL PICTURE IN DISC DISEASE
§ 6:74	Common clinical presentations
§ 6:75	Acute back pain
§ 6:76	Chronic back pain
§ 6:77	Nerve root and cord compression syndromes
	VALUATING NECK AND BACK PROBLEMS
F	OR COMPENSATION PURPOSES
A.	NECK PROBLEMS
§ 6:78	The methodical approach to evaluating soft tissue injuries
§ 6:79	Significant clinical findings in cervical disc lesions
В.	CONVENTIONAL X-RAY STUDIES

- § 6:80 X-rays of cervical spine
- § 6:81 Flexion and extension studies of neck
- § 6:82 Soft tissue x-rays and xerograms

C. OTHER INVESTIGATIVE MODALITIES

- § 6:83 Computerized ultrasound imaging
- § 6:84 Computerized tomography (CT) and magnetic resonance imaging (MRI)
- § 6:85 Thermography—Underlying principles
- § 6:86 The limitations of thermographic imaging in the compensation setting
- § 6:87 Thermography compared to other soft tissue modalities

LOW BACK COMPLAINTS

§ 6:88 Similarities and differences between low back and neck injuries

89	Importance of clinical findings
90	Significant clinical findings in low back compensation cases
91	Significance of positive neurological findings
92	Investigation of low back problems—Conventional x-rays
93	—Contrast myelography
94	—Computerized tomography
95	Comparison of myelography and CT scan in diagnosing disc herniations
96	Investigation of low back problems—Magnetic
0.5	resonance imaging
	—Gas myelography
	—Discography
	—Lumbar venography
	—Thermography
	—Nerve conduction studies
	—Electromyography
103	—Nerve blocks and differential spinal block
TR	EATMENT OF DISC PROBLEMS
A.	NON-SURGICAL TREATMENTS
104	Non-surgical treatments of disc problems in neck
105	Non-surgical treatments of low back disc problems
106	Prognosis with nonoperative treatment—Intensive
	rehabilitation programs
В.	SURGICAL TREATMENTS
107	Indications for surgery and pre-surgical work-up
108	Surgical treatment—Discectomy or laminectomy/discectomy
100	—Microscopic discectomy
	—Chemical discectomy
	—Nucleotome discectomy
	—Fusion operations
113	—Compression syndromes
	OMMON PROBLEMS IN ORTHOPEDIC
C	OMPENSATION CASES
A.	PROOF OF NECK INJURY AND DISABILITY
114	Typical events in a compensation case involving the neck
115	The peculiar nature of cervical injuries
116	Neck injuries which only become symptomatic in the future
	90 91 92 93 94 95 96 97 98 99 100 101 102 103 TR A. 104 105 106 B. 107 108 109 110 111 112 113 • C(C) A. 114 115

TABLE OF	Contents
§ 6:117	Difficult compensation questions in neck injury cases
§ 6:118	Malingering in neck injury cases
§ 6:119	Important information—Details about the nature and
3 0.110	circumstances of the accident
§ 6:120	—History of the chief complaints
§ 6:121	Limitations of medical records in the compensation
3 0.121	setting
§ 6:122	Value of physical therapists' records
§ 6:123	The usefulness of imaging in neck sprain cases
В.	COMPENSATION PROBLEMS WITH LUMBAR
	SPINE LESIONS
§ 6:124	Compensation problems with chronic disc disease
§ 6:125	Precipitating causes of acute disc problems
§ 6:126	Explanation of disc rupture following slight injury
§ 6:127	Problems relating to degenerative disease of spine (DDS)
§ 6:128	Problem of back pain with negative test results
§ 6:129	Important items of proof in lumbar spine cases
§ 6:130	Damage and causation problems in lumbar spine cases
§ 6:130.10	Proof of compression fracture of lumbar vertebra— Testimony of orthopedist
§ 6:130.20	
§ 6:130.30	· · · · · · · · · · · · · · · · · · ·
§ 6:130.40	
	VALUATION OF FUTURE NECK AND LOW
В	SACK PROBLEMS
A.	LATE-DEVELOPING ARTHRITIS
§ 6:131	Difference between medical and legal notions of the
3 0.101	probability of future impairments
§ 6:132	Causation problems in late-developing arthritis
§ 6:133	Difficulty in detecting early stages of arthritic
Ş 0.100	processes
D	DDI AVED DIGG HEDNI AMIONG
В.	DELAYED DISC HERNIATIONS
§ 6:134	Intervertebral disc problems occurring some time after an accident
§ 6:135	Expert opinion on the causes of delayed back pain
§ 6:136	Inadequacies of tests to predict future disc
ζ 0.130	herniations
C.	USE OF EXPERT OPINION AS TO FUTURE DAMAGES
§ 6:137	Factors suggesting probability of future complications

§ 6:138 § 6:139 § 6:140	Ensuring that legal concepts are understood by
§ 6:141	consulting physicians Need for compensationists to take future damages seriously
VIII.	CLINICAL EXAMINATION OF MUSCULOSKELETAL SYSTEM
A.	INITIAL OBSERVATIONS
\$ 6:142 \$ 6:143 \$ 6:144 \$ 6:145	Looking, listening, touching, and testing Examination is guided by case history Gait—Diagnostic footsteps Posture and appearance
В.	EXAMINATION OF HANDS
§ 6:146 § 6:147 § 6:148	Importance of examining hands Deformity, swelling, and lumps of hands and fingers Weakness and wasting of small muscles of hand
C.	EXAMINATION OF JOINTS AND MUSCLE GROUPS—GENERALLY
\$ 6:149 \$ 6:150 \$ 6:151 \$ 6:152 \$ 6:153 \$ 6:154 \$ 6:155	General observation Palpation Testing for power and fatigue Functional capacity assessment (FCA) Examining joint movements—Range of motion (ROM) Mechanical limitation and limitation by pain Guessing and measuring angles
D.	EXAMINATION OF CERVICAL SPINE JOINTS
\$ 6:156 \$ 6:157 \$ 6:158 \$ 6:159	Inspection of neck Active range of motion (AROM) in neck Passive range of motion (PROM) in neck Significance of limited neck movements
E.	EXAMINATION OF LUMBAR SPINE JOINTS
\$ 6:160 \$ 6:161 \$ 6:162	Preliminary observation Palpation of dorsal processes of spine Palpation of zygoapophyseal joints—Facet joint syndrome
§ 6:163 § 6:164	Detecting muscle spasm by palpation Palpation of sacroiliac joints

xxxiv

TABLE OF	CONTENTS
§ 6:165	Checking range of motion (ROM) in lumbar spine
F.	EXAMINING SPINE—TESTING FOR NERVE ROOT INVOLVEMENT
§ 6:166	Straight leg raising
§ 6:167	Bent leg raising
§ 6:168	Neurological signs of disc herniations
§ 6:169	Identifying vertebral level of problem
G.	EXAMINATION OF HIP
§ 6:170	Positioning of patient
§ 6:171	Observation of hip
§ 6:172	Palpation of hip
§ 6:173	Examining neonates for congenital dislocation of hip
§ 6:174	Checking range of motion (ROM) in hip
H.	EXAMINATION OF KNEE
§ 6:175	Observation of knee
§ 6:176	Palpation of knee
§ 6:177	Checking range of motion (ROM) in knee
§ 6:178	Testing semilunar cartilages—Menisci
§ 6:179	Testing ligaments of knee
IX. DI	ETERMINING DISABILITY
A.	IN GENERAL
§ 6:180	General description of disability
§ 6:181	Showing impairment by evaluating each injured part individually
§ 6:182	Showing impairment by functional limitations
§ 6:183	Correlating lists for damage attribution
B.	SOCIAL SECURITY REGULATION (SSR)
	Objective data requirement
§ 6:185	Necessity of showing persistence of problem over time
§ 6:186	Specific criteria for disability—SSR 1.02–1.13
§ 6:187	Importance of diagnostic criteria
§ 6:188	Need to show severity of impairment
§ 6:188.50	
§ 6:189	Alternative approach—Showing partial disability and residual functional capacity
§ 6:189.10	Revisions to Musculoskeletal Disability Listings, effective April 2, 2021

