Internists should be lifelong learners. They should be willing to adjust their concepts and practices in response to new evidence, to learn from their own experience and mistakes, and to improve the practice of medicine through quality improvement, innovation, and discovery. Internists must be able to assess their own learning needs and identify their own learning style. They must be aware of the gaps between the ideal, their own goals, and their actual performances.

Although lifelong learning is an attitude, it is also a skill. Each internist should have a personal method for "keeping up." The options now include electronic databases as well as the more traditional approaches of regular reading, conference attendance, and discussion with consultants. Future internists may become members of "learning teams." These teams will use the techniques of quality improvement and learn from each other as they strive to improve individual and collective practices.

The supplemental curriculum deals with disciplines that are important aspects that a general internist may encounter often or occasionally in the practice of medicine. These are disciplines are discussed in detailed in this section under individual subsections and include:

A. Medical Ethics
B. Legal Medicine
C. Palliative Care
D. Nutrition
E. Preventive Medicine
F. Medical Informatics
G. Home and Nursing Care
H. Occupational and Environmental Medicine
I. Advanced Cardiac Life Support
J. Diagnostic and Preventive Procedures
K. Laboratory Medicine
L. Physician Impairment
M. Substance and Physical Abuse
I. Overview

Ethical practice is one of the core values of the internal medicine residency program. It ties into professionalism and humanism and is emphasized in each rotation. Another aspect is medical ethics. In the complex field of medicine there will arise many situations where management of patients will pose ethical dilemmas. The general internist should be able to identify these dilemmas and utilize appropriate resources to resolve these issues in the most medically sound, compassionate way possible keeping the interest of the patient at the forefront.

II. Principle Teaching Methods

Members of the Resident Staff in the Department of Medicine are encouraged to develop an interest in the ethics of medical care. Experience in this discipline occurs at multiple levels.

First is the hospital’s Ethics Committee. One of the core faculty members as well as some senior residents are part of this committee. The committee is available for consults on any patient admitted to the hospital. Residents on the committee as well as residents taking care of the patient on whom the consult has been requested.

Second is through didactic lectures as part of the core lecture series at the beginning of the year. There are also lectures scheduled throughout the academic year on the subject.

Third is on a case-by-case basis. From time to time Morning Report and Mortality and Morbidity Conference develop discussion surrounding medical ethical issues.

Fourth is the hospital’s Pastoral Care Program that involves a Chaplain Visitor who makes rounds within the teaching units as well as elsewhere in the hospital. These persons may be involved in clinical rounds and may be called upon for discussion of problems involving ethical issues as well as family, social and religious issues.
I. Overview

Legal Medicine, now often called health care law, has grown to become a legal specialty. In the United States, statute and common law, administrative regulation, and ethical constraints and regulate the practice of medicine. Legal Medicine encompasses all of these topics. Some legal fundamentals, such as informed consent, advance directives, and confidentiality affect clinical practice so often that internists should be conversant with these issues. Other aspects of legal medicine either are encountered infrequently or are so complex that the prudent physician needs only to know when to seek legal counsel.

II. Principle Teaching Methods

Residents gain experience in the discipline at multiple levels. First the residents acquire much of their understanding of legal medicine from discussions on rounds, during procedures, and while caring for ambulatory patients. Second is through the utilization of the Risk management team on a case-by-case basis. Third is through various conferences on medico-legal issues. Residents are expected to attend these conferences.

Residents may also gain experience through their training and discussions during rounds and lectures regarding the health care economics and managed health care that include government regulation and other legal aspects of care. These encompass issues like:

1) Chart documentation
2) The importance of communication with families
3) Medical legal aspects of difficult clinical situations
4) Post incident management from a legal perspective
5) Legal relationship between resident staff and senior physicians
6) Contributory negligence
7) Informed consent
8) Statue of limitations
9) Settling malpractice cases

During these conferences and discussions residents are given the opportunity to ask questions and are encouraged to become familiar with legal medicine especially from the aspect of preventing malpractice claims.
SECTION 20(C): PALLIATIVE CARE

I. Overview

Relief of suffering and care of the dying is a primary function of internists. Palliative care refers to the practice of symptom control and supportive care for patients and their families when cure or rehabilitation of disease is not the goal of therapy. Rather, improvement or maintenance in quality of life is the primary goal of palliative care. Palliative care is appropriate for patients with cancer and non-cancer diseases, including congestive heart failure, chronic lung, liver or renal disease, dementia, HIV, and other chronic life-threatening diseases.

