MANAGEMENT OF AMBULATORY SURGERY and OUTPATIENT CARE

PART A: MANAGEMENT OF AMBULATORY SURGERY

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

- 1. Discuss the principles and rationale for performing ambulatory surgery on selected patients, including:
 - a. Assessment of patient risk
 - b Patient selection
 - c. Level of preparation for patients with co-morbid diseases
- 2. List those general surgical procedures commonly performed in an ambulatory setting in your community.
- 3. Discuss the social and economic issues associated with selecting an ambulatory surgery option.
- 4. Describe the anesthesia options available for ambulatory surgery and their possible complications to include:
 - a. Discussion of types of anesthetic
 - b. Delineation of duration of typical local anesthetic action and limitations
 - c. Calculation of dosages, including maximum dosage of typical local anesthetics
 - d. Discussion of techniques of local anesthetics, both field and nerve block
 - e. Consideration of possible adverse reactions
 - f. Outlining of benefits and risks of pharmacologic sedation
- 5. Analyze the importance of postoperative pain management in the ambulatory setting.
- 6. Differentiate between intraoperative issues in awake versus anesthetized patients in terms of:

- a. Patient's physical and emotional comfort
 - (1) Positioning of patient
 - (2) Patient's physical exposure
 - (3) Tissue handling
- b. Intraoperative communication with the patient
 - (1) Aspects of procedure
 - (2) Provide distraction from awareness of procedure via "small talk" or some other means
- c. The need to maintain a sensitive and professional level of communication with other health care workers
- 7. Discuss postoperative follow-up procedures, including methods for monitoring and managing complications.
- 8. Outline community resources available to assist ambulatory surgery patients, and describe the methods for accessing these resources.
- 9. Describe appropriate methods for handling pathology specimens for typical outpatient procedures.

- 1. Complete a preoperative evaluation of a patient as a potential candidate for ambulatory surgery, including consideration of patient risks and treatment options.
- 2. Counsel patients and their families appropriately about ambulatory surgery and follow-up care, including obtaining informed consent after discussing the risks, benefits, and alternatives to the procedure.
- 3. Preoperatively prepare a patient with co-morbid diseases for ambulatory surgery.
- 4. Perform procedures while assuring patient comfort:
 - a. Provide adequate local anesthesia and/or adequate sedation
 - b. Prevent potentially negative visual and auditory stimuli

	c. Communicate with the patient in	traoperatively in a calm and reassuring mann
	(1) Alert patient to new aspects of	of the procedure
	(2) Communicate results of the p	procedure to the patient
	(3) Respond sensitively to patier embarrassment, and procedur	nt's concerns regarding level of pain, re's results
	Maintain a positive, calm, reassuring om.	s, and professional atmosphere in the operation
6.	Perform selected ambulatory surgica	l procedures such as:
	a. Excision of skin and soft tissue le	esions
	b. Breast biopsy	
	c. Lymph node biopsy	
	d. Vascular access procedures	
	e. Incising and draining (I & D) abs	scesses
	f. Endoscopic procedures	
	g. Hernia repairs	
	h. Anorectal surgery	
	i. Laparoscopic cholecystectomy	
7.	Arrange for appropriate handling of	pathological specimens.
8.	Manage unexpected emergencies dur	ring the course of ambulatory surgery, such a
	a. Hemorrhage	d. Chest pain
	b. Anaphylactic shock	e. Pneumothorax
	c. Drug reaction	
9.	Perform appropriate postoperative ex	camination prior to discharge.
10.	. Manage postoperative surgery and a	nesthesia complications.

- 11. Prescribe necessary follow-up care, including:
 - a. Prescribing appropriate postoperative analgesia
 - b. Communicating instructions and expectations for follow-up, such as:
 - (1) Pain level and location
 - (2) Possible side effects of medications
 - (3) Level of activity and return to work
 - (4) Wound care and potential problems
 - (5) Timing of follow-up appointment
 - c. Arrange for home health and other outpatient services using institutional and community resources

Attitudes:

- 1. Recognize the concerns of patients and family regarding ambulatory surgery and outpatient follow-up care.
- 2. Become attuned to patient's concerns and needs:
 - a. Preoperatively
 - b. Intraoperatively
 - c. Postoperatively