C. AMA GUIDES TO PERCENTAGE DISABILITY

- § 6:190 Percentage disability of limb or body part
- § 6:191 Measuring range of motion (ROM) limitation
- § 6:192 Measuring ability to lift weights

D. FUNCTIONAL CAPACITY ASSESSMENT (FCA)

- § 6:193 Computer-assisted functional evaluation
- § 6:194 Computer-assisted rehabilitation program
- § 6:195 FCA centers
- § 6:196 Limitations of percentage disability systems
- § 6:197 Physical capacities assessment—Doctor's form
- § 6:198 —Physical therapist's report
- § 6:199 Doctor's report on musculoskeletal examination (with translation)
- § 6:200 Doctor's report on neck examination (with translation)

E. SOCIAL SECURITY REGULATION/ MUSCULOSKETAL IMPAIRMENTS

- § 6:201 Listing of impairments
- § 6:201.50 Reflex Sympathetic Dystrophy Syndrome/Complex
 - Regional Pain Syndrome
- § 6:201.60 Obesity
- § 6:201.70 Chronic fatigue syndrome
- § 6:201.80 Fibromyalgia

X. GENERAL REFERENCES

§ 6:202 Glossary of terms

XI. SAMPLE COMPLAINTS

- § 6:203 Complaint—Leg—Fracture of tibia and fibula— Deformity of leg—Spinal curvature—Excoriation and avulsion—Permanent disability
- § 6:204 Complaint—Leg—Fracture of tibia—Injury to ligaments—Permanent stiffness
- § 6:205 Complaint—Leg—Fracture of tibia and fibula—Metal plate inserted—Injury to ankle and to leg muscles and tendons—Permanently crippled requiring use of crutches
- § 6:206 Complaint—Leg—Fracture of tibia and fibula—Loss of blood—Shock
- § 6:207 Complaint—Hip—Fracture-dislocation
- § 6:208 Complaint—Pelvis—Fracture—Shortened leg— Traumatic arthritis
- § 6:209 Complaint—Spine—Cervical area—Fracture and dislocation

xxxvi

§ 6:210 Complaint—Spine—Cervical area—Fracture and dislocation—Paralysis—Spinal cord severed at neck
 § 6:211 Complaint—Spine—Fracture—Paralysis—Muscle deterioration
 § 6:212 Complaint—Spine—Fracture—Paralysis—Spinal cord severed at waist

XII. SAMPLE MOTIONS AND ORDERS

- § 6:213 Sample orders granting motion to exclude biomechanic expert § 6:214 Sample plaintiff's memorandum of law in support of motion
 - in limine to exclude evidence of property damage; testimony, photographs, repair records

CHAPTER 7. CARDIOVASCULAR SYSTEM: DISORDERS AND DISABILITIES

I. INTRODUCTION

8 '	7:1	Definition	of the	cardiovascular	system	(CVS)

- § 7:2 Various kinds of cardiovascular problems
- § 7:3 Social importance of cardiovascular diseases
- § 7:4 Legal occurrence of cardiovascular diseases
- § 7:5 Knowledge required by compensationists dealing with cardiovascular diseases

II. BASIC ANATOMY AND PHYSIOLOGY

A. HEART

- § 7:6 Pumping functions of the heart
- § 7:7 Myocardium
- § 7:8 Electrical activity of heart muscle cells
- § 7:9 First pacemaker—Sino-atrial (SA) node
- § 7:10 Second pacemaker—Atrio-ventricular (AV) node
- § 7:11 Electrical transmission in the heart—The EKG
- § 7:12 Cardiac cycle
- § 7:13 Coverings of the heart—The pericardial sac

B. CIRCULATORY SYSTEM AND FLUIDS

- § 7:14 Arterial tree
- § 7:15 Walls of arteries and their functions
- § 7:16 Function of arterioles—Vascular resistance
- § 7:17 Capillaries—Exchange system
- § 7:18 Functions of veins—Return of blood to the heart and blood storage
- § 7:19 Lymphatic system and lymphedema
- § 7:20 Exchange of fluids between body compartments
- § 7:21 Interstitial fluid
- § 7:22 Intracellular fluid
- § 7:23 Potassium leakage
- § 7:24 Fluid volumes in the various compartments
- § 7:25 Exchange of fluids between various compartments

C. BLOOD

4	т	α 1
	In	General

- § 7:26 The composition of whole blood
- § 7:27 Different layers in centrifuged blood

2. Liquid Fraction of Blood—Plasma

- § 7:28 Plasma and serum
- § 7:29 Plasma proteins

3. Red Cells—Erythrocytes

- § 7:30 Microscopic examination of red cells
- § 7:31 Red cell count
- § 7:32 Hematocrit
- § 7:33 Hemoglobin percentage
- § 7:34 Red cell characteristics derived from basic measurements

4. White Cells

- § 7:35 Buffy coat and white cell fraction
- § 7:36 Total white cell count (TWCC)
- § 7:37 Differential white cell count (DWCC)
- § 7:38 Platelet count
- § 7:39 Clinical significance of an abnormal white cell count
- § 7:40 Complete blood count (CBC)

III. CARDIOVASCULAR DISEASE

A. LEGAL PERSPECTIVE ON CARDIAC DISEASES

- § 7:41 Spectrum of cardiac disease
- § 7:42 Common circulatory diseases—Atherosclerotic coronary artery disease

B. CORONARY ARTERY DISEASE (CAD)

- § 7:43 Blood supply of the myocardium—Left coronary artery
- § 7:44 —Right coronary artery
- § 7:45 The importance of anastomosing branches
- $\S~7:46$ How occlusion in one area produces infarction in another
- § 7:47 The significance of arteriospasm

C. CLINICAL PRESENTATIONS OF CORONARY ARTERY DISEASE

- § 7:48 Angina—The pain of coronary artery insufficiency
- § 7:49 Various types of angina
- § 7:50 Myocardial infarction (MI)

§ 7:51 Differential diagnosis of chest pain

D	DIACNOSIS	OF MYOCARDIAL	INFARCTION
D .	DIAGNOSIS	OF MITOCARDIAL	INFARULIUN

0		-	• .			1		
Q	7:52	Important	items	ın	the	clinical	history	

- § 7:53 Electrocardiographic (EKG) evidence
- § 7:54 Evidence of serum cardiac enzyme determinations
- § 7:55 Isoenzyme determinations—Serum electrophoresis
- § 7:56 Isoenzyme fractions used in the diagnosis of myocardial infarction
- § 7:57 Limitations of isoenzyme determinations
- § 7:58 Evidence from diagnostic imaging

