

# Foundations and Adult Health Nursing

Christensen  
Kockrow



6th Edition

Companion CD inside





## **Unit I Basic Nursing Concepts**

### **1 The Evolution of Nursing, 1**

*Elaine Oden Kockrow*

#### **The History of Nursing and Nursing**

##### **Education, 1**

Care of the Sick during Early Civilization, 1

Nursing Education in the Nineteenth

Century, 3

Changes in Nursing during the Twentieth

Century, 5

Significant Changes in Nursing  
for the Twenty-First Century, 7

#### **Development of Practical and Vocational Nursing, 7**

Attendant Nurses, 7

Practical Nursing Programs, 8

Organizational Influence, 9

Additional Credentialing, 9

Contemporary Practical and Vocational  
Nursing Education, 9

Career Advancement, 10

Factors that Changed Practical and Vocational  
Nursing, 10

Licensure for Practical and Vocational  
Nursing, 11

#### **Health Care Delivery Systems, 11**

Health Care System Defined, 11

Delivery of Patient Care, 12

#### **Nursing Care Models, 17**

#### **Contemporary Practical and Vocational Nursing Care, 17**

Practical and Vocational Nursing Defined, 17

Objectives and Characteristics of Practical  
and Vocational Nursing Education, 18

Roles and Responsibilities, 18

### **2 Legal and Ethical Aspects of Nursing, 22**

*Barbara Lauritsen Christensen and Katherine Parker-Feliciano*

#### **Legal Aspects of Nursing, 22**

Overview of the Legal System, 23

Overview of the Legal Process, 23

Legal Relationships, 24

Regulation of Practice, 24

Legal Issues, 25

How to Avoid a Lawsuit, 29

Insurance, 29

The Disciplinary Process, 30

#### **Ethical Aspects of Nursing, 31**

Development of Ethical Principles, 31

Ethical Principles in Nursing Practice, 32

Codes of Ethics, 32

Reporting Unethical Behavior, 32

Ethical Issues, 33

#### **Conclusion, 33**

### **3 Communication, 36**

*Diane D. Kathol*

#### **Overview of Communication, 36**

Verbal Communication, 37

Nonverbal Communication, 37

#### **Styles of Communication, 39**

Assertive Communication, 39

Aggressive Communication, 39

Unassertive Communication, 39

#### **Establishing a Therapeutic Relationship, 40**

#### **Communication Techniques, 40**

Nonverbal Therapeutic Communication  
Techniques, 40

Verbal Therapeutic Communication  
Techniques, 42

#### **Factors Affecting Communication, 46**

Posturing and Positioning, 46

Space and Territoriality, 46

Environment, 46

Level of Trust, 47

Language Barriers, 47

Culture, 47

Age and Gender, 48

Physiologic Factors, 49

Psychosocial Factors, 49

#### **Blocks to Communication, 50**

#### **Nursing Process, 50**

#### **Communication in Special Situations, 50**

Ventilator-Dependent Patients, 52

Aphasic Patients, 52

Unresponsive Patients, 53

#### **Conclusion, 53**

### **4 Vital Signs, 56**

*Elaine Oden Kockrow*

#### **Guidelines for Obtaining Vital Signs, 59**

When to Assess Vital Signs, 59

Recording Vital Signs, 61

- Temperature, 61
  - The Body's Regulation of Temperature, 61
  - Obtaining Temperature Measurements, 64
- Auscultating Using the Stethoscope, 69
- Pulse, 70
  - The Body's Regulation of Pulse, 70
  - Obtaining Pulse Measurements, 71
- Respiration, 75
  - Respiratory Function, 75
  - Assessment of Respiration, 77
- Blood Pressure, 77
  - Factors Determining Blood Pressure, 77
  - Obtaining Blood Pressure Measurements, 80
- Weight and Height, 86
  - Obtaining Weight Measurements, 87
  - Obtaining Height Measurements, 87
- Nursing Process, 87

## 5 Physical Assessment, 93

*Barbara Lauritsen Christensen and Elaine Oden Kockrow*

- Signs and Symptoms, 93
- Disease and Diagnosis, 94
  - Origins of Disease, 94
  - Risk Factors for Development of Disease, 95
  - Terms Used to Describe Disease, 95
  - Frequently Noted Signs and Symptoms of Disease, 95
- Assessment, 97
  - Medical Assessment, 97
  - Nursing Assessment, 98
  - Nursing Health History, 101
  - Nursing Physical Assessment, 106

## 6 Nursing Process and Critical Thinking, 121

*Toni C. Wortham*

- Assessment Data, 122
  - Types of Data, 122
  - Sources of Data, 122
  - Methods of Data Collection, 123
  - Data Clustering, 123
- Diagnosis, 123
  - Nursing Diagnosis, 124
  - Other Types of Health Problems, 126
- Outcomes Identification, 127
- Planning, 128
  - Priority Setting, 128
  - Selecting Nursing Interventions, 129
  - Writing Nursing Orders, 129
  - Communicating the Nursing Care Plan, 130
- Implementation, 131
  - Evidence-Based Practice, 131
  - Documentation, 131

- Evaluation, 131
- Standardized Languages: NANDA-I, NIC, and NOC, 132
  - Nursing Interventions Classification (NIC), 132
  - Nursing Outcomes Classification (NOC), 132
- Role of the Licensed Practical Nurse or Licensed Vocational Nurse, 133
- Nursing Diagnoses and Clinical Pathways, 133
- Critical Thinking, 134

## 7 Documentation, 138

*Elaine Oden Kockrow*

- Purposes of Patient Records, 138
- Basic Guidelines for Documentation, 140
  - Charting Rules, 140
  - Legal Basis of Documentation, 140
  - Common Medical Abbreviations and Terminology, 141
- Methods of Recording, 142
  - Traditional Chart, 142
  - Problem-Oriented Medical Record, 142
  - Focus Charting Format, 144
  - Charting By Exception, 145
  - Record-Keeping Forms and Examples, 145
- Documentation and Clinical (Critical) Pathways, 149
- Home Health Care Documentation, 151
- Long-Term Health Care Documentation, 151
- Special Issues in Documentation, 152
  - Record Ownership and Access, 152
  - Confidentiality, 152
  - Documentation by Computer, 152
  - Use of Fax Machines, 153

## 8 Cultural and Ethnic Considerations, 158

*Elaine Oden Kockrow and Relda T. Kelly*

- Culture Defined, 158
  - Cultural Competence and Transcultural Nursing, 159
  - Race and Ethnicity, 160
  - Ethnic and Racial Groups in the United States, 161
- Culturally Related Assessments, 161
  - Communication, 162
  - Space, 163
  - Time, 164
  - Social Organization, 164
  - Religious Beliefs and Health Care, 165
  - Health Practices, 170
  - Biological Variations, 170
- The Nursing Process and Cultural Factors, 171
- Cultural Practices of Specific Groups, 172

**9 Life Span Development, 180***Elaine U. Polan*

Health Promotion Across the Life Span, 181

Growth and Development, 181

Patterns of Growth, 182

Beginnings, 182

The Family, 182

Types of Families, 183

Family Patterns, 184

Stages of Family Development, 185

Causes of Family Stress, 186

Stages of Growth and Development, 187

Psychosocial Development, 187

Cognitive and Intellectual Development, 187

Communication and Language, 187

Infancy: 1 to 12 Months, 189

Toddler: 1 to 3 Years, 192

Preschool: 3 to 5 Years, 195

School Age: 6 to 12 Years, 198

Adolescence: 12 to 19 Years, 201

Early Adulthood: 20 to 40 Years, 204

Middle Adulthood: 40 to 65 Years, 206

Late Adulthood: 65 Years and Older, 208

**10 Loss, Grief, Dying, and Death, 218***Elaine Oden Kockrow and Barbara Lauritsen Christensen*

Changes in Health Care Related to Dying and Death, 219

Historical Overview, 219

Loss, 219

Grief, 220

Sense of Presence, 221

Grief Attacks, 221

Nurses' Grief, 221

Stages of Grief and Dying, 222

Complicated Grief, 222

Supportive Care during the Dying and Grieving Process, 224

Nursing Process in Loss and Grief, 229

Special Supportive Care, 231

Perinatal Death, 231

Pediatric Death, 231

Suicide, 233

Gerontologic Death, 233

Sudden or Unexpected Death, 233

Issues Related to Dying and Death, 233

Euthanasia, 233

Do Not Resuscitate, 234

Advance Directives, 234

Organ Donations, 235

Rights of Dying Patients, 236

Fraudulent Methods of Treatment, 237

The Dying Patient, 237

Communicating with the Dying Patient, 237

Assisting the Patient in Saying Good-Bye, 237

Palliative Care, 238

Physical Care, 238

Assessments and Interventions, 239

Inquest, 240

Postmortem Care, 240

Documentation, 244

The Grieving Family, 244

Support, 244

Resolution of Grief, 244

**Unit II Basic Nursing Skills****11 Admission, Transfer, and Discharge, 248***Elaine Oden Kockrow and Barbara Lauritsen Christensen*

Common Patient Reactions to

Hospitalization, 248

Role of the Admitting Clerk or Secretary, 249

Cultural Considerations for the Hospitalized Patient, 250

Admitting a Patient, 251

Nursing Process for Patient Admission, 256

Transferring a Patient, 257

Nursing Process for Patient Transfer, 257

Discharging a Patient, 259

Discharge Planning, 259

Referrals for Health Care Services, 261

The Discharge Process, 262

Nursing Process for Patient Discharge, 263

**12 Medical-Surgical Asepsis and Infection Prevention and Control, 266***Elaine Oden Kockrow*

Asepsis, 266

Infection, 267

Infectious Agent, 268

Reservoir, 271

Exit Route, 271

Method of Transmission, 272

Entrance of Microorganisms, 272

Host, 273

Infectious Process, 273

Inflammatory Response, 273

Health Care-Associated Infections, 274

Infection Prevention and Control Team, 275

Infection Preventionist, 275

Occupational Health Service, 275

Standard Precautions, 276

Hand Hygiene, 277

Gloving, 281

Gowning, 282

Mask and Protective Eyewear, 284

Disposing of Contaminated Equipment, 284

Double Bagging, 284

Isolation Technique, 285

Pulmonary Tuberculosis (TB) Precautions, 289

Surgical Asepsis, 291  
 Principles of Sterile Technique, 293  
 Surgical Hand Scrub, 293  
 Managing Sterile Packages, 295  
 Preparing a Sterile Field, 295  
 Pouring Sterile Solutions, 295  
 Donning a Sterile Gown, 297  
 Donning Sterile Gloves, 298  
 Cleaning, Disinfection, and Sterilization, 301  
 Cleaning, 301  
 Disinfection, 302  
 Sterilization, 302  
 Patient Teaching for Infection Prevention and Control, 303  
 Infection Prevention and Control for Home and Hospice Settings, 303  
 Nursing Process, 304