PART B: OUTPATIENT CARE

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

- 1. Delineate the components of and discuss the importance of a focused history and physical examination performed in an outpatient setting on a patient with a surgical disease.
- 2. Identify indications for, technical aspects of, and typical results from the following screening tests:
 - a. Stool guaiac
- c. Prostate screening

- b. Sigmoidoscopy
- d. Mammography
- 3. Demonstrate a working knowledge of the natural history of surgical diseases:
 - a. If untreated
 - b. If treated surgically
 - c. If treated non-surgically
- 4. Distinguish between different types of biopsy techniques in an outpatient setting.
- 5. Specify indications for such common office procedures as:
 - a. Core-needle biopsy/fine-needle aspiration
 - b. Incision and drainage of abscesses (recognize those requiring in-hospital operating room drainage)
 - c. Sigmoidoscopy/anoscopy
 - d. Excision of cutaneous lesions
- 6. Delineate hospital mechanisms for admitting patients.
- 7. Estimate costs of hospitalization and various surgeries.
- 8. Describe the expected appearance of wound sites at various postoperative intervals.
- 9. Delineate appropriate pain medications and dosages.
- 10. Specify the need for drains and tubes, stating the types and special requirements for replacement or removal.

- 1. Demonstrate the ability to obtain the essential elements of a focused preoperative history, including assessment of medications.
- 2. Perform a complete physical examination, paying special attention to assessment of cardiopulmonary risk of surgery.
- 3. Order appropriate and cost-effective laboratory tests for screening and pre- and postoperative evaluation.

- 4. Accurately interpret clinical laboratory results, pathology reports, and radiographic studies.
- 5. Synthesize historical findings, physical examination, and laboratory data for diagnosis.
- 6. Develop appropriate plans for management.
- 7. Order appropriate consultations.
- 8. Appropriately and sensitively counsel the patient and patient's family regarding:
 - a. Disease entity (prognosis, treatment options, additional treatment)
 - b. Surgical issues
 - (1) Operative risks (possible complications, including mortality)
 - (2) Operative procedures (preparation, testing, duration of surgery and hospitalization)
 - (3) Anesthesia
 - (4) Prognosis (curative vs. palliative)
 - c. Other treatment options (no treatment [explain natural history of disease] and non-surgical therapy)
 - d. Informed consent
 - e. Community resources
- 9. Perform appropriate office procedures.
- 10. Arrange patient admission to hospital facility.
- 11. Explain the prospective surgical approach to the patient.
- 12. Postoperatively, obtain appropriate follow-up history, including:
 - a. General well-being
 - b. Pain control
 - c. Presence of fever

- d. Nutritional state (ability to eat, nausea)
- e. Bowel function
- f. Level of activity
- g. Compliance with instructions (medications, complications of medication, physical therapy)
- 13. Perform appropriate postoperative examination of the surgical site.
- 14. Provide appropriate wound care. Identify and manage wound problems, including:
 - a. Superficial wound separation; abdominal dehiscence
 - b. Vascular surgery incisions and wounds (diabetic foot problems and their impact)
 - c. Seromas
 - d. Infections (cellulitis or abscess, determining the need for antibiotics, drainage, office vs. operating room care)
 - e. Lymphoceles
 - f. Incisional hernia
 - g. Foreign body reaction (to sutures, staples)
- 15. Ascertain the need for further consultative support, and arrange for patient referral when indicated.
- 16. Assess the need for further follow-up, including:
 - a. Arrangement for home nursing evaluation and care
 - b. Assessment/arrangement for other support (e.g., the homemaker)
 - c. Prescribing appropriate dietary supplements
 - d. Hospice care
- 17. Prescribe appropriate pain medication.
- 18. Assess patient's ability to maintain level of activity (drive motor vehicle, work, exercise, sexual activity)

- 19. Appropriately and sensitively communicate with patient and family.
- 20. Appropriately communicate with referring physicians in a timely fashion regarding patient outcome.
- 21. Develop the ability to teach in office settings (for nurses, patients, medical students, and junior house officers).