E. DETERMINING SIZE AND LOCATION OF MYOCARDIAL INFARCTIONS

- § 7:59 Clinical and compensation perspectives on the size and location of infarcts
- § 7:60 Actively seeking out clinical opinion as to the severity of an MI
- § 7:61 Important items in the patient's clinical records
- § 7:62 Evidence from the EKG reports
- § 7:63 Evidence from enzyme and isoenzyme studies
- § 7:64 Evidence of heart wall studies
- § 7:65 Evidence of radionuclear imaging (RNI)
- § 7:66 Evidence from imaging using radioimmune markers
- § 7:67 Evidence from electrodiagnostic studies—Conduction studies
- § 7:68 —EKG mapping

F. INVESTIGATING UNDERLYING CORONARY ARTERY DISEASE

- § 7:69 Use of coronary artery angiography
- § 7:70 Use of digital subtraction angiography
- § 7:71 Use of computerized tomography (CT) and magnetic resonance imaging (MRI)
- § 7:72 Use of ultrasound imaging (U/S)
- § 7:73 Use of esophageal sonocardiography
- § 7:74 Use of radiolabelled low density lipoprotein cholesterol (LDL-C)
- § 7:75 Availability and multiplicity of investigative tools

G. INDICATORS OF PROGNOSIS

- § 7:76 Medical opinion about prognosis—Usefulness of outcome analyses
- § 7:77 Prognostic significance of the overall clinical picture
- § 7:78 Significant prognostic items—EKG patterns and cardiac enzyme estimations

- § 7:79 -Progress in hospital and following discharge § 7:80 Cardiac function tests—The ultimate prognostic indicators H. EVALUATING CARDIAC FUNCTION FOLLOWING MYOCARDIAL INFARCTION § 7:81 Recognized categories of cardiac disability § 7:82 Heart failure § 7:83 Important clinical findings in heart failure
- § 7:84 Exercise stress testing (EST)
- § 7:85 Exercise stress testing—Valid end points
- § 7:86 —Standard protocols
- § 7:87 Results of stress testing—Metabolic equivalents (METs)
- § 7:88 Measuring recovery of function—Serial exercise tolerance tests
- Evaluating heart function—Left ventricular ejection § 7:89 fraction studies

I. PSYCHOLOGICAL ASPECTS OF HEART DISEASE

- § 7:90 Psychological concomitants of myocardial infarction
- Mental changes in heart disease—Implications for § 7:91 compensationists

TREATMENT OF ATHEROSCLEROTIC HEART DISEASE (AHD)

§ 7:92	Medical management—Thrombolytic therapy
§ 7:93	Surgical treatments—Percutaneous transluminal coronary angioplasty
§ 7:93.10	Placement of intracoronary stents
§ 7:94	Various forms of laser angioplasty
§ 7:95	Surgical treatment—Atherectomy
§ 7:96	Future of new coronary artery devices (NCADs)
§ 7:97	Management of acute myocardial infarctions— Medical and surgical protocols
§ 7:98	Surgical management of myocardial infarction— Coronary artery bypass grafting
§ 7:99	—Internal thoracic artery anastomosis
§ 7:100	Prognosis following coronary artery surgery
§ 7:100.50	Heart transplant
§ 7:100.80	Statins

IV. ARTERIAL DISEASES IN SITES OTHER THAN HEART

A. ATHEROSCLEROTIC DISEASES OF PERIPHERAL AND CEREBRAL VESSELS

§ 7:101	Unpredictable nature of atherosclerotic vascular disease
§ 7:102	Arterial disease in legs—Claudication
§ 7:103	Disease of carotid and vertebral arteries
§ 7:104	Transient ischemic attacks (TIAs)
§ 7:105	Cerebrovascular accidents (CVAs)—Strokes
§ 7:106	Cerebral aneurysms
§ 7:107	Intracerebral bleeding
§ 7:108	Use of adjustable ligatures to avoid brain damage
§ 7:109	Arterio-venous malformations (AVMs) in the brain
§ 7:110	Prognosis following intracerebral hemorrhage
В.	OTHER DISEASES AFFECTING THE
	CARDIOVASCULAR SYSTEM
§ 7:111	Hypertrophic cardiomyopathy
§ 7:112	Inflammatory disorders of blood vessels
§ 7:113	Autoimmune arteritides—RA, SLE and PAN
§ 7:114	Treatment of inflammatory arterial disease
§ 7:115	Vascular problems associated with trauma and thermal injuries
§ 7:116	Aneurysms of the aorta
§ 7:117	Surgical management of aneurysms
§ 7:118	Arterio-venous malformations (AVMs)
§ 7:119	Disorders of veins—Varicose veins
§ 7:120	—Hemorrhoids
§ 7:121	—Esophageal varices
§ 7:122	Deep venous thrombosis and thromboembolism
§ 7:123	Reducing the risk of deep venous thrombosis
	following surgery
§ 7:124	Disorders of lymphatic ducts
§ 7:125	Congenital heart disease
§ 7:126	Infections involving cardiovascular system

V. BLOOD, FLUID, AND ELECTROLYTE ABNORMALITIES

A. BLOOD LOSS

§ 7:127	Hypovolemia—Acute hemorrhage
§ 7:128	Response of body to chronic blood loss
§ 7:129	Response of body to severe acute blood loss
8 7.130	Clinical presentation of severe acute blood loss

ş	7:131	Renal damage from uncompensated severe bleeding				
§	7:132	Severe blood loss—Brain and heart damage				
§	7:133	—Hemorrhagic shock				
§	7:134	Relative hypovolemia—Anaphylactic shock				
§	7:135 Treatment of mild to moderate blood loss—Volume replacement					
§	7:136	Treatment of severe blood loss—Blood transfusion				
	В.	BLOOD TRANSFUSIONS				
_	7:137	Blood typing—ABO blood groups				
_	7:138	—Rhesus factor and rhesus incompatibility				
§	7:139	Other surface antigens on erythrocytes—Use of antigenic markers				
§	7:140	Complications of blood transfusion—Antigen antibody reaction				
§	7:141	—Infection				
§	7:142	Avoiding complications of blood transfusion—Autotransfusion				
§	7:143	—Blood substitutes				
	C.	LOSS OF FLUIDS OTHER THAN BLOOD				
§	7:144	Volume depletion—Dehydration				
§	7:145	 Occupational and recreational dehydration 				
§	7:146	Electrolyte imbalance in volume depletion— Sodium ion				
§	7:147	—Potassium ion				
_	7:147.	v				
§	7:148	Volume depletion—Fluid replacement with electrolyte solutions				
§	7:149	—Fluid replacement with hyperosmolar solutions				
§	7:150	Hypovolemia—Use of hemoglobin solutions in replacement therapy				
§	7:151	Use of hyperosmolar solutions to treat edema				
	D.	COAGULATION PROBLEMS				
§	7:152	Functions and malfunctioning of blood clotting				
§	7:153	Mechanisms involved in blood clotting				
§	7:154	Blood clotting disorders and their treatment				
Ş	7:155	Clinical presentations of coagulation disorders				
§	7:156	Disseminated intravascular coagulation				
	E.	HYPERTENSIVE HEART DISEASE				
§	7:157	Definition and significance of hypertension				
§	7:158	Underlying causes of hypertension				
§	7:159	Beginning treatment of hypertension				