### 13 Surgical Wound Care, 310

*Elaine Oden Kockrow*

Wound Classification, 310  
 Wound Healing, 311  
 Phases of Wound Healing, 311  
 Process of Wound Healing, 311  
 Factors that Affect Healing, 311  
 Surgical Wound, 314  
 Standard Steps in Wound Care, 314  
 Care of the Incision, 315  
 Wet-to-Dry Dressing, 318  
 Transparent Dressings, 320  
 Irrigations, 321  
 Complications of Wound Healing, 323  
 Staple and Suture Removal, 324  
 Exudate and Drainage, 325  
 Drainage Systems, 328  
 Bandages and Binders, 333  
 Nursing Process, 338

### 14 Safety, 343

*Elaine Oden Kockrow and Barbara Lauritsen Christensen*

Safety in the Hospital or Health Care  
 Environment, 343  
 Falls, 344  
 Infants and Children, 345  
 Older Adults, 346  
 Safety Reminder Devices, 346  
 Latex Sensitivity, 354  
 Left-Handed Patient, 354  
 Electrical Hazards, 354  
 Radiation, 355  
 Mercury Spill, 355  
 Workplace Safety, 355  
 Fire Safety, 357  
 Accidental Poisoning, 360  
 Disaster Planning, 361

Terrorism, 362  
 Bioterrorism, 363  
 Terrorism by Nuclear Exposure, 364  
 Chemical Terrorism, 364  
 Nursing Process for Patient Safety, 365

### 15 Body Mechanics and Patient Mobility, 369

*Elaine Oden Kockrow*

Using Appropriate Body Mechanics, 370  
 Positioning Patients, 372  
 Mobility versus Immobility, 375  
 Neurovascular Function, 377  
 Performing Range-of-Motion Exercises, 378  
 Continuous Passive Motion Machines, 382  
 Moving the Patient, 382  
 Using the Lift for Moving Patients, 387  
 Nursing Process for Patient Mobility, 387

### 16 Pain Management, Comfort, Rest, and Sleep, 394

*Barbara Lauritsen Christensen*

PAIN, 395  
 Nature of Pain, 395  
 Definition of Pain, 395  
 Types of Pain, 396  
 Theories of Pain Transmission, 396  
 Gate Control Theory, 396  
 Endorphins, 396  
 Controlling Pain, 397  
 Requirements of The Joint Commission for Pain Control, 397  
 Making Pain the Fifth Vital Sign, 397  
 Noninvasive Pain Relief Techniques, 398  
 Invasive Pain Relief Techniques, 399  
 Medication for Pain Management, 399  
 Responsibility of the Nurse in Pain Control, 404  
 Nursing Assessment of Pain, 405  
 Nursing Interventions, 408  
 SLEEP AND REST, 409  
 Physiology of Sleep, 409  
 Sleep Cycle, 410  
 Sleep Deprivation, 411  
 Promoting Rest and Sleep, 412  
 Nursing Process for Pain Management, Comfort, Rest, and Sleep, 412

### 17 Complementary and Alternative Therapies, 416

*Elaine Oden Kockrow and Barbara Lauritsen Christensen*

Herbal Therapy, 418  
 Chiropractic Therapy, 423  
 Limitations of Chiropractic Therapy, 423  
 Acupuncture and Acupressure, 423  
 Therapeutic Massage, 424  
 Aromatherapy, 424

- Reflexology, 424
  - Warnings, Contraindications, and Precautions, 425
- Magnet Therapy, 426
- Imagery, 426
- Relaxation Therapy, 426
- Animal-Assisted Therapy, 427
- Yoga, 428
- T'ai chi/Taiji, 428
- Biofeedback, 429
  - Clinical Applications of Biofeedback, 429
  - Limitations of Biofeedback, 429
- Integrative Medicine and the Nursing Role, 429

## 18 Hygiene and Care of the Patient's

### Environment, 434

*Elaine Oden Kockrow*

- Patient's Room Environment, 436
  - Maintaining Comfort, 436
  - Room Equipment, 436
- Bathing, 438
  - Sitz Bath, 438
  - Cool Water Tub Bath, 439
  - Warm Water Tub Bath, 439
  - Hot Water Tub Bath, 440
  - Other Baths, 440
  - Back Care and Back Rub, 448
- Components of the Patient's Hygiene, 448
  - Care of the Skin, 448
  - Oral Hygiene, 450
  - Hair Care, 455
  - Shaving the Patient, 455
  - Hand, Foot, and Nail Care, 457
  - Perineal Care, 457
  - Eye, Ear, and Nose Care, 460
  - Bedmaking, 461
  - Assisting the Patient with Elimination, 465
- Nursing Process for Hygiene, 467

## 19 Specimen Collection and Diagnostic

### Examination, 475

*Elaine Oden Kockrow*

- Diagnostic Examination, 475
  - Preparing the Patient for Diagnostic Examinations, 477
- Specimen Collection, 493
  - Guidelines for Specimen Collection, 493
  - Collecting a Midstream Urine Specimen, 494
  - Collecting a Sterile Urine Specimen, 494
  - Collecting a 24-Hour Urine Specimen, 496
  - Measuring Blood Glucose Levels, 497
  - Collecting a Stool Specimen, 497

- Determining the Presence of Occult Blood in Stool (Guaiac), 499
- Determining the Presence of Occult Blood in Gastric Secretions or Emesis (Gastrocult Test), 501
- Collecting a Sputum Specimen, 501
- Obtaining a Wound Culture, 502
- Collecting Specimens from the Nose and Throat, 505
- Collecting a Blood Specimen (Venipuncture) and Blood for Culture, 506
- Electrocardiogram, 514
- Nursing Process for Specimen Collection and Diagnostic Examination, 514

## 20 Selected Nursing Skills, 523

*Elaine Oden Kockrow*

- Standard Steps in Selected Skills, 523
- Skills for Sensory Disorders, 525
  - Irrigations, 525
- Skills for Heat and Cold Therapy, 529
  - Local Effects of Heat and Cold, 531
  - Assessment, 531
  - Patient Safety, 532
  - Physician's Order, 532
  - Moist or Dry Applications, 532
  - Hot, Moist Compresses, 532
  - Warm Soaks, 533
  - Paraffin Baths, 535
  - Aquathermia (Water-Flow) Pads (K-Pads), 535
  - Commercial Hot Packs, 535
  - Electric Heating Pads, 535
  - Cold, Moist, and Dry Compresses, 536
  - Ice Bags or Collars, 536
- Skills for Administering Parenteral Fluids, 536
  - Intravenous Therapy and Venipuncture, 536
  - Blood Transfusion Therapy, 546
- Skills for Respiratory Disorders, 555
  - Oxygen Therapy, 555
- Skills for Urinary or Reproductive Tract Disorders, 566
  - Urinary Elimination, 566
  - Removal of an Indwelling Catheter, 583
  - Vaginal Irrigation, 583
- Skills for Gastrointestinal Disorders, 583
  - Inserting and Maintaining Nasogastric Tubes, 583
  - Bowel Elimination, 589
  - Care of the Patient with Hemorrhoids, 591
  - Flatulence, 592
  - Administering an Enema, 592
  - Ostomies, 594
- Conclusion, 596

### Unit III Basic Nursing Interventions

#### 21 Basic Nutrition and Nutrition Therapy, 604

*Kristin Kartchner Maughan*

Role of the Nurse in Promoting Nutrition, 605

Basic Nutrition, 605

Diet Planning Guides, 605

Essential Nutrients, 608

Life Cycle Nutrition, 619

Pregnancy and Lactation, 619

Infancy, 623

Childhood, 623

Adolescence, 626

Adulthood, 626

Medical Nutrition Therapy and Therapeutic Diets, 629

Consistency, Texture, and Frequency

Modifications, 629

Kilocalorie Modifications, 631

Eating Disorders, 634

Carbohydrate-Modified Diets, 637

Fat-Modified Diets, 640

Protein-, Electrolyte-, and Fluid-Modified Diets, 643

Nutritional Support, 646

Tube Feedings, 646

Parenteral Nutrition Support, 652

Feeding the Patient, 653

Serving Meal Trays, 653

#### 22 Fluids and Electrolytes, 660

*Barbara Lauritsen Christensen*

Fluids (Water), 660

Fluid Compartments, 661

Intake and Output, 662

Movement of Fluid and Electrolytes, 663

Passive Transport, 663

Diffusion, 663

Osmosis, 664

Filtration, 664

Active Transport, 664

Electrolytes, 665

Acid-Base Balance, 673

Acid-Base Imbalance, 674

Respiratory Acidosis, 675

Respiratory Alkalosis, 675

Metabolic Acidosis, 676

Metabolic Alkalosis, 676

Nursing Process, 677

### 23 Mathematics Review and Medication

**Administration, 681**

*Barbara Lauritsen Christensen*

**MATHEMATICS REVIEW AND PRINCIPLES, 682**

Fractions, 682

Types of Fractions, 682

Changing an Improper Fraction to a Whole or Mixed Number, 682

Changing a Mixed Number to an Improper Fraction, 682

Reducing Fractions to the Lowest Term, 682

Determining which Fraction is Larger, 683

Adding Fractions with the Same Denominator, 683

Adding Fractions with Different Denominators, 683

Adding Mixed Numbers, 684

Subtracting Fractions with the Same Denominator, 684

Subtracting Fractions with Different Denominators, 684

Subtracting Mixed Numbers, 684

Multiplying Fractions, 684

Multiplying Fractions and Mixed Numbers, 684

Dividing Fractions, 685

Dividing Fractions and Whole Numbers, 685

**Decimal Fractions, 685**

Names of Decimal Places, 685

Adding Decimals, 685

Subtracting Decimals, 685

Rounding a Number, 686

Multiplying Decimals, 686

Dividing Decimals, 686

Changing Fractions to Decimals, 686

Changing a Decimal Fraction to a Common Fraction, 686

**Percents, 686**

Changing a Percent to a Decimal Fraction, 687

Changing a Fraction to a Percent, 687

Multiplying by Percent, 687

**Ratios, 687**

**Proportions, 687**

Review of Proportion Method, 688

**Dimensional Analysis, 688**

**The Metric System, 689**

Approximate Equivalents of the Metric System and the Apothecary System, 689

Metric Measurements of Length, 689

**Big to Small Rule, 690**

Converting Larger Units of Measurement to Smaller Units of Measurement (Grams to Milligrams; Liters to Milliliters), 690

