Curriculum in Family Practice

Developed by

Department of Family Medicine Brown University School of Medicine Providence, Rhode Island

William Reichel, M.D. Department of Family Medicine Brown University School of Medicine

Acknowledgments

This curriculum was developed first in the Family Practice Residency at Franklin Square Hospital Center in Baltimore, Maryland, and was utilized there in the residency program between 1972-1988. Dr. Reichel is very grateful for the contributions of Michael Camp, M.D., David Brannon, M.B.A., and Karl Meinert, M.H.A. during that period in which the curriculum was twice revised. The curriculum was widely borrowed and adapted during those years including in the development of the first three family medicine residencies in Spain.

The curriculum was again recently revised at Beverly Hospital, Beverly, Massachusetts in the development of the Beverly Hospital Family Practice Residency Program. At Brown University School of Medicine in Rhode Island, the curriculum has taken on new dimensions in international family medicine residency development in Moscow, India, and Jordan.

Dr. Reichel is most grateful for the insightful contributions of Sami Khouri, M.D. of the University of Jordan, and Vincent Hunt, M.D, of Brown University. The assistance of Madeleine Gervais, M.Ed., in all phases of the international use of this curriculum is greatly appreciated.

CONTENTS

Community Medicine8
Dermatology32
Diagnostic Imaging and Nuclear Medicine33
Disease Prevention and Health Promotion9
Emergency Medicine25
Ethics
Family Practice Behavioral Objectives1
Family Practice, General Training Objectives in
Family Practice, Goals and Objectives in1
Geriatric Medicine17
Gynecology23
Human Behavior and Psychiatry5
Internal Medicine
Obstetrics21
Ophthalmology30
Orthopedics and Sports Medicine
Otolaryngology27
Pediatrics10
Practice Management34
Surgery
Urology 31

Family Medicine Specialty Training Program

Goals and Objectives in Family Practice

The main goal of the Family Practice residency is to train family physicians. In accomplishing this goal, the program will:

- 1. train residents in general clinical medicine, both ambulatory and inpatient, centering on the diagnosis and treatment of specific disease processes;
- 2. provide residents with a biopsychosocial approach to the understanding of human health problems;
- 3. train residents in a preventive approach;
- 4. train residents to become advocates for better health in their communities, their nation, and in the global community;
- 5. train residents to recognize those disease processes requiring the care of specialists and how and when to obtain specialized consultation;
- 6. train residents in the principles of medical ethics and ethical decision-making;
- 7. train residents to understand contemporary family life and family dynamics in health and illness as well as increasing residents' ability to deal effectively with issues of personal health and family life;
- 8. teach the practical management of medical practice including office operations, new concepts of managed health care, and computer use;
- 9. train residents to evaluate and understand the contents, quality and dynamics of a clinical practice through documentation, audit and research analysis.

Behavioral Objectives in Family Practice

Residents in the training program should:

- 1. recognize and accept their responsibilities for providing comprehensive and continuous care for their patients and families;
- 2. recognize and accept their own feelings about providing care for their patients and families;
- 3. demonstrate openness to new experiences, be able to change behavior, pursue independent learning, and understand the importance of continuing medical education;
- 4. demonstrate appropriate communication skills and professional demeanor with their patients and families;
- 5. be able to recognize the real reason, stated or unstated, for a particular visit;

General Training Objectives for Family Practice

- A. At the end of the residency, each resident should be aware of the following principles and concepts that form an overview of Family Practice:
 - 1. Family practice: past, present, and future

2. Continuity of care in family practice

3. Comprehensiveness of care in family practice

4. The family in family practice

- 5. Prevention and health maintenance in family practice
- 6. Behavioral factors in family practice
- B. At the end of the residency, each resident should be aware of the following principles and concepts concerning the life cycle, including both, human development and aging:
 - 1. Classical medical genetics

2. The Human Genome Project and its ethical, social, and legal implications

- 3. The early environmental influences on health and genetic expression; environmental hazards today
- 4. Growth and development