The knowledge and skills of palliative care are important to the practicing internist, including experiences in the care of dying patients and their families in the inpatient, home, and long-term care setting. Having the knowledge and ability to relieve pain and suffering to preserve the best quality of life at the end of life is a critical component of becoming a compassionate physician.

II. Principle Teaching Methods

Key learning domains in palliative care curriculum include:
1) Assessment and treatment of pain and other symptoms
2) End-of-life communication skills
3) Ethical and legal aspects of care
4) Recognition and management of common patient and family psychodynamic issues at end of life
5) Community resources such as hospice care
6) Dealing with families and health care providers’ emotional reactions before and after a patient’s death.

Residents gain experience in this discipline at multiple levels. First is the medical intensive care, medical floor, cardiology and ambulatory rotations. Second is during the Hematology and Oncology rotation during which among other issues residents learn regarding:
• Giving bad news
• Discussing a new diagnosis
• Discussing a change in status
• Goal setting/establishing patient preferences
• Conducting a family conference
• Sharing clinical information
• Discussion of treatment options
• Eliciting family preferences and goals
• Dealing with family-physician conflicts concerning goals of care.

Third is during the Emergency Room rotation.

Second is during the Hematology and Oncology rotation.
Third is during the Emergency Room rotation.

Fourth is during the Geriatrics rotation.

Fifth is through conferences that the internal medicine program tries to arrange for through the course of the year.

III. Educational Content

A. Legal Issues
   1). Advance directives
   2). Decision-making capacity
   3). Do not resuscitate orders (1)
   4). Medical futility
   5). Appropriate use of artificial hydration and nutrition
   6). Withdrawal of life support
   7). Requests for physician aide in dying

B. Pain and Symptom Management
   1). Pain assessment
   2). Pain management-drug therapy
   3). Pain management-non-drug therapy
   4). Nausea and vomiting
   5). Depression
   6). Delirium
   7). Anxiety
   8). Constipation and diarrhea
   9). Dyspnea
   10). “Death” Rattle
   11). Fatigue
   12). Anorexia
   13). Mouth care
   14). Skin care

C. Patient Assessment
   1). Physical needs
   2). Psychological needs
   3). Prognostic factors for advanced cancer, heart/lung/kidney/liver diseases, HIV, stroke, and dementia
   4). Death planning/organ donation/autopsy
   5). Nutritional assessment-appropriate use of artificial hydration/nutrition at end of Life
   6). Assessment for hospice referral
   7). Cross-cultural care at end of life (2)

D. Family Assessment
   1). Psychological needs
   2). Death planning/organ donation/autopsy

E. Pharmacology
   1). Opioids
2). Non-opioid analgesics
3). Anxiolytics
4). Anti-depressants (pain and depression
5). Psychostimulants
6). Anti-emetics
7). Cathartics
8). Anti-cholinergics (management of secretions)
9). Major tranquilizers (treatment of terminal delirium)
10). Corticosteroids

F. Communication Skills
1). Giving bad news
2). Advanced care planning-patient counseling
3). Conducting a family conference
4). Setting end-of-life treatment goals/preferences with patients/families
5). Conducting a DNR discussion
6). Discussing hospice care
7). Use of opioid analgesics-patient counseling
SECTION 20(D): NUTRITION

I. Overview

Clinical nutrition focuses on the importance of nutrition in the maintenance of health and the interrelationship between nutrition and disease. Areas of interest for the general internist include enteral and parenteral nutritional support for hospitalized, homebound, or chronic care patients; nutritional support for surgical and trauma patients; and the role of nutrition in disease prevention.