Converting Smaller Units of Measurement  
to Larger Units of Measurement (Milligrams  
to Grams; Milliliters to Liters), 690

Pediatric Considerations, 690

Young's Rule, 690

Clark's Rule, 691

Fried's Rule, 691

Estimating Body Surface Area in Children, 691

## PRINCIPLES AND PRACTICE OF MEDICATION ADMINISTRATION, 692

Pharmacology, 692

Drug Dosage, 692

Drug Actions and Interactions, 692

Medication Orders, 695

Drug Distribution Systems, 695

Controlled Substances, 696

Types of Orders, 696

"Six Rights" of Medication Administration, 698

Right Medication, 699

Right Dose, 699

Right Time, 699

Right Route, 700

Right Patient, 700

Right Documentation, 700

Important Considerations of Medication  
Administration, 702

Routes of Administration, 702

Enteral Administration, 702

Percutaneous Administration, 707

Parenteral Administration, 712

Nursing Process, 732

## 24 Emergency First Aid Nursing, 737

*Barbara Lauritsen Christensen and Cynthia Steury-Lattz*

Obtaining Medical Emergency Aid, 738

Moral and Legal Responsibilities  
of the Nurse, 738

Assessment of the Emergency Situation, 738

Cardiopulmonary Resuscitation (CPR), 739

Ethical Implications, 739

Events Necessitating CPR, 739

Initial Assessment and Response, 740

The ABCs of CPR, 740

Steps for Adult One-Rescuer CPR, 742

Adult Two-Rescuer CPR, 742

Pediatric CPR—Child or Infant, 743

Hands-Only CPR, 744

Foreign Body Airway Obstruction

Management, 744

Conscious Victim, 745

Unconscious Victim, 745

Infant, 745

Shock, 746

Classification of Shock, 746

Assessment, 746

Nursing Interventions, 747

Bleeding and Hemorrhage, 747

Effects of Blood Loss, 747

Types of Bleeding, 748

Nursing Interventions, 748

Epistaxis, 749

Internal Bleeding, 750

Wounds and Trauma, 750

Closed Wounds, 750

Open Wounds, 750

Dressings and Bandages, 752

Poisons, 753

General Assessment of Poisonings, 753

Ingested Poisons, 753

Inhaled Poisons, 754

Absorbed Poisons, 754

Injected Poisons, 754

Drug and Alcohol Emergencies, 755

Alcohol, 755

Drugs, 755

Thermal and Cold Emergencies, 756

Heat Injuries, 756

Exposure to Excessive Cold, 756

Bone, Joint, and Muscle Injuries, 758

Fractures, 758

Dislocations, 758

Strains and Sprains, 759

Spinal Cord Injuries, 759

Burn Injuries, 759

Shallow Partial-Thickness Burns, 760

Deep Partial-Thickness Burns, 760

Full-Thickness Burns, 760

Terrorism and Bioterrorism, 761

Terrorism, 761

Bioterrorism, 761

Terrorism by Nuclear Exposure, 762

Chemical Terrorism, 763

Nursing Process, 763

## Unit IV Maternal and Neonatal Nursing

### 25 Health Promotion and Pregnancy, 768

*Elaine Oden Kockrow*

Physiology of Pregnancy, 768

Fertilization, 768

Implantation, 769

Embryonic and Fetal Development, 769

Embryonic and Fetal Physiology, 770

Fetal Well-Being, 781

Maternal Physiology, 784

Hormonal Changes, 784

Uterus, 785

Breasts, 785

Maternity Cycle, 785

Antepartal Assessment, 785

General Physical Assessment, 785

Genetic Counseling, 785



- Obstetric Assessment, 786
- Gynecologic Examination, 786
- Determination of Pregnancy, 786
  - Presumptive Signs, 786
  - Probable Signs, 786
  - Positive Signs, 787
- Determination of the Estimated Date of Birth, 787
- Obstetric Terminology, 788
- Antepartal Care, 788
  - Health Promotion, 788
  - Danger Signs during Pregnancy, 789
  - Nutritional and Metabolic Health Pattern, 790
  - Elimination, 793
  - Activity and Exercise, 793
  - Rest and Sleep, 794
  - Sexuality and Reproductive System, 794
  - Coping and Stress Tolerance, 795
  - Roles, Relationships, and Adaptation, 796
  - Self-Perception and Self-Concept, 796
  - Cognitive and Perceptual Changes, 797
- Preparation for Childbirth, 797
  - Childbirth Preparation Classes, 797
  - Cultural Variations in Prenatal Care, 797
- Nursing Process for Normal Pregnancy, 797

## 26 Labor and Delivery, 804

*Elaine Oden Kockrow*

- Birth Planning, 804
  - Birth Setting Choices, 804
- Normal Labor, 805
  - Onset, 805
  - Signs of Impending Labor, 805
  - False Labor versus True Labor, 806
- Labor and Delivery, 806
  - Standard Precautions during Childbirth, 806
  - Process of Labor and Delivery, 806
  - Mechanisms of Labor, 814
  - Stages of Labor and Delivery, 818
  - Monitoring Fetal Status, 819
  - Response of the Newborn to Birth, 826
- Nursing Assessment and Interventions, 827
  - Health Perception and Health Management, 827
  - Nutritional and Metabolic Pattern, 828
  - Elimination, 828
  - Activity and Exercise, 828
  - Vaginal Examination, 828
  - Psychosocial Assessment, 829
  - General Anesthesia, 831
- Nursing Process for Normal Labor, 835
- Medical Interventions, 835
  - Induction, 836
  - Forceps Delivery, 837
  - Vacuum Extraction, 837
  - Cesarean Delivery, 838

## 27 Care of the Mother and Newborn, 841

*Elaine Oden Kockrow*

- Anatomic and Physiologic Changes of the Mother, 841
  - Reproductive Organs, 841
  - Other Body Systems, 844
- Transfer from the Recovery Area, 846
- Nursing Assessment of and Interventions for the Mother, 846
  - Health Management and Health Perception, 846
  - Nutritional and Metabolic Issues, 851
  - Hygiene, 851
  - Elimination, 852
- Maintenance of Safety, 853
  - Activity and Exercise, 853
  - Rest and Sleep, 854
  - Reproductive Issues, 854
- Psychosocial Assessment, 860
  - Coping and Stress Tolerance, 860
  - Signs of Potential Problems, 860
  - Roles and Relationships, 860
  - Self-Perception, 861
  - Cognitive and Perceptual Issues, 861
- Nursing Process for the Postpartum Mother, 861
  - Values and Beliefs, 862
  - Preventing Infant Abduction, 864
  - Discharge: Before 24 Hours and After 48 Hours, 865
  - Maternal Follow-Up Care, 866
  - Well-Baby Follow-Up Care, 866
- Anatomy and Physiology of the Normal Newborn, 866
  - Assessment Immediately after Delivery, 866
  - Characteristics, 866
- Nursing Assessment and Interventions for the Newborn, 872
  - Health Management and Health Perception, 872
  - Nutritional and Metabolic Issues, 872
  - Elimination, 876
  - Rest and Sleep, 877
  - Activity and Exercise, 877
  - Parent-Child Attachment, 877

## 28 Care of the High-Risk Mother, Newborn, and Family with Special Needs, 882

*Elaine Oden Kockrow*

- Complications of Pregnancy, 882
  - Hyperemesis Gravidarum, 884
  - Multifetal Pregnancy, 885
  - Hydatidiform Mole (Molar Pregnancy), 886
  - Ectopic Pregnancy, 887
  - Spontaneous Abortion, 888
  - Incompetent Cervix, 889

- Bleeding Disorders, 890
  - Placenta Previa, 891
  - Abruptio Placentae, 892
  - Disseminated Intravascular Coagulation, 893
  - Postpartum Hemorrhage, 894
  - Gestational Hypertension, 895
  - HELLP Syndrome, 900
- Complications Related to Infection, 901
  - Mastitis, 901
  - TORCH Infections and Human Immunodeficiency Virus, 902
  - Pulmonary Tuberculosis, 904
- Complications Related to Existing Medical Conditions, 905
  - Diabetes Mellitus, 905
  - Cardiac Disease, 907
- Complications Related to Age, 909
  - Adolescents, 909
  - Older Pregnant Woman, 912
- Adoption, 913
- Contraception, 913
- Postpartum Thrombophlebitis, 913
- Complications Related to the Newborn, 914
  - Newborns at Risk, 914
  - Gestational Age, 914
  - Preterm Infant, 916
  - Postterm Infant, 918
  - Gestational Size, 918
  - Infant of a Diabetic Mother, 918
  - Hemolytic Diseases, 918
  - Substance Abuse, 921
- Complications Related to Postpartum Mental Health Disorders, 921
- Mood Disorders, 921
- Nursing Process for the Mother and Newborn at Risk, 922