5. Reproductive biology

- 6. Prenatal biology; drug influences on the fetus
- 7. Normal labor and delivery
- 8. The neonatal period
- 9. Infancy and childhood
- 10. Adolescence; young adulthood
- 11. Middle age and the menopause; the aged
- 12. Aging; death
- C. At the end of the residency, each resident should be able to perform certain skills dealing with the family including:
 - 1. Perform a family interview
 - 2. Collect information of the family history, data base, family tree, and family diagnosis

3. Collect information of the family profile

- 4. Perform family counseling or therapy when indicated, or refer for family counseling when appropriate
- D. At the end of the residency, each resident should be aware of the following principles and concepts regarding the family:
 - 1. Introduction to the sociology of the family
 - 2. Life events, time flow, and family epidemiology

3. The family life cycle

4. Family therapy: applications and principles of family therapy in Family Practice

5. Family presentation

6. Family structure and function

Family dynamics

Functional family relationships

General Training Objectives for Human Behavior and Psychiatry

- I. General Objectives Human Behavior and Psychiatry
 - A. Communication skills interview skills
 - B. Psychopathology understand and diagnose individual and/or family psychopathology
 - 1. recognition and management of stress-related anxiety and/or depression
 - 2. emotion's role in disease
 - 3. recognition of abnormal behavior
 - 4. recognition and management of psychophysiological disorders
 - 5. recognition of impact of family system on maintenance of sick role behavior
 - C. Treatment Plan ability to formulate, implement and alter when necessary, a treatment plan
 - 1. decision and implementation of plan
 - 2. evaluate the outcome of the plan
 - 3. attitude caring for and understanding the patient as a person
 - 4. assisting the patient and his/her family in understanding the illness and utilize available resources to help them with medical care and other problems that may be affecting either their physical or mental well-being
 - D. Counseling skills appropriateness of counseling, technique and use of contract
 - E. Utilization of resources appropriate use of members of the psychiatric team, consultants, community social services and mental health agencies
 - F. Pharmacology knowledge of psychotherapeutic agents, indication, action, and adverse reactions
 - G. Ability to handle oneself while under stress and pressure from a patient, patient's family, or self
 - H. Ability to promote the physician's own well-being and that of his/her family
- II. Knowledge: Diagnosis and Management
 - A. At the end of the residency, each resident should be able to evaluate, diagnose, and manage/refer the following conditions:
 - 1. Adult disorders
 - a. Affective disorders
 - b. Anxiety disorders
 - c. Substance abuse disorders
 - d. Schizophrenia and other psychoses

- 5. Counseling the family of a mentally retarded child
- 6. Counseling the family of the child with a learning disorder
- 7. Counseling the adolescent
- 8. Runaways
- 9. Counseling the recently separated or divorced
- 10. Counseling the family of the mentally ill patient
- 11. Counseling the family of the alcoholic parent
- 12. Counseling of the AIDS patient
- 13. Counseling the family of the AIDS patient
- 14. Male and female sexuality
- 15. Sexual counseling
- 16. The empty nest syndrome
- 17. Mid-life crisis
- 18. Pre-retirement and retirement counseling
- 19. The lonely elderly patient
- 20. Counseling the family or caregiver of a frail, impaired elderly patient
- 21. Counseling the widow; dealing with grief
- 22. The dying patient physician and family

General Training Objectives for Disease Prevention and Health Promotion

At the end of the residency, each resident should be able to utilize and/or implement following protocols and algorithms for health screening and health promotion:

1. Population health and prevention; nutrition, sanitation, economics, housing, education, and transportation and their impact on health

2. Health education; health maintenance and wellness; health screening

- 3. An algorithm for health maintenance and health screening, e.g. The Report of the U.S. Preventive Services Task Force
- 4. Prevention of heart disease, stroke, and other vascular disease

5. Hypertension control

6. Management of the hyperlipidemias

7. Nutritional counseling

8. Counseling for exercise and physical activity

9. Counseling to prevent tobacco use; counseling to assist in smoking cessation

10. Prevention of neoplastic diseases

11. Prevention of infectious parasitic and zoonotic diseases

12. Prevention of tuberculosis

13. Immunizations/chemoprophylaxis

- 14. Prevention of sexually transmissible disease
- 15. Prevention of AIDS
- 16. Genetic counseling
- 17. Prevention of metabolic disorders