§ 7:160	Significance of diastolic pressure				
§ 7:161	Significance of systolic pressure				
§ 7:162	Blood pressure problems during pregnancy—				
	Preeclampsia and eclampsia				
§ 7:163	Treatment of hypertension				
§ 7:164	Hypertension secondary to other diseases				
F.	CARDIAC ARRHYTHMIAS				
§ 7:165	Normal sinus rhythm and various arrhythmias				
§ 7:166	Various tachyarrhythmias				
§ 7:167	Various bradyarrhythmias				
§ 7:168	Ectopic beats—Their causes and their significance				
§ 7:169	Varieties of heart block				
§ 7:170 Investigation of cardiac arrhythmias—					
§ 7:171	Electrodiagnostic studies Medical treatment of cardiac arrhythmias				
§ 7.171 § 7:172	Surgical management of cardiac arrhythmias				
§ 7:172 § 7:173	Cardiac arrhythmia as disability				
5 1.110	Caratac arring minia as alsasmoy				
	LINICAL EXAMINATION OF				
\mathbf{C}_{A}	ARDIOVASCULAR SYSTEM				
A.	INSPECTION				
§ 7:174	Observation of skin				
§ 7:175	Central and peripheral cyanosis				
§ 7:176	Plethoric appearance of polycythemia				
§ 7:177	Pallor and other skin findings				
§ 7:178	Finger clubbing				
§ 7:179	Nail beds and finger tips				
§ 7:180	Facial expression				
§ 7:181	Neck veins—Jugular venous distension (JVD)				
В.	EXAMINATION OF HEART				
§ 7:182	Palpating apex beat				
§ 7:183	Palpating radial pulse				
§ 7:184	Palpating peripheral pulses				
§ 7:185	1 0 1				
§ 7:186	Palpation of abdomen				
§ 7:187	Percussion of cardiac outline				
§ 7:188	Auscultation—Use of stethoscope				
§ 7:189	First and second heart sounds				
§ 7:190	Third and fourth heart sounds				
§ 7:191	Heart murmurs				
§ 7:192	Scratching sound of pericarditis				
§ 7:193	Typical record of normal auscultation of heart				

C. ARTERIAL BLOOD PRESSURE

- § 7:194 Sphygmomanometer
- § 7:195 Khorotkoff sounds
- § 7:196 Reliability of blood pressure measurement

VII. DETERMINING CARDIAC DISABILITY

A. IN GENERAL

- § 7:197 Basic issues in determining cardiac disability
- § 7:198 Legal and medical categorizations

B. SOCIAL SECURITY REGULATION (SSR)

- § 7:199 General conditions
- § 7:200 Congestive heart failure—SSR 4.02
- § 7:201 Ischemic heart disease—SSR 4.00D, 4.00E
- § 7:202 Exercise stress testing (EST)—SSR 4.04A (1–5)
- § 7:203 Evidence of resting EKGs—SSR 4.04B (1–6)
- § 7:204 Angiographic and other evidence—SSR 4.04B (7, 8)
- § 7:205 Abnormalities of heart wall contraction
- § 7:206 Abnormalities of rhythm—SSR 4.05
- § 7:207 Peripheral vascular disease—SSR 4.12, 4.13
- § 7:208 Other circulatory conditions
- § 7:208.10 Obesity

C. PERCENTAGE DISABILITY

1. In General

- § 7:209 Making percentage determinations
- § 7:210 New York heart association (NYHA) classifications of cardiac impairment
- § 7:211 Importance of exercise stress testing (EST)

2. Percentage Disability in Specific Disease Conditions

- § 7:212 Valvular heart disease
- § 7:213 Ischemic heart disease
- § 7:214 Congenital heart disease
- § 7:215 Hypertension
- § 7:216 Cardiomyopathies and pericarditis
- § 7:217 Cardiac arrhythmias
- § 7:218 Peripheral vascular disease
- § 7:219 Hematopoietic system disorders
- § 7:220 Leukemias, hemorrhagic disorders, and disorders of immune system

D. SOCIAL SECURITY REGULATION/ CARDIOVASCULAR IMPAIRMENTS

§ 7:221 Listing of impairments general considerations

VIII. DOCUMENTS

§ 7:222 Doctor's notes on cardiovascular case (with translation)

IX. REFERENCES

§ 7:223 Glossary of terms

CHAPTER 8. PULMONARY SYSTEM: DISORDERS AND DISABILITIES

I. INTRODUCTION

- § 8:1 How lawyers may encounter lung problems
- § 8:2 Need for compensationists to know something about pulmonary medicine

II. LUNG ANATOMY AND PHYSIOLOGY

- § 8:3 Structure and function of lungs
- § 8:4 The airways—Humidification and filtration
- § 8:5 Lungs as defense system
- § 8:6 The mechanics of inspiration
- § 8:7 Expiration—Passive and active
- § 8:8 Overcoming surface tension in breathing—Respiratory distress syndrome
- § 8:9 Gas exchange in alveoli
- § 8:10 Pulmonary capillary beds
- § 8:11 Disorders of interstitium
- § 8:12 Respiratory quotient
- § 8:13 Transportation of gases in blood
- § 8:14 Hemoglobin
- § 8:15 Oxygen tension and oxygen saturation
- § 8:16 Color changes of hemoglobin—Cyanosis
- § 8:17 Oxygen cascade
- § 8:18 Oxygen consumption inside cells—Krebs cycle
- § 8:19 Cytochrome system—Carbon monoxide poisoning
- § 8:20 Toxic effects of oxygen
- § 8:21 Clinical importance of carbon dioxide

III. IMPORTANT RESPIRATORY DISEASES

A. IN GENERAL

§ 8:22 Spectrum of lung diseases—Lung trauma

 § 8:23 Limited number of legally significant lung disease § 8:24 Acute respiratory infections—Inhalation pneumon § 8:25 Chronic respiratory infections 						
В.	TUMORS OF THE LUNG					
§ 8:26	Primary and secondary tumors					
§ 8:27	Adenocarcinomas of lung					
§ 8:28	Mesotheliomas					
C.	CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)					
§ 8:29	Definition, nature and prevalence of COPD					
§ 8:30	Breakdown of alveolar septa					
§ 8:31	Loss of pulmonary elasticity					
§ 8:32	Destruction of pulmonary capillary beds					
§ 8:33	Damage to airways					
§ 8:34	Increased mucus secretion					
§ 8:35	Airway closure and bronchospasm					
§ 8:36 § 8:37	Lung bullae and pneumothorax Confusing terms—COPD, chronic bronchitis and					
8 0:91	emphysema					
§ 8:38	Insidious onset and silent progression of COPD					
§ 8:39	Compensated lung disease—The pink puffer					
§ 8:40	Decompensated emphysema—The blue bloater					
§ 8:41	Admission of chronic lung patients to intensive care units					
§ 8:42	Improvements in treatment of advanced emphysema					
§ 8:43	Spectrum of disability in emphysema					
D.	FIBROSING DISEASES OF THE LUNG					
§ 8:44	Nature and causes of pulmonary fibrosis					
§ 8:45	Hypersensitivity reactions					
§ 8:46	Mechanisms involved in the immune response in the lung					
§ 8:47	Insidious onset of fibrosing lung diseases					
§ 8:48	Various causes of occupational lung diseases					
§ 8:49						
E.	ASTHMA					
§ 8:50	Nature and causes of asthma					
§ 8:51	Clinical presentations of asthma—Mild and severe attacks					
§ 8:52 Status asthmaticus and near-fatal asthmatic attacks						
-	8:53 Use of arterial blood gas in asthma					