## Unit V Pediatric Nursing

### 29 Health Promotion for the Infant, Child, and Adolescent, 926

*Barbara Lauritsen Christensen*

- Healthy People 2010*, 926
  - Physical Activity, 927
  - Overweight and Obesity, 927
  - Tobacco Use, 929
  - Substance Abuse, 929
  - Television, Video Games, and the Internet, 929
  - Responsible Sexual Behavior, 930
  - Mental Health, 930
  - Injury and Violence, 930
  - Environmental Quality, 931
  - Immunization, 931
  - Access to Health Care, 935
- Dental Health, 935
  - Strategies to Promote Dental Health, 935

- Injury Prevention, 936
  - Poisoning, 936
  - Aspiration of a Foreign Body, 938
  - Burn Injuries, 938

### 30 Basic Pediatric Nursing Care, 941

*Barbara Lauritsen Christensen*

- History of Child Care—Then and Now, 941
- Pediatric Nursing, 943
  - Characteristics of a Pediatric Nurse, 943
  - Children with Special Needs, 944
  - Family-Centered Care, 944
  - Partnerships with Parents, 945
  - Future Challenges for the Pediatric Nurse, 945
  - Nursing Implications of Growth and Development, 946
- Physical Assessment of the Pediatric Patient, 947
  - Growth Measurements, 947
  - Vital Signs, 949
  - Head-to-Toe Assessment, 951
- Factors Influencing Growth and Development, 954
  - Nutrition, 954
  - Metabolism, 955
  - Sleep and Rest, 956
  - Speech and Communication, 956
- Hospitalization of a Child, 957
  - Preadmission Programs, 958
  - Admission, 959
  - Hospital Policies, 960
  - Developmental Support for the Child, 960
  - Pain Management, 960
  - Surgery, 962
  - Parent Participation, 963
- Common Pediatric Procedures, 964
  - Bathing, 965
  - Feedings, 965
  - Safety Reminder Devices, 967
  - Urine Collection, 968
  - Venipunctures to Obtain Blood Specimens, 969
  - Lumbar Puncture, 970
  - Oxygen Therapy, 970
  - Suctioning, 971
  - Intake and Output, 972
  - Medication Administration, 972
  - Ocular, Otic, and Nasal Administration, 975
  - Rectal Administration, 977
- Safety, 977

### 31 Care of the Child with a Physical Disorder, 983

*Barbara Lauritsen Christensen*

- Disorders of Cardiovascular Function, 984
  - Congenital Heart Disease*, 984
  - Defects with Increased Pulmonary Blood Flow, 987

- Defects with Decreased Pulmonary Blood Flow, 990
- Mixed Defects, 991
- Defects with Obstruction to Systemic Blood Flow, 991
- Acquired Heart Disease*, 992
- Disorders of Hematologic Function, 992
  - Anemias*, 992
  - Iron Deficiency Anemia, 992
  - Sickle Cell Anemia (SCA), 993
  - Aplastic Anemia, 995
  - Coagulation Disorders*, 995
  - Hemophilia, 995
  - Idiopathic Thrombocytopenia Purpura, 996
  - Neoplastic Disorders*, 997
  - Leukemia, 997
  - Hodgkin's Lymphoma, 999
- Disorders of Immune Function, 999
  - Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome, 999
  - Juvenile Rheumatoid Arthritis (Juvenile Idiopathic Arthritis), 1002
- Disorders of Respiratory Function, 1003
  - Respiratory Distress Syndrome, 1003
  - Bronchopulmonary Dysplasia, 1004
  - Pneumonia, 1005
  - Sudden Infant Death Syndrome, 1006
  - Upper Respiratory Tract Infections*, 1007
  - Acute Pharyngitis (Sore Throat), 1007
  - Tonsillitis, 1007
  - Croup, 1008
  - Lower Respiratory Tract Infections*, 1009
  - Bronchitis (Tracheobronchitis), 1009
  - Respiratory Syncytial Virus and Bronchiolitis, 1010
  - Pulmonary Tuberculosis, 1010
  - Cystic Fibrosis, 1011
  - Bronchial Asthma, 1013
- Disorders of Gastrointestinal Function, 1015
  - Cleft Lip and Cleft Palate, 1015
  - Dehydration, 1017
  - Diarrhea and Gastroenteritis, 1018
  - Constipation, 1020
  - Gastroesophageal Reflux, 1020
  - Hypertrophic Pyloric Stenosis, 1021
  - Intussusception, 1023
  - Hirschsprung's Disease, 1024
  - Hernias, 1025
- Disorders of Genitourinary Function, 1025
  - Urinary Tract Infection, 1025
  - Nephrotic Syndrome (Nephrosis), 1026
  - Acute Glomerulonephritis, 1028
  - Wilms' Tumor (Nephroblastoma), 1028
  - Structural Defects of the Genitourinary Tract, 1029
- Disorders of Endocrine Function, 1030
  - Hypothyroidism, 1030
  - Hyperthyroidism, 1031
  - Diabetes Mellitus, 1031
- Disorders of Musculoskeletal Function, 1033
  - Developmental Dysplasia of the Hip, 1034
  - Legg-Calvé-Perthes Disease (Coxa Plana), 1036
  - Scoliosis, 1036
  - Osteomyelitis, 1038
  - Talipes (Clubfoot), 1038
  - Duchenne's Muscular Dystrophy, 1039
  - Septic Arthritis (Septic Joint, Suppurative Arthritis), 1040
  - Fractures, 1040
- Disorders of Neurologic Function, 1040
  - Meningitis, 1040
  - Encephalitis, 1042
  - Hydrocephalus, 1042
  - Cerebral Palsy, 1044
  - Seizure Disorders, 1046
  - Spina Bifida (Myelomeningocele), 1047
  - Neonatal Abstinence Syndrome, 1048
  - Neuroblastoma, 1048
  - Lead Poisoning, 1049
- Disorders of Integumentary Function, 1050
  - Noninfectious Disorders of the Skin*, 1050
  - Contact Dermatitis, 1050
  - Diaper Dermatitis, 1051
  - Atopic Dermatitis (Eczema), 1051
  - Seborrheic Dermatitis, 1053
  - Acne Vulgaris, 1053
  - Psoriasis, 1055
  - Traumatic Injuries, 1055
  - Infectious Disorders of the Skin*, 1055
  - Bacterial Infections, 1055
  - Herpes Simplex Virus Type 1, 1055
  - Tinea Capitis, Tinea Corporis, Tinea Cruris, and Tinea Pedis (Ringworm), 1056
  - Candidiasis (Thrush), 1056
  - Parasitic Infections, 1057
- Communicable Diseases and Immunizations, 1058
- Disorders of Sensory Organ Function, 1058
  - Hearing*, 1058
  - Otitis Media, 1058
  - Vision*, 1063
  - Refractive Errors (Myopia and Hyperopia), 1063
  - Strabismus, 1063
  - Periorbital Cellulitis, 1063
  - Nasal Cavity*, 1063
  - Allergic Rhinitis, 1063



### **32 Care of the Child with a Mental or Cognitive Disorder, 1067**

*Barbara Lauritsen Christensen*

Disorders of Cognitive Function, 1067

Cognitive Impairment, 1067

Down Syndrome, 1068

Autism, 1070

Child Maltreatment, 1071

Child Neglect, 1072

Child Abuse, 1072

School Avoidance (School Phobia, School Refusal), 1074

Learning Disabilities, 1074

Attention-Deficit/Hyperactivity Disorder, 1075

Other Disorders, 1076

Anorexia Nervosa and Bulimia Nervosa, 1076

Substance Abuse, 1076

Depression, 1076

Suicide, 1077

Psychogenic Abdominal Pain (Recurrent Abdominal Pain), 1079

### **Unit VI Gerontologic Nursing**

#### **33 Health Promotion and Care of the Older Adult, 1082**

*Barbara Lauritsen Christensen and Martha E. Elkin*

Health and Wellness in the Aging Adult, 1082

Older Adulthood Defined, 1082

Demographics, 1082

Wellness, Health Promotion, and Disease Prevention, 1083

Healthy Aging, 1084

Myths and Realities, 1085

Theories of Aging, 1085

Ageism, 1086

Legislation Affecting Older Adults, 1086

Psychosocial Concerns of the Older Adult, 1087

Stresses of Caregiving, 1087

Loss, Grief, and Depression, 1087

End-of-Life Care, 1088

The Aging Body, 1088

Integumentary System, 1088

Gastrointestinal System, 1090

Genitourinary System, 1094

Cardiovascular System, 1095

Respiratory System, 1097

Musculoskeletal System, 1099

Endocrine System, 1102

Reproductive System, 1103

Sensory Perception, 1105

Nervous System, 1107

Safety and Security Issues for Older Adults, 1113

Finances, 1113

Housing, 1114

Falls, 1114

Polypharmacy, 1115

Elder Abuse and Neglect, 1116

Continuum of Older Adult Care, 1117

Hospitalization, Surgery, and Rehabilitation, 1117

Discharge Planning, 1118

Home Care, 1118

Assisted Living, 1119

Long-Term Care Facilities, 1119

### **Unit VII Psychiatric Mental Health Nursing**

#### **34 Basic Concepts of Mental Health, 1122**

*Anne W. Ryan*

Historical Overview, 1123

Basic Concepts Related to Mental Health, 1125

Mental Health Continuum, 1125

Personality and Self-Concept, 1126

Stress, 1127

Anxiety, 1127

Motivation, 1128

Frustration, 1128

Conflict, 1128

Adaptation and Coping, 1128

How Illness Affects Mental Health, 1128

Illness Behaviors, 1129

Crisis Intervention, 1131

Application of the Nursing Process, 1131

#### **35 Care of the Patient with a Psychiatric Disorder, 1135**

*Anne W. Ryan*

Organic Mental Disorders, 1136

Delirium, 1140

Dementia, 1140

Thought Process Disorders, 1140

Schizophrenia, 1140

Major Mood Disorders, 1141

Depression, 1142

Bipolar Disorders, 1143

Medical Treatment, 1143

Anxiety Disorders, 1145

Phobias, 1146

Obsessive-Compulsive Disorder, 1146

Posttraumatic Stress Disorder, 1146

Personality Disorders, 1146

Sexual Disorders, 1147

Psychophysiologic (Somatoform) Disorders, 1148

Eating Disorders, 1148

Anorexia Nervosa, 1148

Bulimia Nervosa, 1148

Overview of Treatment Methods, 1148

Communication and the Therapeutic Relationship, 1148

Electroconvulsive Therapy, 1150  
 Psychopharmacology, 1151  
 Alternative Therapies, 1154  
 Application of the Nursing Process, 1154