18. Prevention of hematologic disorders

- 19. Prevention of ophthalmologic and otologic disorders
- 20. Prevention of osteoporosis
- 21. Prevention of low back pain
- 22. Prevention of dental disease
- 23. Prevention of emotional disease

24. Stress management

25. Prevention of alcoholism and substance abuse

- 26. Prevention of social problems, including isolation, neglect, abuse and loneliness
- 27. Preconceptual and prenatal care
- 28. Prevention of prenatal disorders
- 29. Reduction of infant mortality
- 30. Prevention of motor vehicle accidents
- 31. Prevention of household and environmental injuries
- 32. Prevention of accidents at different stages of the life cycle
- 33. Prevention of occupational disease and injuries
- 34. Prevention of sports injuries
- 35. Prevention of crime and homicide
- 36. Prevention of war

- 5. Otitis, pharyngitis, and upper respiratory infections in children
- 6. Epiglottitis
- 7. Viral croup
- 8. Common behavioral problems
- 9. Learning disorders, Attention Deficit Disorder
- 10. Asthma in children
- 11. Pneumonia in children
- 12. AIDS in babies and children
- 13. Common skin problems in infants and children
- 14. Common allergic problems in children
- 15. Hematuria and urinary tract infection
- 16. Sepsis and meningitis
- 17. Anemia in childhood
- 18. Poisoning in infants and children
- 19. Lead toxicity
- 20. Mental retardation
- 21. Convulsive disorders in infants and children
- 22. The battered child syndrome; sexual abuse
- 23. Head injury in children
- 24. Common lower extremity problems
- 25. Orthopedic problems in childhood
- 26. Adolescent pregnancy
- 27. Juvenile onset diabetes
- 28. Heart murmurs
- B. At the end of the residency, each resident should demonstrate fundamental knowledge of growth and development, both physical and psychological:
 - 1. Growth and development, physical and psychological, at all ages: postnatally, infancy, childhood, adolescence
 - 2. Premature infant
 - 3. High risk infant (i.e. low apgar, perinatal exposures, socioeconomic risk factors etc.)
 - 4. Small for gestational age infants
 - 5. Postmature infants
- C. At the end of the residency, each resident should be aware of the following diagnostic and therapeutic principles:
 - 1. Immunizations passive and active
 - 2. Indications for elective surgery
 - 3. Evaluation of hearing and language disorders in children
 - 4. Use and abuse of antibiotics in treatment of infants and children
 - 5. Prevention of rheumatic fever

III. Skills

- A. At the end of the residency, each resident should have attained the following skills:
 - 1. Examination of the newborn
 - 2. Immediate care in delivery room of normal infant

General Training Objectives for Internal Medicine

- I. General Objectives Internal Medicine
 - A. Obtaining a comprehensive history and performing a complete and accurate physical examination
 - B. Recording data clearly and concisely
 - C. Physiology and Anatomy
 - 1. understanding of normal anatomy and physiology
 - 2. with ability to apply this knowledge clinically
 - D. Pathophysiology Understanding of the Mechanism of Disease Processes
 - E. Pharmacology
 - 1. ability to prescribe appropriate drugs
 - 2. knowledge of dosage, action, adverse reactions, interactions
 - F. Logical Approach to Problem Solving
 - 1. obtaining an adequate data base
 - 2. ability to assess the significance of the data base
 - 3. appropriate use of resources (lab, diagnostic imaging, library, etc.)
 - G. Understanding the appropriate use of consultation services and communication with consultants
 - H. Decision on and implementation of plan
 - I. Evaluation of the outcome of the plan
 - J. Attitude Caring For and Understanding the Patient As a Person
 - K. Assisting the patient and his/her family to understand the illness and utilize available resources to help them with medical care and other problems that may be affecting either their physical or mental well-being
 - L. Principles of Cost-Containment in Adult Medical Care
- II. Knowledge: Diagnosis and Management Internal Medicine
 - A. At the end of the residency, each resident should be able to investigate, diagnose, and treat the following common symptoms, signs, and medical disorders:
 - 1. Abdominal pain
 - 2. Vomiting
 - 3. Diarrhea
 - 4. Hematemesis and melena
 - 5. Weight loss
 - 6. Jaundice