II. Principle Teaching Methods

Residents gain experience in this discipline at multiple levels. First is the medical floor and clinic rotation. Residents consult the nutritionist for their patients and learn on a case-by-case basis about issues related to:

- Nutritional assessment
- Management of patients with nutritional deficiencies or excesses
- Dietary modifications and education for medical conditions like diabetes, hypertension, dyslipidemia, chronic renal or hepatic failure.
- Affects of diet and drug interactions (like warfarin)
- Nutritional diseases, and other pathological conditions in which nutrition therapy would be beneficial.

Second is the Geriatrics rotation. Residents learn about issues related to:

- Nutritional assessment
- Malnutrition in the elderly
- Enteral and parenteral nutrition

Third is through didactic conferences that discuss issues like:

- Obesity
- Diet modifications for various medical illnesses.
SECTION 20(E): PREVENTIVE MEDICINE, CLINICAL EPIDEMIOLOGY AND EVIDENCE BASED MEDICINE

I. Overview

Preventive medicine focuses on maintaining health and preventing disease, disability, and death. The basic components of preventive medicine include biostatistical principles and methodology; epidemiologic principles and methodology; planning, administration, and evaluation of health and medical programs; recognition and control of environmental and occupational hazards; social, cultural, and behavioral factors in medicine; and application of preventive principles and outcome measures in clinical practice. In the role of primary care physician, the general internist will engage in preventive medicine every working day.

Clinical epidemiology is the study of how clinical questions (such as diagnosis, prognosis, and treatment) are answered by strong scientific research involving populations and groups of patients. Internists must find ways to cope with a rapidly changing evidence base for medicine, with clinical controversy, and with information overload. They should be able to assess the validity of published evidence for themselves. To do so requires understanding the basic clinical research strategies, such as study design, measurement, and analysis, and the meaning of terms used to describe research results in journals. Internists should also be able to judge the credibility of colleagues (authors of review articles, editorials, teachers, and consultants) who synthesize scientific evidence for them. Medical students do not necessarily acquire these abilities in medical school lectures or during teaching rounds; residency programs must teach this material, reinforce it by example, and monitor how well the housestaff use it in clinical care.

Dealing with uncertainty is one of the internist's fundamental skills. Quantitative clinical reasoning, also known as decision analysis, is the best method for using imperfect data to make decisions under conditions of uncertainty.

II. Principle Teaching Methods

Use of techniques of evidence based medicine and critical appraisal of the medical literature is an integral part of all clinical rotations. Residents learn this at multiple levels.

First are formal weekly Journal Club sessions. The PGY 1, 2, and 3 residents critically review a key article for discussion with the attending faculty, and residents. Basic instruction includes clinical epidemiology, biostatistics, and clinical decision theory as it applies to patients. In depth, are required to incorporate key studies from the literature that support their presentation and conclusions.

Second is on all clinical rotations throughout the three years of training. Residents use other parts of this curriculum as well as on a case-by-case basis. Through all these encounters, residents learn how to search the medical literature effectively and efficiently using software packages, search engines and UptoDate. Residents discuss
the results of their literature searches with the supervising attending who help them translate literature search and clinical study results in patient management decisions.

III. Educational Objectives:

During this training, the resident will:

1). Discuss basic principles of evaluating a journal article.

2). Compare the differences between an article that deals with a diagnostic study, a therapeutic trial, a descriptive analysis, etc

3). Present a review of a selected article at Journal Club using Power Point.
4). Demonstrate basic skills of teaching a small group session.
5). Search the medical literature efficiently and effectively.
6). Present proficient and effective slide presentation software, e.g., Power Point.
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SECTION 20(F): MEDICAL INFORMATICS

I. Overview

To provide efficient, effective patient care, internists must be highly proficient information managers. The volume and complexity of medical knowledge and data have outstripped the internist's ability to function optimally without support from information management tools. To make optimal use of the computer-based information resources that are available today requires an understanding of their strengths and limitations and of the issues involved in implementing them in clinical practice. Internal medicine residents should understand how to use current technologies and be able to adapt as new tools become available.