### **36 Care of the Patient with an Addictive Personality, 1158**

*Anne W. Ryan*

Addiction, 1158  
 Stages of Dependence, 1159  
   Early Stages, 1159  
   Middle Stage, 1160  
   Late Stage, 1160  
 Alcohol Abuse and Alcoholism, 1160  
   Etiology and Pathophysiology, 1160  
   Disorders Associated with Alcoholism, 1161  
 Nursing Management, 1162  
   Assessment, 1162  
   Diagnostic Tests, 1162  
   Nursing Diagnoses, 1162  
   Nursing Interventions, 1163  
   Rehabilitation, 1164  
 Drug Abuse, 1166  
   Depressants, 1166  
   Opioid Analgesics, 1167  
   Stimulants, 1167  
   Hallucinogens, 1168  
   Cannabis, 1170  
   Inhalants, 1170  
 Chemically Impaired Nurses, 1172

## **Unit VIII Community Health Nursing**

### **37 Home Health Nursing, 1177**

*Barbara Lauritsen Christensen*

Home Health Care Defined, 1178  
 Historical Overview, 1178  
 Types of Home Care Agencies, 1179  
 Changes in Home Health Care, 1180  
 Service Components, 1182  
   Skilled Nursing, 1182  
   Role of the LPN/LVN, 1183  
   Physical Therapy, 1184  
   Speech-Language Therapy, 1184  
   Occupational Therapy, 1184  
   Medical Social Services, 1184  
   Homemaker–Home Health Aide, 1185  
 The Typical Home Health Process, 1185  
   Referral, 1185  
   Admission, 1185  
   Care Plan, 1186  
   Visits, 1186  
   Documentation, 1186  
   Discharge Planning, 1187  
 Quality Assurance, Assessment, and Improvement, 1187

Reimbursement Sources, 1187

  Medicare, 1187  
   Medicaid, 1187  
   Third Party, 1188  
   Private Pay, 1188  
   Other Sources, 1188  
 Cultural Considerations, 1188  
 Nursing Process, 1188  
 Conclusion, 1190

### **38 Long-Term Care, 1193**

*Elaine Oden Kockrow and Patricia A. O'Neill*

Settings for Long-Term Care, 1194  
   The Home, 1194  
   Hospice, 1196  
   Adult Daycare, 1196  
   Residential Care Settings, 1197  
   Institutional Settings, 1198  
 Nursing Process, 1202

### **39 Rehabilitation Nursing, 1206**

*Sharon K. Duffy*

Need for Rehabilitation, 1206  
 Chronic Illness and Disability, 1207  
   Chronicity, 1207  
   Disability, 1207  
 Cross-Cultural Rehabilitation, 1208  
   Cultural Competence, 1208  
 Issues in Rehabilitation, 1208  
 Goals of Rehabilitation, 1209  
 Cornerstones of Rehabilitation, 1209  
 Rehabilitation Team, 1209  
   Models of Team Functioning, 1209  
   Rehabilitation Nurse, 1210  
   Comprehensive Rehabilitation Plan, 1211  
 Patient Education, 1211  
 Scope of Individuals Requiring Rehabilitation, 1212  
   Family and Family-Centered Care, 1212  
   Pediatric Rehabilitation Nursing, 1212  
   Gerontologic Rehabilitation Nursing, 1213  
   Polytrauma and Rehabilitation Nursing, 1213  
     Posttraumatic Stress Disorder, 1213  
 Disabling Disorders, 1214  
   Spinal Cord Injuries, 1214  
   Traumatic Brain Injuries, 1217  
 Conclusion, 1219

### **40 Hospice Care, 1222**

*Barbara Lauritsen Christensen*

Historical Overview, 1222  
 Palliative versus Curative Care, 1223  
 Criteria for Admission, 1224  
 Goals of Hospice, 1224

- Interdisciplinary Team, 1224
  - Medical Director, 1225
  - Nurse Coordinator and Hospice Nurses, 1225
  - Social Worker, 1226
  - Spiritual Coordinator, 1226
  - Volunteer Coordinator, 1226
  - Bereavement Coordinator, 1226
  - Hospice Pharmacist, 1226
  - Dietitian Consultant, 1227
  - Hospice Aide, 1227
  - Other Services, 1227
- Palliative Care, 1227
  - Pain, 1227
  - Nausea and Vomiting, 1229
  - Constipation, 1231
  - Anorexia and Malnutrition, 1231
  - Dyspnea or Air Hunger, 1232
  - Psychosocial and Spiritual Issues, 1232
  - Other Common Signs and Symptoms, 1232
- Patient and Caregiver Teaching, 1233
- Bereavement Period, 1233
- Ethical Issues in Hospice Care, 1234
- The Future of Hospice, 1234

## Unit IX Adult Health Nursing

### 41 Introduction to Anatomy and Physiology, 1237

*Barbara Lauritsen Christensen and M. Christine Neff*

- Anatomical Terminology, 1237
  - Body Planes, 1238
  - Body Cavities, 1238
- Abdominal Regions, 1239
- Abdominopelvic Quadrants, 1239
- Structural Levels of Organization, 1239
  - Cells, 1241
  - Tissues, 1245
  - Membranes, 1248
  - Organs and Systems, 1248

### 42 Care of the Surgical Patient, 1253

*Elaine Oden Kockrow and Barbara Lauritsen Christensen*

- Perioperative Nursing, 1254
  - Influencing Factors, 1255
  - Psychosocial Needs, 1256
  - Socioeconomic and Cultural Needs, 1256
  - Medications, 1257
  - Education and Experience, 1259
- Preoperative Phase, 1259
  - Preoperative Teaching, 1260
  - Preoperative Preparation, 1260
- Intraoperative Phase, 1279
  - Holding Area, 1279
  - The Nurse's Role, 1280
- Postoperative Phase, 1280
  - Immediate Postoperative Phase, 1280
  - Later Postoperative Phase, 1282

- Gastrointestinal Status, 1288
- Fluids and Electrolytes, 1288
- Nursing Process for the Surgical Patient, 1289
- Discharge: Providing General Information, 1291
  - Ambulatory Surgery Discharge, 1291

### 43 Care of the Patient with an Integumentary Disorder, 1295

*Linda Y. North*

- Anatomy and Physiology of the Skin, 1295
  - Functions of the Skin, 1295
  - Structure of the Skin, 1296
  - Appendages of the Skin, 1297
- Assessment of the Skin, 1297
  - Inspection and Palpation, 1298
  - Chief Complaint, 1303
- Psychosocial Assessment, 1304
- Viral Disorders of the Skin, 1304
  - Herpes Simplex, 1304
  - Herpes Zoster (Shingles), 1308
  - Pityriasis Rosea, 1310
- Bacterial Disorders of the Skin, 1310
  - Cellulitis, 1310
  - Impetigo Contagiosa, 1311
  - Folliculitis, Furuncles, Carbuncles, and Felons, 1313
- Fungal Infections of the Skin, 1314
- Inflammatory Disorders of the Skin, 1315
  - Contact Dermatitis, 1315
  - Dermatitis Venenata, Exfoliative Dermatitis, and Dermatitis Medicamentosa, 1316
  - Urticaria, 1317
  - Angioedema, 1317
  - Eczema (Atopic Dermatitis), 1318
  - Acne Vulgaris, 1319
  - Psoriasis, 1320
  - Systemic Lupus Erythematosus, 1321
- Parasitic Diseases of the Skin, 1323
  - Pediculosis, 1323
  - Scabies, 1325
- Tumors of the Skin, 1326
  - Keloids, 1326
  - Angiomas, 1327
  - Verruca (Wart), 1327
  - Nevi (Moles), 1327
  - Basal Cell Carcinoma, 1327
  - Squamous Cell Carcinoma, 1327
  - Malignant Melanoma, 1328
- Disorders of the Appendages, 1330
  - Alopecia, 1330
  - Hypertrichosis (Hirsutism), 1330
  - Hypotrichosis, 1330
  - Paronychia, 1330
- Burns, 1330
- Nursing Process for the Patient with an Integumentary Disorder, 1339