- 60. AIDS
- 61. Urinary tract infections
- 62. Prostatic disease
- 63. Renal calculi
- 64. The common anemias
- 65. The leukemias
- 66. The lymphomas
- 67. Hypothyroidism
- 68. Hyperthyroidism
- B. At the end of the residency, each resident should be aware of the following diagnostic and therapeutic principles:
 - 1. Indications for:
 - a. angiography
 - b. ultrasound diagnosis
 - c. computerized axial tomography
 - d. tomography
 - e. magnetic resonance imaging
 - f. nuclear medicine scans
 - 2. Risk factors in heart disease and stroke
 - 3. Indications for physical medicine and rehabilitation, including:
 - a. Infrared
 - b. Hydrocollator packs
 - c. Whirlpool
 - d. Diathermy
 - e. Ultrasound
 - f. Ultraviolet massage
 - g. Traction
 - h. Gait training
 - i. Exercise
 - 4. Nutrition and dietary care
 - 5. Indications for EKG stress testing
 - 6. Cardiac pharmacology
 - 7. Indications for elective cardioversion
 - 8. Indications for:
 - a. pacemaker
 - b. central venous pressure line
 - c. Swan-Ganz catheter
 - 9. Cardiac resuscitation
 - 10. Indications for endoscopic procedures
 - 11. Use and abuse of antibiotics

III. Skills

- A. At the end of the residency, each resident should have attained the following skills:
 - 1. Complete medical examination
 - 2. Neurologic examination
 - 3. Basic hematology
 - 4. Urinalysis, including urinary sediments
 - 5. Office microbiology

General Training Objectives for Geriatric Medicine: Problems of Aging and Care of the Elderly

- A. At the end of the residency, each resident should be able to assess, diagnose, and manage the common symptoms, signs, and disorders of the older patient:
 - 1. Assessment of the elderly patient
 - a. functional
 - b. social
 - c. mental status
 - d. values
 - e. economic
 - 2. Common complaints of the elderly
 - 3. Multiple problems in the elderly
 - 4. Functional psychiatric disorders
 - 5. The confused, disoriented, or demented elderly patient
 - 6. Heart disease in the elderly
 - 7. Cardiovascular risk factors in the elderly
 - 8. Thromboembolism
 - 9. Stroke and other neurological problems in the elderly patient
 - 10. Hematologic problems
 - 11. Cancer in the elderly
 - 12. Prostatic disorders in the elderly male
 - 13. Skin care and problems
 - 14. Visual loss in the elderly
 - 15. Otolaryngologic problems
 - 16. Surgical management of the elderly
 - 17. Dental problems
 - 18. Podiatric problems
- B. At the end of the residency, each resident should be able aware of the following principles in the care of the older patient:
 - 1. Assessment of the elderly patient
 - a. functional
 - b. social
 - c. mental status
 - d. values
 - e. economic
 - 2. Essential principles in the care of the elderly
 - 3. Physiology and biology of aging
 - 4. Drug therapy in the elderly
 - 5. Sex counseling
 - 6. Rehabilitation of the elderly
 - 7. The role of the house call
 - 8. When to institutionalize
 - 9. The role of the physician in the nursing home
 - 10. Alternatives to institutionalization for the aged
 - 11. Coordination of services for the elderly