II. Principle Teaching Methods

With knowledge expanding at a rapid pace, residents require training in assessing and utilizing this information. Residents learn basic techniques for electronic retrieval of the medical literature, computer-assisted medical instruction and electronic information networks throughout their training.

The residents gain experience in this discipline at multiple levels. First is during orientation, residents learn how to access MD Consult, that gives the ability to search Medline and download articles.

Second is through the use of DINAH system. Through their day-to-day clinical activities, residents retrieve patient information, including lab studies and discharge summaries, through this hospital computer system. Residents receive training in all these systems during orientation.

Third is through the Medical Education division where residents can choose to learn retrieval of the literature, word-processing, database management and the use of PowerPoint and slide production. Residents receive on-on-one tutoring in Power Point slide presentation for their Conference.

Fourth is through the New Innovations system (www.new-innov.com). Residents are given a tutorial on the system and password to access the system at orientation. They use the system throughout the three years of training for accessing the resident handbook, annual and monthly rotation schedules, to log in procedures, to evaluate peers and attendings and to view their performance evaluations.

Fifth is through the Rcopia system (www.drfirst.com). Resident are given a tutorial on this system and password to access this system during orientation. Residents use the system to update patient medications and refill prescriptions on their clinic patients in this system.

Sixth is the Athena system. This system has recently been implemented in the medical clinic (June 1, 2006) and will allow residents to schedule patient appointments, change appointments and flag charts to ensure continuity of care in the clinic.
Seventh is through the Groupwise system. Residents are given tutorial and access to the system at orientation. The system allows residents to send and receive emails from throughout the hospital system and communicate with other residents through a secure system.

Eighth is the Dimensions Healthcare website. This website has two components: one is the intranet and the other is the internet site. Residents can gain access to the hospital’s various policies and procedures, DINAH, Groupwise through the intranet. The residents will also have access to their Internal Medicine Website which is still under construction. This will allow residents to securely review conference slides, schedules, curriculum and reading materials, sign out patients on this website.

Ninth are various websites that will be used to access multiple choice questions for either end of rotation evaluation (for example in ICU rotation) or for board review (for USMLE step3 or ABIM examination)

III. Educational Objectives

Residents are required to attend all pertinent sessions during orientation or Morning Report. During this training, the resident will:

1). Be introduced to the principles and skills of computer-based knowledge management in their clinical practice.
2). Access patient information and order tests and medications in an efficient manner.
3). Continue the process of gaining skills for life-long learning.
4). Manage this information, when necessary, in slide presentation, chart or database format.
5). Learn important aspects of maintaining patient confidentiality and complying with HIPAA regulations
I. Overview

A consequence of the success of modern medicine is a proliferation of chronic disease and disability. Most people now face years of living with some progressive dependency and disability. Nursing-home beds already outnumber hospital beds, and for every person in a nursing home three more with similarly severe disabilities receive their care at home. Families alone, under their physician's guidance, provide 80% percent of the care for these homebound, frail patients. Younger patients, particularly those who are functioning well, also make increasing use of home services for infusion of medication, short-term recovery from injury, and other reversible situations.

II. Principle Teaching Methods

Residents gain experience in this discipline at multiple levels. First is during their medical floor and ambulatory rotations. Here they learn to develop a multidisciplinary approach to patient care and set up on a case-by-case basis.

Second is during their Geriatrics rotation. During this time residents learn about care of the many adults face a long period of decline in the grip of chronic illness, such as Alzheimer's disease, or in the aftermath of an acute illness, such as a stroke. Many of these individuals will live out their days in a nursing home. Others will spend a short period in a nursing home as part of a successful convalescence after hospitalization. Physicians must be effective in the nursing home setting.