#### 44 Care of the Patient with a Musculoskeletal Disorder, 1345

*Martha E. Spray*

##### Anatomy and Physiology of the Musculoskeletal System 1345

Functions of the Skeletal System, 1345

Structure of Bones, 1346

Articulations (Joints), 1346

Divisions of the Skeleton, 1346

Functions of the Muscular System, 1346

##### Laboratory and Diagnostic Examinations, 1349

Radiographic Studies, 1349

Aspiration, 1352

Endoscopic Examination, 1352

Electrographic Procedure, 1353

Laboratory Tests, 1353

Effects of Bed Rest on Mineral Content  
in Bone, 1353

##### DISORDERS OF THE MUSCULOSKELETAL SYSTEM, 1353

##### Inflammatory Disorders, 1353

*Arthritis*, 1353

Rheumatoid Arthritis, 1354

Ankylosing Spondylitis, 1359

Osteoarthritis (Degenerative Joint Disease), 1361

Gout (Gouty Arthritis), 1363

##### Other Musculoskeletal Disorders, 1364

Osteoporosis, 1364

Osteomyelitis, 1367

Fibromyalgia Syndrome, 1367

##### Surgical Interventions for Total Knee or Total Hip Replacement, 1369

Knee Arthroplasty (Total Knee  
Replacement), 1369

Unicompartmental Knee Arthroplasty, 1369

Hip Arthroplasty (Total Hip Replacement),  
1371

##### Fractures, 1373

Fracture of the Hip, 1373

Other Fractures, 1378

Fracture of the Vertebrae, 1381

Fracture of the Pelvis, 1383

##### Complications of Fractures, 1384

Compartment Syndrome, 1384

Shock, 1385

Fat Embolism, 1386

Gas Gangrene, 1386

Thromboembolus, 1387

Delayed Fracture Healing, 1388

##### Skeletal Fixation Devices, 1388

External Fixation Devices, 1388

##### Nonsurgical Interventions for Musculoskeletal Disorders, 1389

Casts, 1389

Cast Removal, 1392

Traction, 1392

Orthopedic Devices, 1393

##### Traumatic Injuries, 1396

Contusions, 1396

Sprains, 1396

Whiplash, 1396

Ankle Sprains, 1397

Strains, 1397

Dislocations, 1398

Airbag Injuries, 1399

Carpal Tunnel Syndrome, 1399

Herniation of Intervertebral Disk (Herniated  
Nucleus Pulposus), 1400

Tumors of the Bone, 1402

Amputation, 1403

##### Nursing Process for the Patient with a Musculoskeletal Disorder, 1405

#### 45 Care of the Patient with a Gastrointestinal Disorder, 1411

*Barbara Lauritsen Christensen*

##### Anatomy and Physiology of the Gastrointestinal System, 1411

Digestive System, 1411

Accessory Organs of Digestion, 1415

Regulation of Food Intake, 1416

##### Laboratory and Diagnostic Examinations, 1416

Upper Gastrointestinal Study (Upper GI Series,  
UGI), 1416

Tube Gastric Analysis, 1416

Esophagogastroduodenoscopy (EGD, UGI  
Endoscopy, Gastroscopy), 1416

Capsule Endoscopy, 1417

Barium Swallow and Gastrografin Studies, 1417

Esophageal Function Studies (Bernstein  
Test), 1417

Examination of Stool for Occult Blood, 1418

Sigmoidoscopy (Lower GI Endoscopy), 1418

Barium Enema Study (Lower GI Series), 1418

Colonoscopy, 1418

Stool Culture, 1419

Obstruction Series (Flat Plate of the Abdomen),  
1419

##### Disorders of the Mouth, 1419

Dental Plaque and Caries, 1419

Candidiasis, 1420

Carcinoma of the Oral Cavity, 1420

##### Disorders of the Esophagus, 1422

Gastroesophageal Reflux Disease, 1422

Carcinoma of the Esophagus, 1424

Achalasia, 1425

##### Disorders of the Stomach, 1426

Gastritis (Acute), 1426

*Peptic Ulcers*, 1427

Gastric Ulcers, 1427

Physiologic Stress Ulcers, 1428

Duodenal Ulcers, 1428

Cancer of the Stomach, 1436

- Disorders of the Intestines, 1437
  - Infections, 1437
  - Irritable Bowel Syndrome, 1439
  - Inflammatory Bowel Disease*, 1441
  - Ulcerative Colitis, 1441
  - Crohn's Disease, 1445
  - Acute Abdominal Inflammations*, 1448
  - Appendicitis, 1448
  - Diverticulosis and Diverticulitis, 1449
  - Peritonitis, 1451
  - Hernias*, 1452
  - External Hernias, 1452
  - Hiatal Hernia, 1453
  - Intestinal Obstruction, 1454
  - Colorectal Cancer, 1456
  - Hemorrhoids, 1460
  - Anal Fissure and Fistula, 1462
  - Fecal Incontinence, 1462
- Nursing Process for the Patient with a Gastrointestinal Disorder, 1463**

#### **46 Care of the Patient with a Gallbladder, Liver, Biliary Tract, or Exocrine Pancreatic Disorder, 1467**

*Barbara Lauritsen Christensen*

- Laboratory and Diagnostic Examinations in the Assessment of the Hepatobiliary and Pancreatic Systems, 1467
  - Serum Bilirubin Test, 1467
  - Liver Enzyme Tests, 1467
  - Serum Protein Test, 1468
  - Oral Cholecystography, 1468
  - Intravenous Cholangiography, 1468
  - Operative Cholangiography, 1468
  - T-Tube Cholangiography, 1469
  - Ultrasonography of the Liver, the Gallbladder, and the Biliary System, 1469
  - Gallbladder Scanning, 1469
  - Needle Liver Biopsy, 1469
  - Radioisotope Liver Scanning, 1470
  - Serum Ammonia Test, 1470
  - Hepatitis Virus Studies, 1470
  - Serum Amylase Test, 1470
  - Urine Amylase Test, 1470
  - Serum Lipase Test, 1471
  - Ultrasonography of the Pancreas, 1471
  - Computed Tomography of the Abdomen, 1471
  - Endoscopic Retrograde Cholangiopancreatography of the Pancreatic Duct, 1471
- Disorders of the Liver, Biliary Tract, Gallbladder, and Exocrine Pancreas, 1472
  - Cirrhosis, 1472
  - Liver Cancer, 1477
  - Hepatitis, 1479
  - Liver Abscesses, 1483
  - Cholecystitis and Cholelithiasis, 1484

- Pancreatitis, 1489
- Cancer of the Pancreas, 1491
- Nursing Process for the Patient with a Gallbladder, Liver, Biliary Tract, or Exocrine Pancreatic Disorder, 1493**

#### **47 Care of the Patient with a Blood or Lymphatic Disorder, 1498**

*Barbara Lauritsen Christensen*

- Anatomy and Physiology of the Hematologic and Lymphatic Systems, 1498
  - Characteristics of Blood, 1498
  - Lymphatic System, 1503
  - Laboratory and Diagnostic Tests, 1505
- Disorders of the Hematologic and Lymphatic Systems, 1505
  - Disorders Associated with Erythrocytes*, 1505
  - Anemia, 1505
  - Disorders Associated with Leukocytes*, 1517
  - Aggranulocytosis, 1517
  - Leukemia, 1518
  - Disorders of Coagulation*, 1520
  - Disorders Associated with Platelets*, 1522
  - Thrombocytopenia, 1522
  - Clotting Factor Defects*, 1523
  - Hemophilia, 1523
  - von Willebrand's Disease, 1525
  - Disseminated Intravascular Coagulation, 1525
  - Disorder of Plasma Cells*, 1527
  - Multiple Myeloma, 1527
  - Disorders of the Lymphatic System*, 1528
  - Lymphangitis, 1528
  - Lymphedema, 1529
  - Hodgkin's Lymphoma, 1529
  - Non-Hodgkin's Lymphoma, 1533
- Nursing Process for the Patient with a Blood or Lymphatic Disorder, 1534**

#### **48 Care of the Patient with a Cardiovascular or a Peripheral Vascular Disorder, 1539**

*Barbara Lauritsen Christensen*

- Anatomy and Physiology of the Cardiovascular System, 1540
  - Heart, 1540
  - Blood Vessels, 1542
- Circulation, 1543
  - Coronary Blood Supply, 1543
  - Systemic Circulation, 1543
  - Pulmonary Circulation, 1544
- Laboratory and Diagnostic Examinations, 1544
  - Diagnostic Imaging, 1544
  - Cardiac Catheterization and Angiography, 1544
  - Electrocardiography, 1544
  - Cardiac Monitors, 1545
  - Thallium Scanning, 1546
  - Echocardiography, 1546

Positron Emission Tomography, 1546

Laboratory Tests, 1546

#### Disorders of the Cardiovascular System, 1547

Normal Aging Patterns, 1548

Risk Factors, 1548

Cardiac Dysrhythmias, 1550

Cardiac Arrest, 1555

#### Disorders of the Heart, 1556

Coronary Atherosclerotic Heart Disease, 1556

Angina Pectoris, 1557

Myocardial Infarction, 1562

Heart Failure, 1568

Pulmonary Edema, 1576

Valvular Heart Disease, 1576

*Inflammatory Disorders of the Heart*, 1578

Rheumatic Heart Disease, 1578

Pericarditis, 1579

Endocarditis, 1581

Myocarditis, 1582

Cardiomyopathy, 1582

#### Disorders of the Peripheral Vascular System, 1584

Normal Aging Patterns, 1584

Risk Factors, 1584

Assessment, 1585

Hypertension, 1587

*Disorders of the Arteries*, 1591

Arteriosclerosis and Atherosclerosis, 1591

Peripheral Arterial Disease of the Lower  
Extremities, 1591

Arterial Embolism, 1593

Arterial Aneurysm, 1595

Thromboangiitis Obliterans (Buerger's  
Disease), 1596

Raynaud's Disease, 1597

*Disorders of the Veins*, 1598

Thrombophlebitis, 1598

Varicose Veins, 1601

Venous Stasis Ulcers, 1602

#### Nursing Process for the Patient with a Cardiovascular Disorder, 1603

### 49 Care of the Patient with a Respiratory Disorder, 1609

*Barbara Lauritsen Christensen*

#### Anatomy and Physiology of the Respiratory System, 1610

Upper Respiratory Tract, 1610

Lower Respiratory Tract, 1613

Mechanics of Breathing, 1613

Regulation of Respiration, 1614

#### Assessment of the Respiratory System, 1614

#### Laboratory and Diagnostic Examinations, 1615

Chest Roentgenogram, 1615

Computed Tomography, 1616

Pulmonary Function Testing, 1616

Mediastinoscopy, 1616

Laryngoscopy, 1617

Bronchoscopy, 1617

Sputum Specimen, 1617

Cytologic Studies, 1618

Lung Biopsy, 1618

Thoracentesis, 1618

Arterial Blood Gases, 1618

Pulse Oximetry, 1619

*Disorders of the Upper Airway*, 1620

Epistaxis, 1620

Deviated Septum and Nasal Polyps, 1621

Antigen-Antibody Allergic Rhinitis and  
Allergic Conjunctivitis (Hay Fever), 1622