General Training Objectives for Surgery

- A. General Objectives Surgery
 - 1. Obtaining a comprehensive history and performing a complete and accurate physical examination
 - 2. Pathology -- understanding of the pathology that necessitates the surgery
 - 3. Anatomy and physiology a working knowledge of the surgical area
 - 4. Technical proficiency in the handling of surgical tissue and instruments
 - 5. Orders -- pre and postoperative and the reasoning behind them
 - 6. Understanding the appropriate use of consultation services and communication with consultants
 - 7. Complications -- an awareness of operative and postoperative complications
 - 8. Minor surgical skills
 - 9. Assisting the patient and the family to understand the illness and utilize available resources to help them work with medical care and other problems that may be affecting either their physical or mental well being
 - 10. Understanding of nutritional considerations for surgery
- B. At the end of the residency, each resident should be able to investigate, diagnose and manage/refer the common symptom, signs and disorders that need or may need surgery:
 - 1. Assessment of acute abdomen
 - 2. Appendicitis
 - 3. Cholecystitis, cholangitis, pancreatitis
 - 4. Complications of gallstones
 - 5. Rectal disease
 - 6. Varicosities
 - 7. Peripheral vascular disease
 - 8. Decubitus ulcers and leg ulcers
 - 9. Tracheostomy and intubation
 - 10. Thyroid disease
 - 11. Surgical oncology
 - 12. Breast cancer
 - 13. Carcinoma of colon
 - 14. Carcinoma of lung
 - 15. Moles, warts, and other tumors of the skin
 - 16. Gastrointestinal bleeding
 - 17. Head, neck, thoracic and abdominal injuries
- C. At the end of the residency, each resident should be aware of the following diagnostic and therapeutic principles:
 - 1. Indications for common surgical procedures
 - 2. Preoperative evaluation
 - 3. Common complications, including fluid and electrolyte imbalance, sepsis, shock, fever, atelectasis, thromboembolism and others
 - 4. Estimated blood loss
 - 5. Preferred anesthesia
 - 6. Morbidity and mortality and risk/benefit evaluation
 - 7. Average length and course of hospitalization

General Training Objectives for Obstetrics

- A. General Objectives Obstetrics
 - 1. Obtaining a comprehensive history and performing a complete and accurate physical examination

2. Anatomy and physiology -- understanding the female anatomy and physiology during pregnancy and in the non-pregnant state

3. Recognition of high-risk pregnancy -- ability to recognize the high-risk pregnancy utilizing appropriate resources, including consultation

4. Labor -- a thorough understanding of mechanics of labor and delivery

5. Principles of preconceptual care

6. Principles of antepartum and postpartum care

7. Recognition of abnormal labor

8. Thorough knowledge of fetal monitoring

9. Managing complications -- knowledge of modalities used in managing complications of labor and delivery

10. Technical proficiency in the handling of tissue and instruments

11. Attitude -- caring for and understanding the expectant mother and father

- 12. Understanding the appropriate use of consultation services and communication with consultants
- 13. Understanding of principles of community based prenatal care
- B. At the end of the residency, each resident should be able to evaluate, diagnose and manage the following obstetrical conditions:
 - 1. Prenatal evaluation
 - 2. Normal labor and delivery
 - 3. Postpartum care
 - 4. Care of the normal newborn
- C. At the end of the residency, each resident should be able to recognize and manage/refer the following conditions:
 - 1. Evaluation of anemia and abnormal glucose tolerance during pregnancy
 - 2. The high risk pregnancy
 - 3. Infections in pregnancy
 - 4. Obstetrical emergencies, antepartum and postpartum hemorrhage
- D. At the end of the residency, each resident should be aware of the following obstetrical principles and practices:
 - 1. Preconceptual care
 - 2. Prenatal and genetic counseling in daily practice
 - 3. Biological process in pregnancy
 - 4. Initial studies on first prenatal visit
 - 5. Guidelines for immunization during pregnancy
 - 6. Community based prenatal care
 - 7. Drugs, smoking and alcohol in pregnancy
 - 8. Environmental factors in pregnancy
 - 9. Sub-18 pregnancy
 - 10. Fetal monitoring