COMPETENCY-BASED ATTITUDINAL OBJECTIVES:

- 1. Have a working understanding of the role of the surgeon as primary care giver in office and clinical settings.
- 2. Demonstrate professionalism, empathy, and compassion by showing respect for a patient's privacy and self-esteem during aspects of the physical examination which may be uncomfortable, frightening, or embarrassing for the patient.
- 3. Demonstrate an awareness of, and respect for, patient autonomy, especially regarding:
 - a. Decisions about therapy
 - b. Decisions not to treat
 - c. Issues of patient compliance
- 4. Show an awareness of, and respect for, the contributions of other office staff members (nurses, technicians, secretaries).
- 5. Demonstrate a respect for medical students in office and/or clinic settings.
- 6. Recognize patient or patient family responsibilities that may affect the timing of surgery.
- 7. Demonstrate an understanding of, and sensitivity to, patient socioeconomic concerns regarding such issues as:
 - a. Insurance and the ability to pay for physician services, hospitalization, and prescribed medications
 - b. Possible loss of work time and wages
- 8. Demonstrate sensitivity and appropriate flexibility regarding patient fears and concerns, including:

	a.	Preoperatively	
		(1) Anxiety about pain and procedur	re's findings
		(2) Embarrassment	
	b.	Intraoperatively	
		(1) Pain and individual response to p	oain
		(2) Modesty	
		(3) Comfort	
	c.	Postoperatively	
		(1) Ability to care for self	(3) Level of function
		(2) Drugs	(4) Prognosis
9. Display a working knowledge of the management of the office and the outpatient surgical setting.			
RESEARCH AND BIOSTATISTICAL METHODS			
CO	OMF	PETENCY-BASED KNOWLEDGE (DBJECTIVES
1.	Dit	fferentiate between the following stud	y designs:
	a.	Descriptive or case series	

b. Case-control (retrospective)

c. Cross-sectional (prevalence)

e. Clinical trial

g. Crossover

d. Cohort (prospective/incidence)

f. Sequential (repeated measures)

2.	Di	Discuss the following concepts related to study design:			
	a. Internal versus external validity (generalizability)		(generalizability)		
	b. Major threats to internal and external validity		ernal validity		
	c. Randomization, random selection, random assignment				
	d. Inclusion versus exclusion criteriae. Blinding, blocking, stratification			ia	
	f.	Number needed to treat	umber needed to treat		
	g.	"Intention to Treat" principle	;		
3.	Ex	plain the differences between	the	following scales of measurement:	
	a.	Nominal	c.	Interval	
	b.	Ordinal	d.	Ratio	
4. Distinguish between the following techniques/methods for exploring and presenting data:			echniques/methods for exploring and presenting		
	a.	Frequency distribution	d.	Histogram	
	b.	Bar chart	e.	Frequency polygon	
	c.	Contingency table	f.	Scatterplot	
5.	Di	stinguish between the following	1g s¹	tatistics used to summarize or describe data:	
	a.	Mean, mode, median			
	b.	Range, standard deviation			
	c.	Percentile, interquartile range	9		
	d.	Proportion, ratio, rate			
6.	Int	erpret the following vital stati	stics	s rates:	
	a.	Mortality, morbidity, cause-s	pec	ific mortality rates	
	b.	Prevalence, incidence			

- c. Adjusted rates
- 7. Distinguish between the following measures of relationship between two variables:
 - a. Pearson correlation coefficient
 - b. Coefficient of determination
 - c. Spearman rank correlation
 - d. Relative risk, odds ratio
- 8. Interpret the following terms and concepts related to drawing inferences from research data:
 - a. Population versus sample
 - b. Population distribution, sampling distribution, standard normal distribution
 - c. Standard error versus standard deviation
 - d. Hypothesis testing, null and alternative (research) hypothesis
 - e. Parametric versus nonparametric tests
 - f. Confidence intervals, confidence limits
 - g. One-tailed versus two-tailed tests
 - h. Level of significance, alpha level, P value
 - i. Type I error, type II error, power
- 9. Identify the following tests of significance and concepts related to the comparison of means:
 - a. Independent and paired t-test (parametric tests)
 - b. Wilcoxon rank-sum test (also called the Mann-Whitney U or the Mann-Whitney-Wilcoxon rank-sum test) (nonparametric test)
 - c. Wilcoxon signed-ranks test (nonparametric test)
 - d. One-way analysis of variance (ANOVA)