Obstructive Sleep Apnea, 1623

Upper Airway Obstruction, 1624

Cancer of the Larynx, 1625

*Respiratory Infections*, 1627

Acute Rhinitis, 1627

Acute Follicular Tonsillitis, 1628

Laryngitis, 1629

Pharyngitis, 1630

Sinusitis, 1630

*Disorders of the Lower Airway*, 1631

Acute Bronchitis, 1631

Legionnaires' Disease, 1632

Severe Acute Respiratory Syndrome, 1633

Anthrax, 1634

Tuberculosis, 1634

Pneumonia, 1639

Pleurisy, 1643

Pleural Effusion/Empyema, 1644

Atelectasis, 1646

Pneumothorax, 1647

Lung Cancer, 1649

Pulmonary Edema, 1651

Pulmonary Embolism, 1652

Acute Respiratory Distress Syndrome, 1654

*Chronic Obstructive Pulmonary Disease*,  
1656

Emphysema, 1657

Chronic Bronchitis, 1660

Asthma, 1662

Bronchiectasis, 1664

#### Nursing Process for the Patient with a Respiratory Disorder, 1665

### 50 Care of the Patient with a Urinary Disorder, 1670

*Alita K. Sellers*

#### Anatomy and Physiology of the Urinary System, 1670

Kidneys, 1670

Urine Composition and Characteristics, 1674

Urine Abnormalities, 1674

Ureters, 1674

Urinary Bladder, 1674

Urethra, 1675

Normal Aging of the Urinary System, 1675



**Laboratory and Diagnostic Examinations, 1675**

- Urinalysis, 1675
- Specific Gravity, 1676
- Blood (Serum) Urea Nitrogen, 1676
- Blood (Serum) Creatinine, 1676
- Creatinine Clearance, 1676
- Prostate-Specific Antigen, 1676
- Osmolality, 1677
- Kidney-Ureter-Bladder Radiography, 1677
- Intravenous Pyelogram or Intravenous Urography, 1677
- Retrograde Pyelography, 1677
- Voiding Cystourethrography, 1677
- Endoscopic Procedures, 1677
- Renal Angiography, 1678
- Renal Venogram, 1678
- Computed Tomography, 1678
- Magnetic Resonance Imaging, 1678
- Renal Scan, 1678
- Ultrasonography, 1678
- Transrectal Ultrasound, 1678
- Renal Biopsy, 1678
- Urodynamic Studies, 1678

**Medication Considerations, 1679**

- Diuretics to Enhance Urinary Output, 1679
- Medications for Urinary Tract Infections, 1680

**Nutritional Considerations, 1681****Maintaining Adequate Urinary Drainage, 1681**

- Types of Catheters, 1681
- Nursing Interventions and Patient Teaching, 1682
- Prognosis, 1684

**Disorders of the Urinary System, 1684*****Alterations in Voiding Patterns, 1684***

- Urinary Retention, 1684
- Urinary Incontinence, 1684
- Neurogenic Bladder, 1686

***Inflammatory and Infectious Disorders of the Urinary System, 1687***

- Urinary Tract Infections, 1687
- Urethritis, 1688
- Cystitis, 1689
- Interstitial Cystitis, 1689
- Prostatitis, 1690
- Pyelonephritis, 1691
- Obstructive Disorders of the Urinary Tract, 1692***
- Urinary Obstruction, 1692
- Hydronephrosis, 1693
- Urolithiasis, 1693

**Tumors of the Urinary System, 1695**

- Renal Tumors, 1695***
- Renal Cysts, 1696***
- Tumors of the Urinary Bladder, 1697
- Conditions Affecting the Prostate Gland, 1698***
- Benign Prostatic Hypertrophy, 1698
- Cancer of the Prostate, 1700
- Urethral Strictures, 1702***
- Urinary Tract Trauma, 1703***
- Immunologic Disorders of the Kidney, 1703***

**Nephrotic Syndrome, 1703****Nephritis, 1704*****Renal Failure, 1706*****Acute Renal Failure, 1706****Chronic Renal Failure (End-Stage Renal Disease), 1707****Care of the Patient Requiring Dialysis, 1710****Hemodialysis, 1710****Peritoneal Dialysis, 1711****Surgical Procedures for Urinary Dysfunction, 1713****Nephrectomy, 1713****Nephrostomy, 1713****Kidney Transplantation, 1714****Urinary Diversion, 1714****Nursing Process for the Patient with a Urinary Disorder, 1716****51 Care of the Patient with an Endocrine Disorder, 1720*****Barbara Lauritsen Christensen*****Anatomy and Physiology of the Endocrine System, 1721****Endocrine Glands and Hormones, 1721****Disorders of the Pituitary Gland****(Hypophysis), 1725****Acromegaly, 1725****Gigantism, 1727****Dwarfism, 1728****Diabetes Insipidus, 1728****Syndrome of Inappropriate Antidiuretic Hormone, 1729****Disorders of the Thyroid and Parathyroid Glands, 1731****Hyperthyroidism, 1731****Hypothyroidism, 1734****Simple (Colloid) Goiter, 1736****Cancer of the Thyroid, 1737****Hyperparathyroidism, 1738****Hypoparathyroidism, 1739****Disorders of the Adrenal Glands, 1740****Adrenal Hyperfunction (Cushing Syndrome), 1740****Adrenal Hypofunction (Addison's Disease), 1742****Pheochromocytoma, 1744****Disorders of the Pancreas, 1745****Diabetes Mellitus, 1745****Nursing Process for the Patient with an Endocrine Disorder, 1764****52 Care of the Patient with a Reproductive Disorder, 1769*****Barbara Lauritsen Christensen*****Anatomy and Physiology of the Reproductive System, 1770****Male Reproductive System, 1770****Female Reproductive System, 1771**

Effects of Normal Aging on the Reproductive System, 1774

**Human Sexuality, 1774**

Sexual Identity, 1775

Taking a Sexual History, 1776

Illness and Sexuality, 1777

**Laboratory and Diagnostic Examinations, 1777**

Diagnostic Tests for Women, 1777

Diagnostic Tests for Men, 1781

**The Reproductive Cycle, 1782**

Menarche, 1782

*Disturbances of Menstruation, 1782*

Amenorrhea, 1783

Dysmenorrhea, 1783

Abnormal Uterine Bleeding (Menorrhagia and Metrorrhagia), 1784

Premenstrual Syndrome, 1786

Menopause, 1787

Male Climacteric, 1789

Erectile Dysfunction, 1790

Infertility, 1791

**Inflammatory and Infectious Disorders of the Female Reproductive Tract, 1792**

Simple Vaginitis, 1793

Senile Vaginitis or Atrophic Vaginitis, 1793

Cervicitis, 1794

Pelvic Inflammatory Disease, 1794

Toxic Shock Syndrome, 1795

**Disorders of the Female Reproductive System, 1796**

Endometriosis, 1796

Vaginal Fistula, 1797

Relaxed Pelvic Muscles, 1798

Leiomyomas of the Uterus, 1799

Ovarian Cysts, 1800

**Cancer of the Female Reproductive Tract, 1800**

Cancer of the Cervix, 1801

Cancer of the Endometrium, 1803

Cancer of the Ovary, 1803

*Hysterectomy, 1805*

Vaginal Hysterectomy, 1805

Abdominal Hysterectomy, 1805

**Disorders of the Female Breast, 1806**

Fibrocystic Breast Condition, 1806

Acute Mastitis, 1807

Chronic Mastitis, 1807

Breast Cancer, 1807

**Inflammatory and Infectious Disorders of the Male Reproductive System, 1819**

Prostatitis, 1819

Epididymitis, 1820

**Disorders of Male Genital Organs, 1820**

Phimosis and Paraphimosis, 1820

Hydrocele, 1821

Varicocele, 1821

**Cancer of the Male Reproductive Tract, 1821**

Cancer of the Testis (Testicular Cancer), 1821

Cancer of the Penis, 1822

**Sexually Transmitted Infections, 1822**

Genital Herpes, 1823

Syphilis, 1824

Gonorrhea, 1825

Trichomoniasis, 1826

Candidiasis, 1827

Chlamydia, 1827

Acquired Immunodeficiency Syndrome, 1828

**Family Planning, 1828**

**Nursing Process for the Patient with a Reproductive Disorder, 1832**

### **53 Care of the Patient with a Visual or Auditory Disorder, 1837**

*Barbara Lauritsen Christensen*

**Anatomy and Physiology of the Sensory System, 1838**

*Anatomy of the Eye, 1838*

Accessory Structures of the Eye, 1838

Structure of the Eyeball, 1838

Chambers of the Eye, 1839

*Physiology of Vision, 1840*

*Anatomy and Physiology of the Ear, 1840*

External Ear, 1840

Middle Ear, 1840

Inner Ear, 1841

*Other Special Senses, 1842*

Taste and Smell, 1842

Touch, 1842

Position and Movement, 1842

**Normal Aging of the Sensory System, 1842**

**Nursing Considerations for Care of the Patient with an Eye Disorder, 1842**

**Laboratory and Diagnostic Examinations, 1842**

**Disorders of the Eye, 1843**

Blindness and Near Blindness, 1843

Refractory Errors, 1846

Inflammatory and Infectious Disorders of the Eye, 1849

Inflammation of the Cornea, 1851

*Noninfectious Disorders of the Eye, 1851*

Dry Eye Disorders, 1851

Ectropion and Entropion, 1852

Disorders of the Lens, 1853

Disorders of the Retina, 1854

Glaucoma, 1859

Corneal Injuries, 1863

*Surgeries of the Eye, 1865*

Enucleation, 1865

Keratoplasty (Corneal Transplant), 1865

Photocoagulation, 1866

Vitreotomy, 1866

**Nursing Considerations for Care of the Patient with an Ear Disorder, 1867**

**Laboratory and Diagnostic Examinations, 1867**

Otoscopy, 1867

Whispered Voice Test, 1867  
 Tuning Fork Tests, 1867  
**Disorders of the Ear, 1869**  
 Loss of Hearing (Deafness), 1869  
 Inflammatory and Infectious Disorders of the Ear, 1871  
 Noninfectious Disorders of the Ear, 1876  
*Surgeries of the Ear, 1880*  
 Stapedectomy, 1880  
 Tympanoplasty, 1880  
 Myringotomy, 1881  
 Cochlear Implant, 1881  
**Nursing Process for the Patient with a Visual or Auditory Disorder, 1881**