General Training Objectives for Gynecology

- A. General Objectives Gynecology
 - 1. Obtaining a comprehensive history and performing a complete and accurate physical examination
 - 2. Anatomy and physiology understanding the female anatomy and physiology in all stages of life
 - 3. Pathophysiology understanding the mechanism of disease of women
 - 4. Logical approach to problem solving
 - a. Obtaining an adequate data base
 - b. Ability to assess the significance of the data base
 - c. Appropriate use of resources (lab, diagnostic imaging, library, etc.)
 - 5. Decision on implementation of plan
 - 6. Understanding the appropriate use of consultation services and communication with consultants
 - 7. Pharmacology ability to prescribe appropriate medication, knowledge of action, adverse reactions
 - 8. Technical proficiency in handling of tissue and instruments
 - 9. Attitude caring for and understanding the patient as a person
 - 10. Assisting the patient and her family to understand the illness and utilize available resources to help them work with medical care and other problems that may be affecting either their physical or mental well being
- B. At the end of the residency, each resident should be able to evaluate, diagnose, and manage/refer the following gynecologic conditions:
 - 1. Treatment of menstrual disorders
 - 2. Management of the menopause
 - 3. Treatment of common problems, such as vaginitis, pelvic inflammatory disease, urinary tract infection, and allied pelvic complaints
 - 4. Diagnosis of pediatric gynecologic problems
 - 5. Sexual assault
 - 6. Trauma
 - 7. Benign and malignant neoplasms of he female reproductive tract, including cervical, uterine and ovarian cancer
 - 8. Cystocele, rectocele, prolapse
- C. At the end of the residency, each resident should be aware of the following gynecologic principles:
 - 1. Normal growth and development of female anatomical structures and variants
 - 2. Family and sexual counseling
 - 3. Physiology of menstruation
 - 4. Assessment of surgical needs
- D. At the end of the residency, each resident should attain the following skills:
 - 1. Incision and drainage of Bartholin gland abscess
 - 2. Obtaining cervical cytology
 - 3. Performance of a KOH prep

General Training Objectives for Emergency Medicine

- General Objectives Emergency Medicine Α.
 - 1. Understanding the importance of a caring, compassionate approach to all patients who present to the Emergency Department, regardless of the type of problem they have or their social, cultural, or ethnic background

Understanding appropriate use of diagnostic and therapeutic tools in an 2.

Emergency Department setting

- 3. Understanding the appropriate use of consultative services and communications with consultants
- 4. Understanding the importance of adequate Emergency Department charting
- Understanding the importance of developing an appropriate follow-up situation 5. or disposition after discharge from the Emergency Department
- Understanding the role of ambulances and pre-hospital care providers 6.
- В. At the end of the residency, each resident should be able to evaluate, diagnose, and manage/refer/assist in the following emergency situations:
 - 1. Adult Medical Emergencies
 - Airway maintenance a.
 - b. Competence in resuscitation
 - Recognition and initial management of shock c.
 - d. Thromboembolism
 - Myocardial infarction
 - Congestive heart failure f.
 - Bradyarrhythmias and tachyarrhythmias
 - Respiratory distress and failure h.
 - Meningitis and other infectious emergencies i.
 - Bleeding disorders 1.
 - Gastrointestinal hemorrhage k.
 - Hypertensive crisis 1.
 - Metabolic crisis including diabetic ketoacidosis m.
 - Diabetic hyperosmolar coma n.
 - Adrenal crisis 0.
 - Disorders of acid-base balance p.
 - Drug ingestion/overdose management q.
 - The comatose patient r.
 - Acute allergic crisis s.
 - 2. Pediatric Emergencies
 - Convulsive disorders in infants and childhood
 - Septic shock b.
 - Meningitis c.
 - Bronchial asthma d.
 - Diabetic coma/ketoacidosis e.
 - f. Diarrhea and vomiting; dehydration
 - **Poisoning**
 - The battered child syndrome h.
 - Head injury i.
 - **Epiglottitis**