During this time residents learn that to be effective in providing and supervising care for patients in their homes, and acquire the following skills:

- Comprehensive advance planning;
- Assessment of the environment and the support system
- Care oversight, team leadership, and standard setting
- Compliance and confrontation with regulation
- Financing of care over time; and 6) organization of services and continuous quality improvement.
- Also, they regarding learn nutritional assessment, prevention and rehabilitation services, coordination of ancillary services, physical diagnosis, skin care of a bedridden patient, and care of the dying.
SECTION 20(H): OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

I. Overview

Occupational and environmental medicine is concerned with the diagnosis, treatment, and prevention of disease caused by agents in the environment. It focuses on preventing and treating occupational diseases and injuries; controlling or assessing health hazards in the workplace; and fostering employee health. The general internist needs to know about health hazards in the home or workplace, how to do a preliminary evaluation, when to refer to an occupational medicine specialist, and how to assist in long term management of work related illness and disability.

II. Principle Teaching Methods

Residents gain experience in this discipline at multiple levels. First is the resident orientation and the regular hospital tutorials. Residents are required to take the tutorials on OSHA on a regular basis.

Second is during medical floors and the Geriatrics rotation. The Occupational and Physical Medicine training is addressed in the Geriatrics section of the curriculum.
I. Overview

All residents are required to be certified in ACLS upon entering the residency program and to be re-certified after two years. The curriculum is provided to all residents when they arrive as PGY1. This training is essential to providing care to patients in an emergency and acute care setting and in the event of a cardiac arrest.

II. Educational Objectives

During their residency training, the resident will:

- Demonstrate the principles and basic pathophysiology for administering advanced cardiac life support.
- Apply these principles and training during clinical rotations, including those in the intensive care units, and the emergency room.
- Pass the certifying examination and maintain active status throughout the training period.
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SECTION 20(J): DIAGNOSTIC AND THERAPEUTIC PROCEDURES

I. Overview

The residency-training program and the American Board of Internal Medicine require certification of clinical competency in specified diagnostic and therapeutic procedures. The minimum number and type of procedures required are delineated under “Procedures” in Section I of the Resident Handbook.

II. Principle Teaching Methods

The settings in which the residents learn these procedures are varied, including in patient services, intensive care units, emergency rooms, walk-in clinics, outpatient clinics and continuity medical clinics. Residents receive both didactic and various practice sessions in some procedures prior to performing them on patients. All uncertified residents must be supervised by a certified resident or attending and document the procedure in their Procedure Log Book and into new innovations system.

During their training, the resident will:

- List the indications, methods, alternatives and complications for each procedure.
- Discuss the principles of informed consent and ensure that this is obtained on all patients.
- Become certified in all required procedures prior to completing the training program.
- Be supervised by a certified individual for procedures until he/she is certified.
- Document all completed procedure in the Procedure Log Book and New Innovations.
- Discuss results of bodily fluids obtained, e.g., ascites, pleural fluid, and synovial fluid with the supervising attending.
- Document procedure in the patient's record clearly and appropriately.
I. Overview

Throughout the care of their patients, residents use laboratory science to support them in their clinical decision-making. Knowledge of the indications for ordering tests is integral to the daily activities of the resident. Residents learn about the use and indications for these tests through didactic conferences, bedside teaching and small group discussions.

II. Principle Teaching Methods

Residents gain experience in this discipline at various levels. First the residents are required to attend the appropriate conferences to learn the didactic material and incorporate this knowledge into their clinical practice under the supervision of attendings. During their training, residents will:

- Discuss the indications for the use of various laboratory tests.
- Balance the risk and benefit to the patient for each of these studies.
- Interpret both positive and negative results.
- Apply principles of epidemiology and evidence based medicine in determining the significance of the results.

Second the residents are required for several subspecialty rotations like Infectious disease, endocrinology, gastroenterology, Hematology, nephrology etc required to prepare and/or review slides, interpret serologic results etc. with the supervising attending. Details of these requirements are detailed under appropriate sections of this curriculum.