## **54 Care of the Patient with a Neurologic Disorder, 1886**

*Barbara Lauritsen Christensen*

**Anatomy and Physiology of the Neurologic System, 1887**  
 Structural Divisions, 1887  
 Cells of the Nervous System, 1887  
 Central Nervous System, 1888  
 Peripheral Nervous System, 1891  
 Effects of Normal Aging on the Nervous System, 1891  
 Prevention of Neurologic Problems, 1892  
**Assessment of the Neurologic System, 1893**  
 History, 1893  
 Mental Status, 1894  
 Language and Speech, 1895  
 Cranial Nerves, 1895  
 Motor Function, 1896  
 Sensory and Perceptual Status, 1897  
**Laboratory and Diagnostic Examinations, 1897**  
 Blood and Urine Tests, 1897  
 Cerebrospinal Fluid, 1897  
 Other Tests, 1898  
**Common Disorders of the Neurologic System, 1901**  
 Headaches, 1901  
 Neuropathic Pain, 1903  
 Increased Intracranial Pressure, 1904  
 Disturbances in Muscle Tone and Motor Function, 1908  
 Disturbed Sensory and Perceptual Function, 1911  
**Other Disorders of the Neurologic System, 1912**  
*Conduction Abnormalities, 1912*  
 Epilepsy or Seizures, 1912  
*Degenerative Diseases, 1916*  
 Multiple Sclerosis, 1916  
 Parkinson's Disease, 1919  
 Alzheimer's Disease, 1924  
 Myasthenia Gravis, 1926  
 Amyotrophic Lateral Sclerosis, 1929  
 Huntington's Disease, 1929  
*Vascular Problems, 1930*  
 Stroke, 1930

*Cranial and Peripheral Nerve Disorders, 1936*  
 Trigeminal Neuralgia, 1936  
 Bell's Palsy (Peripheral Facial Paralysis), 1937  
 Infection and Inflammation, 1938  
 Guillain-Barré Syndrome (Polyneuritis), 1939  
 Meningitis, 1940  
 Encephalitis, 1941  
 West Nile Virus, 1941  
 Brain Abscess, 1942  
 Acquired Immunodeficiency Syndrome, 1942  
 Brain Tumors, 1943  
*Trauma, 1944*  
 Head Injury, 1944  
 Spinal Cord Trauma, 1946  
**Nursing Process for the Patient with a Neurologic Disorder, 1949**

## **55 Care of the Patient with an Immune Disorder, 1955**

*Barbara Lauritsen Christensen*

**Nature of Immunity, 1955**  
 Innate, or Natural, Immunity, 1956  
 Adaptive, or Acquired, Immunity, 1956  
 Humoral Immunity, 1957  
 Cellular Immunity, 1958  
**Complement System, 1958**  
**Genetic Control of Immunity, 1958**  
 Effects of Normal Aging on the Immune System, 1958  
**Immune Response, 1959**  
**Disorders of the Immune System, 1960**  
*Hypersensitivity Disorders, 1960*  
 Anaphylaxis, 1962  
 Latex Allergies, 1964  
 Transfusion Reactions, 1965  
 Delayed Hypersensitivity, 1965  
*Immunodeficiency Disorders, 1966*  
 Primary Immunodeficiency Disorders, 1966  
 Secondary Immunodeficiency Disorders, 1966  
*Autoimmune Disorders, 1966*  
 Plasmapheresis, 1967

## **56 Care of the Patient with HIV/AIDS, 1970**

*Craig E. Nielsen*

**Nursing and the History of HIV Disease, 1970**  
 Significance of the Problem, 1973  
 Trends and Most Affected Populations, 1973  
**Transmission of HIV, 1974**  
 Sexual Transmission, 1975  
 Parenteral Exposure, 1976  
 Perinatal (Vertical) Transmission, 1977  
**Pathophysiology, 1978**  
 Influences on Viral Load and Disease Progression, 1978  
**Spectrum of HIV Infection, 1980**  
 Acute Retroviral Syndrome, 1981



Early Infection, 1981  
 Early Symptomatic Disease, 1981  
 AIDS, 1982  
**Laboratory and Diagnostic Examinations, 1983**  
   HIV Antibody Testing, 1983  
   CD<sub>4</sub><sup>+</sup> Cell Monitoring, 1983  
   Viral Load Monitoring, 1983  
   Resistance Testing, 1985  
   Other Laboratory Parameters, 1985  
**Therapeutic Management, 1985**  
   Pharmacologic Management, 1985  
**Nursing Interventions, 1993**  
   Adherence, 1996  
   Palliative Care, 1997  
   Psychosocial Issues, 1998  
   Confidentiality, 1999  
   Duty to Treat, 1999  
   Ethical and Legal Principles, 1999  
   Acute Intervention, 1999  
**Prevention of HIV Infection, 2005**  
   HIV Testing and Counseling, 2005  
   Risk Assessment and Risk Reduction, 2007  
   Barriers to Prevention, 2007  
   Reducing Risks Related to Sexual  
     Transmission, 2007  
   Reducing Risks Related to Drug Abuse, 2009  
   Reducing Risks Related to Occupational  
     Exposure, 2009  
   Other Methods to Reduce Risk, 2010  
**Outlook for the Future, 2010**

## **57 Care of the Patient with Cancer, 2014**

*Barbara Lauritsen Christensen*

**Oncology, 2014**  
 Development, Prevention, and Detection of  
 Cancer, 2016  
**Hereditary Cancers, 2017**  
   Genetic Susceptibility, 2017  
   Cancer Risk Assessment and Genetic  
     Counseling, 2017  
**Cancer Prevention and Early Detection, 2017**  
**Pathophysiology of Cancer, 2021**  
   Cell Mechanisms and Growth, 2021  
   Description, Grading, and Staging  
     of Tumors, 2021  
**Diagnosis of Cancer, 2022**  
   Biopsy, 2022  
   Endoscopy, 2023  
   Diagnostic Imaging, 2023  
   Laboratory and Diagnostic Examinations,  
     2024  
**Cancer Therapies, 2025**  
   Surgery, 2025  
   Radiation Therapy, 2026  
   Chemotherapy, 2027  
   Biotherapy, 2036  
   Bone Marrow Transplantation, 2036

Peripheral Stem Cell Transplantation, 2037  
 Nursing Interventions, 2037  
**Advanced Cancer, 2037**  
   Pain Management, 2037  
   Nutritional Therapy, 2038  
   Communication and Psychological  
     Support, 2038  
   Terminal Prognosis, 2039

## **Unit X From Graduate to Professional**

### **58 Professional Roles and Leadership, 2045**

*Elaine Oden Kockrow and Barbara Lauritsen Christensen*

**Functioning as a Graduate, 2045**  
   Finding and Obtaining a Job, 2046  
   Contracts and Starting Out, 2048  
   Keeping Your Job, 2050  
   Advancement, 2051  
   Terminating Employment, 2051  
**Transition from Student to Graduate, 2051**  
   Know Your Role, 2051  
   Confidentiality, 2052  
   Role of the Licensed Practical Nurse  
     or Licensed Vocational Nurse  
       in the Community, 2053  
   Professional Organizations, 2053  
   Continuing Education, 2053  
   Certification Opportunities, 2054  
**Men in Nursing, 2054**  
**Licensure Examination, 2054**  
   Test Preparation, 2054  
   Taking the Test, 2055  
   After the Test, 2056  
   Endorsement and Reciprocity, 2056  
**Nurse Practice Acts, 2057**  
**State Board of Nursing, 2057**  
**Mentoring and Networking, 2058**  
**Career Opportunities, 2058**  
   Hospitals, 2058  
   Long-Term Care Facilities, 2060  
   Home Health, 2060  
   Physician's Office or Clinic, 2060  
   Insurance Companies, 2060  
   Temporary Agencies, 2060  
   Travel Opportunities, 2061  
   Pharmaceutical Sales, 2061  
   Other Medical Sales, 2061  
   Outpatient Hotels, 2061  
   The Military, 2061  
   Adult Daycare, 2061  
   Schools, 2061  
   Public Health, 2061  
   Outpatient Surgery, 2061  
   Private Duty, 2061  
   Government (Civil Service), 2062  
   Industry, 2062  
   Rehabilitation, 2062

Psychiatry, 2062  
Hospice, 2062  
Potential Opportunities, 2062  
Leadership and Management, 2062  
    Autocratic Style, 2063  
    Democratic Style, 2063  
    Laissez-Faire Style, 2063  
    Situational Leadership, 2063  
    Team Leading, 2064  
    Time Management, 2064  
    Anger Management, 2064  
    Burnout, 2066  
    Delegation, 2067  
    Computers in Health Care, 2068  
    Transcribing Physicians' Orders, 2068  
    Change-of-Shift Report, 2071  
    Malpractice Insurance, 2072  
    Chemically Impaired Nurses, 2072

## Appendixes

- A Common Abbreviations, 2076**
- B The Joint Commission's Lists of Dangerous Abbreviations, Acronyms, and Symbols, 2078**
- C Laboratory Reference Values, 2079**
- D Answers to Review Questions for the NCLEX® Examination, 2088**

References and Suggested Readings, R-1

Illustration Credits, IC-1

Glossary, G-1

Index, I-1

NANDA International-Approved Nursing  
Diagnoses 2009–2011