General Training Objectives for Otolaryngology

- I. Knowledge and Skills Otolaryngology
 - A. At the end of the residency, each resident should be able to evaluate, diagnose, and manage/refer the following ear, nose and throat disorders:
 - 1. Otitis externa
 - 2. Otitis media
 - 3. Sinusitis
 - 4. Dizziness.
 - 5. Hearing loss
 - 6. Deafness
 - 7. Rhinitis
 - 8. Epistaxis
 - 9. Hoarseness
 - 10. Nasal fracture
 - 11. Nasal polyp
 - 12. Trauma of the mouth
 - B. At the end of the residency, each resident should be aware of the following diagnostic and therapeutic principles:
 - 1. Principles of the ear, nose, and throat examination
 - 2. Indications for tonsillectomy and adenoidectomy
 - 3. Examination of the head and neck
 - 4. Use of the audiometer and its interpretation
 - 5. Appropriate use of audiometric consultation
 - 6. Indications for referral to an otolaryngologist
 - C. At the end of the residency, each resident should attain the following skills:
 - 1. Tympanostomy tube placement
 - 2. Nasal speculum examination
 - 3. Cauterization of anterior septal bleeding
 - 4. Ear canal suctioning and removal of cerumen and foreign bodies
 - 5. Indirect nasopharyngoscopy and laryngoscopy

- C. At the end of the residency, each resident should attain the following skills:
 - 1. Performance of simple casting and casting management, traction and splinting
 - 2. Management of certain fractures and dislocations including Colles' fracture in adult and child, shoulder dislocation and fractured clavicle
 - 3.
 - Injection of soft tissues Intraarticular injection and aspiration 4.
 - 5. Management of ingrown toenails, corns and calluses
 - Use of medical equipment and supplies, including taping and strapping techniques

General Training Objectives for Urology

- I. Knowledge and Skills Urology
 - A. At the end of the residency, each resident should be able to evaluate, diagnose and manage/refer the following urological disorders:
 - 1. Acute and chronic urinary tract infections
 - 2. Prostatic disease
 - 3. Epididymitits
 - 4. Prostatitis
 - 5. Uretheral discharges
 - 6. Genitourinary trauma
 - 7. Hematuria
 - 8. Testicular tortion and mass
 - 9. Uretheral stenosis
 - 10. Male infertility
 - 11. Impotence
 - 12. Urinary calculi
 - 13. Bladder cancer
 - 14. Renal cancer
 - 15. Prostatic cancer
 - 16. Congenital abnormalities of the urinary tract
 - B. At the end of the residency, each resident should be aware of the following diagnostic and therapeutic principles:
 - 1. Performance of urologic history and physical examination
 - 2. Indications for prostatic surgery
 - 3. Indications for vasectomy
 - 4. Counseling the individual for vasectomy
 - 5. Indications for referral to the urologist
 - C. At the end of the residency, each resident should attain the following skills:
 - 1. Performance of bladder catheterization
 - 2. Performance of circumcision in the newborn
 - 3. Performance of suprapubic aspiration

General Training Objectives for Diagnostic Imaging and Nuclear Medicine

- I. Knowledge and Skills Diagnostic Imaging and Nuclear Medicine
 - A. At the end of the residency, each resident should be able to recognize and interpret the following in diagnostic imaging and radiographic studies:
 - 1. Interpretation of commonly obtained studies such as head, neck, spine, chest, abdomen, and extremity films, upper gastrointestinal series gallbladder series, barium enema, intravenous pyelogram, mammography and commonly performed sonograms
 - 2. Recognition of radiologic manifestations of frequently encountered clinical problems such as pneumonia, congestive heart failure, pneomothorax, hemothorax, respiratory distress of the newborn, epiglottitis, sinusitis, fractures, dislocations, foreign bodies, arthritis, osteoporosis, ileus, bowel obstruction, perforated viscous, renal and ureteral calculi and other pathologic conditions
 - B. At the end of the residency, each resident should be aware of the following principles in Diagnostic Imaging and Nuclear Medicine
 - 1. Indications for and limitations of radiological tests, also including computed tomographic scans, magnetic resonance imaging studies, sonograms and invasive studies such as arteriography, venography and lymphangiography
 - 2. Preparation of the patent needed for the test(s) ordered
 - 3. Proper sequencing of radiographic studies
 - 4. Complications of the various radiologic studies
 - 5. Special concerns such as in the case of the pregnant or possibly pregnant patient being considered for radiologic study
 - 6. Proper completion of Radiology request forms
 - 7. Interpretation of commonly obtained studies such as head, neck, spine, chest, abdomen and extremity films, upper gastrointestinal series, gallbladder series, barium enema, intravenous pyelogram, mammography and commonly performed sonograms
 - 8. Indications for and techniques and limitations of such nuclear medicine studies as lung ventilation, perfusion, and venogram studies; liver, spleen, HIDA, gastrointestinal bleeding; bone, and joint scans; cardiac studies such as MUGA and stress ind resting thallium scans; and renal, thyroid and gallium studies
 - 9. Proper sequencing of Nuclear Medicine tests and coordination of such exams with radiologic and other diagnostic studies
 - 10. Special concerns such as in the pregnant patient
 - 11. Proper completion of Nuclear Medicine request forms