§ 8:81

§ 8:54	Heart rate changes in asthmatic attacks—Pulsus paradoxicus				
§ 8:55	*				
§ 8:56	Chest x-ray findings in asthmatic patients				
8 8:57	Treatment of asthma				
§ 8:58	Follow-up studies on recovering asthmatics				
§ 8:59	Asthma as autoimmune disorder				
§ 8:60	Disability and compensation questions relating to asthma				
F.	SOME OTHER LUNG DISEASES				
88:61	Bronchiectasis				
§ 8:62	Mucoviscidosis—Cystic fibrosis				
§ 8:63	Autoimmune diseases of the lung—Pulmonary renal syndromes				
8 8:64	Pulmonary sarcoidosis				
8 8:64.5	0 Coronavirus disease 2019—Covid-19				
IV. I	NVESTIGATION OF LUNG DISEASES				
A.	IMAGING				
§ 8:65	Basic theory and terminology				
88:66	Uses of conventional chest x-ray				
§ 8:67	X-ray findings in chronic lung diseases				
8 8:68	Radionuclear imaging (RNI)				
§ 8:69	Computerized tomography (CT) and magnetic resonance imaging (MRI)				
§ 8:70	Lung sonography				
§ 8:71	Bronchography and bronchoscopy				
В.	PULMONARY FUNCTION TESTS (PFTS)				
§ 8:72	Meanings of the term pulmonary function tests				
§ 8:73	Original drum respirometer				
§ 8:74	Traditional spirometer, peak flow meter and flow/volume loop analyzer				
§ 8:75	Respirometer—Vital capacity and tidal volume				
§ 8:76	Respirometer—Forced expiratory volumes—FEV, FEV $_1$ and FEV $_1\%$				
§ 8:77	Respirometer—Maximum ventilatory volume (MVV)				
§ 8:78	Peak flow measurement and forced expiratory flow (FEF)				
§ 8:79	Computerized respirometry—Flow/volume loops				
§ 8:80	Technical terms in spirometry—Volumes and capacities				
C.	PHYSIOLOGICAL TESTING				

What constitutes physiological testing

	TIEDIOIE IN ORMITON OTOTE
\$ 8:82 \$ 8:83 \$ 8:84 \$ 8:85 \$ 8:86 \$ 8:87 \$ 8:88 \$ 8:89	Two types of dead space—Anatomical and physiological Measuring anatomical dead space Importance of anatomical dead space Measuring physiological dead space Measuring residual volume Carbon monoxide diffusion test Measurement of compliance Closing volume and closing capacity
D.	BLOOD GAS ESTIMATIONS
\$ 8:90 \$ 8:91 \$ 8:92 \$ 8:93 \$ 8:94	Values measured by blood gas machine Accuracy of blood gas estimation Ensuring that the test sample was arterial and not venous blood Verifying proper blood sampling—Summary Normal express tension. Physiological and
§ 8:94	Normal oxygen tension—Physiological and
\$ 8:95 \$ 8:96 \$ 8:97 \$ 8:98 \$ 8:99 \$ 8:100 \$ 8:101 \$ 8:102 \$ 8:103 \$ 8:104 \$ 8:105 \$ 8:105 \$ 8:106 \$ 8:107	pathological shunting Carbon dioxide tension Measuring acidity—pH notation Application of pH notation to arterial blood Physiological effects of low arterial pH Buffering systems of blood Control of pH by pulmonary ventilation Renal control of body pH Clinical situations when pH will be low Blood bicarbonate level Hypoxia and hypercarbia—Interpreting ABG reports for compensation purposes Typical blood gas reports in earlier stages of chronic lung disease—The pink puffer Typical blood gas reports in later stages of chronic lung disease—The blue bloater Effect of respiratory infections on blood gases in patients with chronic lung disease
v. ci	LINICAL EXAMINATION OF RESPIRATORY
	STEM
A.	CLINICAL HISTORY
§ 8:108 § 8:109 § 8:110	The patient's complaints (chief complaints) Occupational history Personal history
В.	THE PHYSICAL EXAMINATION
§ 8:111 § 8:112	Brief clinical record Inspection—General observation

Τ	ABLE OF (Contents
§	8:113	Observation of the respiratory system—The manner of breathing
Ş	8:114	Physical examination—Palpation of the chest
	8:115	Physical examination—Percussion of the chest
	8:116	Physical examination—Auscultation of the lungs
	8:117	Normal and abnormal breath sounds
	8:118	Abnormal transmission of speech through chest wall
	8:119	Formal description of abnormal breathing sounds
7	7 I. PF	ROOF OF LUNG DISABILITY
	A.	SHOWING LUNG DISABILITY FOR NON- STATUTORY PURPOSES
§	8:120	Why lung disability cases are troublesome to lawyers
	8:121	Psychiatric impairments in chronic lung disease
	8:122	Using medical records to prove lung disability
	8:123	Using x-ray reports to prove lung disability
	8:124	Using spirometry to prove lung disability
	8:125	Using blood gas studies to prove lung disability
	8:126	Proof of lung disability—Imaging and physiological tests
	В.	SOCIAL SECURITY REGULATIONS (SSR)
§	8:127	Principal types of pulmonary impairment
§	8:128	How to prove severity of impairment
§	8:129	Ventilatory function test—Spirometry—SSR 3.00D
Ş	8:130	Impaired gas exchange—SSR 3.00E
	8:131	Specific categories of impairment—SSR 3.02
	8:132	Asthma—SSR 3.03
	8:133	Bronchiectasis—SSR 3.07
	8:134	Listing of impairments
	8:134.15	
	8:134.30	
	8:134.50	
	C.	PERCENTAGE DISABILITY
§	8:135	Two percentage impairment approaches
	8:136	AMA guides
	8:137	AMA percentage impairment classes
	8:138	Uses of AMA guides in various compensation systems
V	/II. D	OCUMENTS
8	8:139	Doctor's notes on respiratory case (with translation)
	8:140	Data from respiratory therapy department
o		and the state of t

VIII. REFERENCES

§ 8:141 Glossary of terms

IX. SAMPLE FORMS

- § 8:142 Plaintiff's interrogatories to defendant—Action for medical malpractice of physician based upon missed diagnosis of lung cancer
- § 8:143 Complaint, petition, or declaration—By purchaser's estate—Against manufacturers of cigarettes—
 Negligence, breach of warranty, strict products liability, civil conspiracy and other causes of action—
 Wrongful death

X. ILLUSTRATIVE TESTIMONY

- § 8:144 Failure to diagnose or properly treat COPD— Plaintiff's Medical Expert [Direct Examination]
- § 8:145 —Defendant's Cross-Examination of Plaintiff's Medical Expert [Cross-Examination]
- § 8:146 —Plaintiff's Cross Examination of Defendant Attending Physician [Cross Examination]
- § 8:147 —Plaintiff's Cross-Examination of Defendant Critical Pulmonologist [Cross-Examination]
- § 8:148 —Plaintiff's Cross-Examination of Defendant Nurse [Cross-Examination]

CHAPTER 9. EYES: INJURIES AND IMPAIRMENTS

I. INTRODUCTION

- § 9:1 How visual impairments feature in compensation cases
- § 9:2 The concept of blindness—Various definitions
- § 9:3 Categories of blindness—Visual impairment scales
- § 9:4 Translating visual impairment scales into functional terms
- § 9:5 Standard classification of visual impairments

II. BASIC ANATOMY AND PHYSIOLOGY

A. STRUCTURES SURROUNDING EYE

- § 9:6 The eyelids (palpebrae)
- § 9:7 The lacrimal apparatus (tearing)