For satisfactory completion of these rotations residents are required to submit the appropriate logsheets to the program coordinator.
I. Overview

All residents are required to receive training in physician impairment as part of their orientation. These topics include alcohol and other substance abuse, depression, dementia, other mental, emotional and physical disorders in their peers, and principles and methods of active intervention. Details of the Residency Programs policies and procedures on Physician Impairment are detailed under Section II of the Resident Handbook.

II. Principle Teaching Method

During this training, the resident will:

- Discuss the warning signs of physician impairment
- Demonstrate understanding of how depression and other mental illness can occur and affect residency performance.
- Discuss the hospital's due process for physicians with substance abuse problems.
- List support groups, counseling sessions and other opportunities for rehabilitation.

Resident physicians should be aware of the problems which may be encountered in the professional lives of physicians. Such difficulties as drug abuse, alcoholism, marital and emotional problems may interfere with the effectiveness of physicians.
I. Overview

General Internists must learn to identify signs and symptoms of patients who are victims of domestic violence, physical/sexual abuse and those suffering from substance abuse disorders.

The harmful use of and addiction to alcohol and other drugs—including prescription drugs—is one of this nation’s major and most costly health problems. Excluding nicotine, alcohol and other drug problems are present in 10-20% of ambulatory patients and from 25% to 50% of general hospital patients. Since over 20% of U.S. adults are regular cigarette smokers, nicotine addiction adds measurably to the already high prevalence. Making this diagnosis is a high priority since substance abuse and dependence causes numerous medical problems, may masquerade as other psychiatric diagnoses, and may complicate ongoing therapeutic management of other diseases. The primary care physician is the first line of defense in recognizing and treating disorders of substance abuse and addiction. This is reviewed in teaching venues for general medicine.

II. Principle Teaching Methods

Residents gain experience in this discipline at various levels. First is through didactic lectures throughout the course of the year. This includes core lecture series, conferences in the Ambulatory clinic and in adolescent medicine, and in the Emergency Room rotation.

Second is through patient care on clinical rotation like the medical floor, ambulatory and ER rotations, adolescent rotation and in ID Clinic.

III. Educational Goals

By the end of their three-year training residents will be able to:

- Discuss presenting signs and symptoms of domestic violence and be able to identify and evaluate victims.
- List triggers for violent behavior and what resources are available for its management.
- Discuss principles for evaluating and managing patients with substance abuse problems and associated psychiatric problems.
- Demonstrate understanding of the developmental, psychological and medical issues in adolescents and young in the school/university setting.
- Interview in order to screen for tobacco, alcohol, and other drug use and any problems related to their consumption.
- Counseling and management of substance abuse and alcohol abuse, including appropriate use of referrals to rehabilitative services.
Counseling intravenous drug users about HIV risk.

IV. Educational Content

A. Common Clinical Presentations

- Repeated injury
- Systolic hypertension (alcohol)
- Chronic insomnia
- Chronic pain without an evident diagnosis
- Fatigue, memory impairment
- Panic or anxiety attacks
- Depression secondary to ETOH/sedative drugs
- Weight loss (stimulant abuse, AIDS)
- HIV+/AIDS
- Substance-abusing health professional

B. Manifestations of Alcohol/Sedative Withdrawal

- Agitation
- Insomnia
- Seizures
- Delirium
- Hallucinations

C. Manifestations of Opioid Withdrawal

- Insomnia
- Profuse diaphoresis
- Lacrimation, rhinorrhea
- Piloerection (goose flesh)
- Shallow breathing; respiratory arrest

D. Manifestations of Opioid Intoxication

- Pinpoint pupils
- Clammy skin
- Needle tracks
- Somnolence, confusion

E. Cocaine or Amphetamine Intoxication

- Agitation
- Dilated pupils
- Rapid mood swings
- Aggressive behavior