- 3. Basic accounting and finance for practicing physicians
 - a. The difference between accounting and finance
 - b. Balance sheet and financial statements
 - c. Typical terminology
- 4. Preparing a practice budget
 - a. Typical start-up expenses
 - b. Sample practice financial model
 - c. Caveats to avoid
- 5. Obtaining banking services
 - a. Preparation -- the key
 - b. Financial alternatives
 - c. Securing necessary capital
 - d. Required documentation
- 6. Building a patient base
 - a. Basics of developing clientele
- 7. Selecting professional liability insurance
 - a. Types of malpractice insurance
 - b. Cost of malpractice insurance
 - c. Evaluating malpractice carriers

C. Practice Dynamics

- 1. Selecting office equipment and supplies
 - a. Leasing vs. buying
 - b. Typical equipment and supplies
 - c. Sample of utilization for practice
 - d. Calculating economic order
 - e. Quantity and reorder point
- 2. Computer basics
 - a. Computer components
 - b. What computers do and don't do
 - c. Computer applications in the office
 - d. Sample programs
 - e. Presentation
 - f. Computer terminology
- 3. Deciding to computerize your office
 - a. How to decide and on what basis to decide
 - b. Evaluating vendors
 - c. Medical industry comparison of specific hardware and software choices
- 4. Personnel practices
 - a. Interviewing, hiring, motivating, maintaining, and firing personnel
 - b. Review of labor laws
 - c. Salary and fringe benefit determination

General Training Objectives in Ethics

- A. At the end of the residency, each resident should be aware of the following ethical principles, issues and dilemmas:
 - 1. Living and dying and the right to refuse treatment
 - 2. The Baby Doe Case
 - 3. The living will
 - 4. Informed consent
 - 5. Truth telling
 - 6. Allocation of resources and the right to health care
 - 7. The family physician's duty to the patient
 - 8. Ethical issues in reproduction
 - 9. Ethical issues in confidentiality
 - 10. Patient/physician relationships
 - 11. Ethical issues in private practice
 - 12. Ethical issues in public policy
 - 13. Special issues in dealing with the whole family
 - 14. Special issues in the care of the adolescent patient
 - 15. Special issues in the care of the pregnant patient
 - 16. Ethical issues in the care of the elderly patient
 - 17. "Do Not Resuscitate" orders
 - 18. Ethical issues in the termination of treatment
 - 19. Ethical issues in the termination of nutrition
 - 20. Ethical issues in cost containment
 - 21. Ethical issues in truth telling and confidentiality
 - 22. Ethical issues in informed consent
 - 23. Ethical issues in long term care
 - 24. Special issues in regarding AIDS
 - 25. Ethical issues in the management of emotional disorders
 - 26. Ethical issues in the management of alcoholism an drug abuse
 - 27. Ethical issues related to continuity of care
 - 28. Ethical issues related to the corporate organization of health care
 - 29. Ethical issues related to cost containment, specifically prospective payment, utilization review, rationing, etc.
 - 30. The hospital ethics or patient care advisory committee
 - B. At the end of the residency, each resident should attain the following skills in ethical decision-making (all of the above principles, issues and dilemmas can be translated into skills in ethical decision-making). Examples include:
 - 1. Be able to provide informed consent
 - 2. Be able to maintain confidentiality
 - 3. Be able to discuss "Do Not Resuscitate" orders and provide advice to the patient and/or his or her family or proxy
 - 4. Be able to discuss living wills and advance directives for health care with the patient
 - 5. Be able to consider cost containment issues of diagnosis and management, and yet factor that in with high quality and excellent care