B. THE ORBIT

- § 9:8 The walls of the orbital chamber
- § 9:9 The orbital foramina (windows)
- § 9:10 The orbital contents

C. GLOBE

§ 9:11 Main features of eyeball

TABLE OF	TABLE OF CONTENTS				
\$ 9:12 \$ 9:13 \$ 9:14 \$ 9:15 \$ 9:16 \$ 9:17	Chambers of eye Movements of the eye—The extraocular muscles Outer coverings of the globe—Sclera and cornea Middle layer of global coverings—Uvea Lens The retina—Fundoscopic examination				
D.	PERCEPTION OF LIGHT				
 § 9:18 Layers of cells in the retina § 9:19 Functions of rod cells and cone cells—Visual pigm § 9:20 Special functions of the cones—Macular vision § 9:21 Special functions of the rods—Peripheral vision § 9:22 Central visual pathways—The visual cortex 					
III. I	DISEASES AFFECTING EYE AND VISION				
A.	DISEASES WITH LIMITED LEGAL RELEVANCE				
§ 9:23 § 9:24 § 9:25 § 9:26	Significance of eye diseases for compensation purposes Tumors of the eye and orbit Infectious disorders of the eye Eye infections—Uveitis				
В.	GLAUCOMA				
§ 9:27 § 9:28 § 9:29	The definition of glaucoma Open-angle glaucoma Closed-angle glaucoma Litermittent opigedes of acute glaucoma				
§ 9:30 § 9:31 § 9:32 § 9:33 § 9:34	Intermittent episodes of acute glaucoma Secondary glaucoma—Due to trauma or infection Making the diagnosis of glaucoma—Tonometry Diagnosing glaucoma—Serial and provocative testing Measurement of intraocular pressure—Standard units				
§ 9:35	of measurement Diagnosing glaucoma—Ophthalmoscopy and gonioscopy				
§ 9:36 § 9:37 § 9:38 § 9:39	Diagnosing glaucoma—Visual field testing Medical treatment of open-angle glaucoma Medical treatment of closed-angle glaucoma Surgical treatments—Indications for considering				
§ 9:40	surgical management Current screening protocols for glaucoma				
C.	TRAUMATIC EYE INJURIES				
§ 9:41 § 9:42	Causes of eye trauma Traumatic injuries to the eyelids				

§ 9:43	Corneal injuries—Erosions					
§ 9:44	Corneal injuries—Foreign bodies					
§ 9:45	Corneal injuries—Thermal and chemical burns					
§ 9:46	Injuries to the globe					
§ 9:47	Traumatic dislocation of lens					
§ 9:48	Blunt trauma to the globe					
§ 9:49	Penetrating injuries to the eye					
§ 9:50	Sympathetic ophthalmia					
\$ 5.50	Sympathetic opininamia					
D	. CONDITIONS AFFECTING THE RETINA					
§ 9:51	The spectrum of retinal diseases					
§ 9:52	Retinal detachments and retinal tears					
§ 9:53	Precipitants of retinal detachment					
§ 9:54	Terms used to describe retinal tears					
§ 9:55	The diagnosis and treatment of retinal detachments					
§ 9:56	Diabetic retinopathy					
§ 9:57	Background retinopathy					
§ 9:58	Proliferation retinopathy					
§ 9:59	Prevention of diabetic retinopathy					
§ 9:60	Retinopathy of prematurity (ROP)					
§ 9:61	Retinitis pigmentosa					
8 9.01	neumus pigmentosa					
\mathbf{E}	DISEASES OF THE LENS					
§ 9:62	Lenticular problems—Incidence and importance to					
	compensationists					
§ 9:63	Descriptive terms applied to cataracts					
§ 9:64	Lenticular cataracts—Clinical presentations					
§ 9:65	Cataracts—Various causes					
§ 9:66	Treatment of cataracts—Cataract surgery					
§ 9:67	Cataract extractions					
F.						
§ 9:68	Disorders of eye movement					
§ 9:69	Abnormal eye movements—Strabismus					
§ 9:70	Causes of strabismus					
§ 9:71	Legal importance of ocular motility in adults					
§ 9:72	Compensatory mechanisms to get rid of diplopia					
§ 9:73	Permanent disability resulting from strabismus					
§ 9:74	Terms used to describe strabismus of eyes					
§ 9:75	Clinical evaluation of strabismus—Looking for causes					
§ 9:76	Clinical evaluation of strabismus—Examining eye					
§ 9:77	movements					
-	Measuring the angle of deviation					
§ 9:78	S S S S S S S S S S S S S S S S S S S					
8 9:19	§ 9:79 Evaluating strabismus—Testing accommodation and refraction					

Table of Contents

ş	9:80	Treatment objectives
Ş	9:81	Surgical treatments for eye movement disorders
	G.	REFRACTIVE PROBLEMS
ş	9:82	The eye as a system of lenses
ş	9:83	More complex account of refraction of light in the eye—More complex version
Ş	9:84	Basic optical theory—Algebraic or trigonometric optics
Ş	9:85	Refractive disorders—Important terms and concepts
8	9:86	Errors of refraction—Regular and irregular astigmatism
Ş	9:87	Visual acuity
ş	9:88	Measuring visual acuity with Snellen eye chart— Pediatric eye charts
Ş	9:89	Current treatment of refractive problems
Ι	v. c	LINICAL EVALUATION OF EYE
	A.	HISTORY AND PHYSICAL EXAMINATION
ş	9:90	General medical history
ş	9:91	Visual history
ş	9:92	Physical examination
ş	9:93	Examination of the anterior chamber
ş	9:94	Examination of the vitreous and fundus
ş	9:95	Testing eye movements
Ş	9:96	Examining the visual fields
	В.	EYE TESTING INSTRUMENTS
ş	9:97	Basic diagnostic instruments
ş	9:98	Campimetry
ş	9:99	Testing lacrimation—The Schirmer test
ş	9:100	Testing for retinal changes—The Amsler grid
Ş	9:101	Testing for astigmatism—The keratoscope
Ş	9:102	Evaluating exophthalmos and enophthalmos—Exophthalmometry
ş	9:103	Visual acuity testing in patients with corneal, lens or vitreous opacities
ş	9:104	Testing retinal artery blood pressure
ş	9:105	Retinal imaging—Fluorescein angiography
ş	9:106	Imaging of the eye—X-rays, CT-scan, and MRI
ş	9:107	Imaging—Ultrasound studies
ş	9:108	Electrodiagnostic studies—Electroretinography
§	9:109	Electrodiagnostic studies—Visual evoked potentials (VEPs)

V. EVALUATING VISUAL IMPAIRMENT

۸ .	IN	GEN	TID A	Т
Α.	IIN I	LTLIN	$\Gamma_{I} R.A$	

§ 9:	110	Types of	of visual	impairment	;
------	-----	----------	-----------	------------	---

- § 9:111 Combined impairments (equivalent impairment)
- § 9:112 Mathematical approaches to disability determination

B. SOCIAL SECURITY REGULATION (SSR)

- § 9:113 Basic principles in social security evaluation of visual disabilities
- § 9:114 General considerations relating to central loss—SSR 2.02
- § 9:115 General considerations relating to visual field losses—SSR 2.03
- § 9:116 Impairment of muscle function
- § 9:117 Visual efficiency—SSR 2.04
- § 9:118 Visual impairment categories—SSR 2.02–2.06

C. PERCENTAGE DISABILITY

- § 9:119 The AMA guides
- § 9:120 Percentage disability for central visual acuity
- § 9:121 Percentage disability for visual field loss
- § 9:122 Percentage loss in motility problems and diplopia
- § 9:123 Combining various impairments

D. SOCIAL SECURITY REGULATION/VISUAL IMPAIRMENT

§ 9:124 Listing of impairments

VI. REFERENCES

§ 9:125 Glossary of terms

CHAPTER 10. EAR, NOSE AND THROAT: INJURIES AND IMPAIRMENTS

I. INTRODUCTION

- § 10:1 Otorhinolaryngology—No longer one but several disciplines
- § 10:2 Hearing loss—Incidence and costs
- § 10:3 Importance of noise induced hearing loss
- § 10:4 Limitations of numerical representation of hearing loss
- § 10:5 Knowledge needed by compensationists

II. BASIC ANATOMY AND PHYSIOLOGY

Δ	EAR	AND	HEA	ARING
^ .	17/7	\neg	1 1 1 7 7	

- § 10:6 The outer ear
- § 10:7 The middle ear
- § 10:8 The inner ear—The vestibulocochlear apparatus
- § 10:9 The inner ear—The organ of Corti

B. STRUCTURES ASSOCIATED WITH EAR

- § 10:10 The inner ear—The vestibular apparatus
- § 10:11 Vestibular function—Nystagmus apparatus
- § 10:12 Internal acoustic canal and the cerebellopontine angle
- § 10:13 The course of the facial nerve

III. DISEASES OF EAR

A. TRAUMATIC EAR DISEASES

- § 10:14 Lacerations and contusions of the ear
- § 10:15 Traumatic injuries—Perforations of the ear drum
- § 10:15.10 Proof of perforated eardrum with middle ear involvement
- § 10:16 Traumatic injuries—Whiplash head injuries and basal skull fractures
- § 10:16.10 Middle ear and inner ear injuries associated with trauma
- § 10:16.20 Proof of mixed hearing loss (longitudinal fracture of petrous bone)
- § 10:16.30 Proof of sensorineural (cochlear) hearing loss (transverse fracture of petrous bone)
- § 10:17 Noise induced hearing loss—Basic theory
- § 10:18 Noise induced hearing loss—Determining acceptable noise levels
- § 10:19 Noise induced hearing loss—Operating room noise
- § 10:19.10 Acoustic trauma and noise-induced hearing loss
- § 10:20 Ear damage associated with surgery

B. FACIAL TRAUMA

- § 10:21 Various specialties handling facial trauma
- § 10:22 The fractures of the nose
- § 10:23 Fractures of the facial bones—The Le Fort classification
- § 10:24 Management of facial fractures
- § 10:25 Fractures of the mandible
- § 10:26 Fracture of the cribriform plate

C. OTOTOXICITY

§ 10:27 Aspirin ototoxicity

§ 10:28	Ototoxicity associated with antibiotics and anti-
§ 10:29	cancer drugs Due care in the administration of ototoxic drugs
D.	INFECTIONS
§ 10:30	Acute otitis media and its complications
§ 10:31	Otitis media with effusion (serous otitis media)
§ 10:32	Chronic otitis media—Cholesteatoma and cholesterol granuloma
§ 10:33	Mechanisms of hearing loss in perforations of the ear drum
§ 10:34	Treatment of defects in the tympanic membrane
E.	DEGENERATIVE CONDITIONS
§ 10:35	Ostosclerosis, stapedectomy and stapedotomy
§ 10:36	Presbyacusis
F.	DISEASES AFFECTING LABYRINTH
§ 10:37	Ménière's disease and Ménière's syndrome
§ 10:38	Labyrinthitis and vestibular neuronitis
§ 10:39	Dizziness
§ 10:40	Benign paroxysmal positional vertigo
G.	ACOUSTIC NEUROMAS
§ 10:41	Clinical signs of an acoustic neuroma
§ 10:42	Residual impairments associated with removal of
	acoustic neuromas
H.	SOME OTHER ENT PROBLEMS
§ 10:43	Facial nerve injuries and disorders
§ 10:44	Facial paralysis—Bell's palsy
§ 10:45	Sleep apnea syndromes—Presentation, diagnosis and
	treatment
§ 10:46	Dysphonia—Voice and speech disorders
	XAMINATION OF EAR, NOSE AND THROAT ENT)
A.	HISTORY
8 10.47	General medical history
-	· ·
8 10:48	ENT history
В.	EXAMINATION
§ 10:49	Examination of head and neck

xxvi

Table of Contents

§ 10:50 Examination of throat

§ 10:51 § 10:52 § 10:53	·	
	VALUATION AND TREATMENT OF HEARIN	N G
A.	EVALUATING HEARING IMPAIRMENT	
\$ 10:54 \$ 10:55 \$ 10:56 \$ 10:57	Nature of hearing impairment Watch test Whispering test Limitations of simple clinical hearing tests	
В.	AUDIOMETRY	
\$ 10:58 \$ 10:59 \$ 10:60 \$ 10:61 \$ 10:62 \$ 10:63 \$ 10:64 \$ 10:65 \$ 10:66 \$ 10:67 \$ 10:68 \$ 10:69	Schwabach test Weber test Rinne test Bels and decibels Pure tone audiometry Interpreting audiogram results Speech audiometry Free-field audiometry Impedance audiometry—Tympanometry Evoked potential studies Cortical audiometry Speech distortion studies	
C.	TESTING HEARING AND VESTIBULAR FUNCTION	
\$ 10:70 \$ 10:71 \$ 10:72 \$ 10:73 \$ 10:74 \$ 10:75 \$ 10:76	Clinical testing of vestibular function Electronystagmometry (ENG) Caloric testing during ENG Short increment sensitivity index (SISI) Threshold decay studies Swinging voice test Bekesy audiogram	
D.	TREATMENT AND REHABILITATION FOR HEARING IMPAIRED	
§ 10:77 § 10:78 § 10:79 § 10:80	Surgical correction of hearing loss—Cochlear implants Hearing aids Auditory training and lip reading	
§ 10:80	Assistive devices—Loops and transmitters	XX
		222

§ 10:81 Community awareness of hearing problems

VI. EVALUATING HEARING DISABILITY

Δ	NI	TM	ERI	$C\Delta I$.	EVAI	LUATIO	N
α.	INI) IVI	1.4 1.4.1		1'4 V / \	AUAIIV	IN

- § 10:82 Numerical representation of hearing disability
- § 10:83 Limitations on numerical representation of hearing loss

B. SOCIAL SECURITY REGULATION (SSR)

- § 10:84 Otolaryngological impairments—SSR 2.00-2.09
- § 10:85 Requirements to qualify for hearing impairment— SSR 2.08
- § 10:86 Disability due to labyrinthine disturbances—SSR 2.07
- § 10:87 Inability to produce comprehensible speech—SSR 2.09

C. PERCENTAGE DISABILITY

- § 10:88 AMA guides for hearing impairment
- § 10:89 Percentage evaluation of speech discrimination loss
- § 10:90 Calculating binaural hearing loss
- § 10:91 Calculating monaural hearing loss
- § 10:92 Percentage impairment in equilibrium disturbances
- § 10:93 Percentage disability of whole person
- § 10:94 Percentage impairment in non-statutory compensation situations

D. SOCIAL SECURITY REGULATIONS/HEARING IMPAIRMENT

§ 10:94.10 Listing of impairments

VII. REFERENCES

§ 10:95 Glossary of terms

CHAPTER 11. SKIN: INJURIES AND IMPAIRMENTS

I. INTRODUCTION

- § 11:1 Knowledge of dermal medicine needed by lawyers
- § 11:2 Major dermatological specialties
- § 11:3 Varieties of dermatological compensation problems
- § 11:4 Medical malpractice claims in dermatological practice

xxviii

§ 11:31

II. BASIC ANATOMY AND PHYSIOLOGY

11. DF	ASIC ANATOMI AND PHISIOLOGI
A.	SKIN STRUCTURES AND FUNCTIONS
§ 11:5 § 11:6 § 11:7	Multiple functions of skin The structure of the skin The epidermis
§ 11:8 § 11:9 § 11:10	Pigmentation and hyperpigmentation of the skin Hypopigmentation—Vitiligo and albinism The dermis
В.	THE RESPONSE OF SKIN TO TRAUMA
§ 11:11 § 11:12 § 11:13	Various epithelial and dermal injuries The healing process Normal and abnormal healing
§ 11:14	Healing of more superficial wounds—Abrasions
C.	DERMAL IMMUNE RESPONSES
§ 11:15 § 11:16 § 11:17	The structure and function of the Langerhans cells Functions of T-lymphocytes and B-lymphocytes The functions of chemotactic substances and immunoglobulins
§ 11:18	Development of the immune response throughout the body
§ 11:19	Abnormal immune reactions
§ 11:20	The concept of sensitivity
§ 11:21	Clinical varieties of allergic response
§ 11:22	Hypersensitivity reactions in skin and in other tissue
§ 11:23	Sensitivity to small molecules—Hapten formation
§ 11:24	Immune preparedness and desensitization
§ 11:25	Familial susceptibility to development of allergies
III. T	RAUMATIC INJURIES TO SKIN
A.	TRAUMA—CUTS, LACERATIONS, AND ABRASIONS
§ 11:26	Common terms relating to traumatic skin injuries
§ 11:27	Healing by first intention—Primary closure
§ 11:28	Secondary closure—Granulation
В.	THERMAL, CHEMICAL, AND ELECTRICAL INJURIES
§ 11:29	First, second and third degree burns
§ 11:30	Factors affecting severity of burns—Temperature and duration of contact

Chemical burns—Contact with acids

	WEDICAL INFORMATION DISIEM
\$ 11:32 \$ 11:33 \$ 11:34 \$ 11:35 \$ 11:35.10 \$ 11:35.20	thermal burn injuries
C.	SURGICAL REPAIR AND PLASTIC SURGERY
§ 11:36 § 11:37	Surgical repair—Wound closure Surgical techniques to relieve skin tension—Relieving incision and skin flaps
§ 11:38 § 11:39 § 11:40	Local skin flaps, distant skin flaps and pedicle grafts Direct skin grafting Mechanisms of graft survival
\$ 11:41 \$ 11:42 \$ 11:43 \$ 11:44 \$ 11:45 \$ 11:46	Different kinds of grafts—Terminology Biological graft materials Advances in elective reconstructive surgery Advances in cosmetic surgery—Liposuction Avoiding infection in reconstructive surgery Informed consent issues
§ 11:47 § 11:48	Frontiers of reconstructive surgery Cosmetic dental procedures
IV. Co	ONTACT DERMATITIS
A.	COMMON AND UNCOMMON SENSITIZERS
§ 11:49 § 11:50	Long list of sensitizers Short list of common sensitizers
B.	METALS
§ 11:51 § 11:52 § 11:53	Mercury Nickel Chromium—Chromates and dichromates
C.	HALOGEN COMPOUNDS
§ 11:54 § 11:55 § 11:56 § 11:57	Iodine Chlorine and chlorine compounds Bromine and bromides Fluorine and fluorides
D.	ANTIBIOTICS
§ 11:58 § 11:59	Antibiotic creams and ointments Streptomycin—Related drugs

§ 11:60 § 11:61 § 11:62	Prior sensitization by oral antibiotics Antibiotics in animal feeds Sulfa drugs
E.	ANTIHISTAMINES
\$ 11:63 \$ 11:64 \$ 11:65 \$ 11:66 \$ 11:67 \$ 11:68 \$ 11:69	Significance of ethylamine grouping Ethylenediamines—Atarax Ethylenediamine hydrochloride—Aminophylline Diphenylenediamines—Benadryl Phenothiazine derivatives—Thorazine and phenergan Alkylamines—Cold and cough medicines White and yellow antihistamines—Azo dyes
F.	LOCAL ANESTHETICS
§ 11:70	Multiple uses of local anesthetics
§ 11:71 § 11:72	Amides and esters Pramoxine hydrochloride—Sunburn lotions
G.	ADDITIVE SUBSTANCES
§ 11:73 § 11:74	Functions of additives Some commonly used additives
§ 11:75	Parabens
§ 11:76	Sorbic acid
§ 11:77 § 11:78	Formaldehyde Additives used in industrial processes
	-
H.	NATURAL SUBSTANCES AS SENSITIZERS
§ 11:79	Value of natural substances in manufacturing
§ 11:80	Balsam of Peru
§ 11:81 § 11:82	Resins Essential oils
I.	PLANT DERMATITIS
	Poison oak and poison ivy
§ 11:84	Other plants in the rhus/sumac family
J.	ATOPIC DERMATITIS
§ 11:85	Hyperallergic patient
§ 11:86	The atopic response—Atopic dermatitis (atopic eczema)
§ 11:87	Causes of atopic eczema
§ 11:88	Occupational problems of atopic patients

V. CLINICAL EVALUATION OF SKIN PROBLEMS

A.	DERMATOLOGICAL HISTORY AND PHYSICAL
	EXAMINATION

11:89	Questions about ordinary health of patient
11:90	Dermatological history
11:91	Social and occupational history
11:92	Physical examination
11:93	Recording physical findings—Some important terms
B.	DERMATOLOGICAL TESTING
11:94	Simple clinical tests
11:95	Testing skin for allergic response
11:96	Patch testing
11:97	Tests for home use with cosmetic preparations
11:98	Protocols for testing of new products
11:99	Predictive testing of new products for allergenic potential
11:100	Monitoring products for allergic reactions
C.	INDUSTRIAL DERMATOLOGY
11:101	Compensating industrial injuries
11:102	Screening prospective employees for skin problems
3 11.103	Specific and nonspecific hardening

VI. EVALUATING DERMAL INJURIES AND IMPAIRMENT

A. DETERMINING DERMAL IMPAIRMENT FOR GENERAL PURPOSES

- § 11:105 Problems in compensation for skin disorders
 § 11:106 Dermal disabilities—Disfigurement and itch
 § 11:107 Limitations imposed by skin conditions
 § 11:108 Other bodily disorders related to skin conditions
 - B. STATUTORY COMPENSATION SYSTEMS
- § 11:109 Skin Disorders (8.00 and 108.00)

Occupational dermatitis

- § 11:110 AMA guides
- § 11:111 Uses and limitations of percentage impairment systems

VII. REFERENCES

§ 11:112 Glossary of terms

xxxii

§ 11:104

Table of Contents

CHAPTER 12. MEDICAL LIENS AND SUBROGATION

- § 12:1 Introduction
- § 12:2 Medicare
- § 12:3 Medicaid
- § 12:4 Hospital/medical providers
- § 12:5 Private health insurers
- § 12:6 Reimbursement agreements

APPENDIX

Appendix A. Miscellaneous Topics

Table of Laws and Rules

Table of Cases

Index