- e. Two-way ANOVA
- f. Repeated measures ANOVA
- g. Statistical interaction
- h. Planned comparisons
- i. Posterior or post hoc comparisons such as the Tukey, Scheffe, Newman-Keuls, Bonferroni, and Dunnett procedures
- 10. Identify the following tests of significance and concepts related to the comparison of proportions:
 - a. Z-approximation test
 - b. Chi-square test
 - c. McNemar test for comparing proportions in paired groups
 - d. Sample size and strength of association in the interpretation of the chi square statistic
 - e. Fisher's Exact Test
- 11. Identify the following tests of significance and concepts related to investigating the relationship between two or more variables:
 - a. t-test for testing the significance of the correlation
 - b. Fisher's Z transformation
 - c. Confidence intervals for the relative risk and odds ratio
 - d. Simple and multiple linear regression
 - e. Standard error of estimate
 - f. Confidence bands for a regression line
 - g. Comparing two regression lines
 - h. Testing the significance of the regression line and the regression coefficients
 - i. Stepwise multiple regression

- j. Logistic regression
- 12. Identify the following concepts related to the analysis of survival data:
 - a. Actuarial or life table analysis versus Kaplan-Meier
 - b. Comparing two survival curves using the Gehan or generalized Wilcoxon test, the logrank test, and the Mantel-Haenszel chi-square test
 - c. Censored observations
 - d. Cox regression
- 13. Interpret the following concepts related to evaluating diagnostic tests and procedures:
 - a. Sensitivity and specificity
 - b. Gold standard
 - c. Predictive value of a positive or negative test
 - d. Index of suspicion or prior probability
 - e. Likelihood ratio method
- 14. Discuss the following procedures, principles, and concepts related to the ethics of medical research:
 - a. The Declaration of Helsinki
 - b. Informed consent
 - c. Institutional review boards and animal use review committees
 - d. Ethical use of animals in research
 - e. Confidentially and anonymity concerns
 - f. Truth and accuracy in the publication of research results
- 15. Explain the following procedures and concepts related to clinical databases:
 - a. Role of clinical databases in clinical research and outcomes research
 - b. Database terminology such as field, record, query, report generation, ASCII file, computer file, and merging

- c. Data coding, data entry, and data verification
- d. Use of standardized databases such as hospital tumor registries or state trauma registries
- e. Database development
- 16. Discuss the following principles, methods, and concepts related to evidence-based surgery:
 - a. Basic skills needed to critically evaluate the published evidence:
 - (1) Defining the clinical question
 - (2) Translating the question into searchable keywords
 - (3) Conducting the search
 - (4) Selecting the best articles
 - b. Users' guides for selecting and evaluating articles about therapy, diagnosis, harm, and prognosis
 - c. Selection and evaluation of integrative articles such as review articles, metaanalyses, practice guidelines, and decision analyses
 - d. Use of administrative databases to link patient outcomes to costs related to producing these outcomes
 - e. Use of patient-reported outcome measures as another method for evaluating the success of surgical treatments

- 1. Critically evaluate the published evidence for a surgical therapy using a computer search engine such as MEDLINE, using the users' guide for evaluating therapy articles, and summarizing your findings in writing, to include your recommendation for surgical practice.
- 2. Write a summary of the literature review, including a synthesis of the major findings and a recommendation for surgical practice.

- 3. Develop and implement a computer-based clinical database using a software package such as EXCEL, ACCESS, SPSS, SAS, FileMaker, or other commercially available software.
- 4. Identify and prepare a case study suitable for presentation or publication.
- 5. Design and conduct a surgical research study, utilizing the following activities:
 - a. Select/search for a researchable project, involving an attending or other clinicianmentor
 - b. Search and review the literature
 - c. Formulate hypotheses
 - d. Identify key variables (both predictor and outcome), decide on the optimal level of measurement, create operational definitions, and assess reliability
 - e. Develop a research design
 - f. Identify population and study sample
 - g. Develop sample selection procedures
 - h. Select or develop measures
 - i. Develop study protocol and prepare institutional review board (IRB) proposal
 - j. Collect and analyze data
 - k. Interpret results
 - 1. Identify various journal formats and related instructions to authors
 - m. Write paper
 - n. Review techniques for optimal presentation of papers and posters, including related media
 - o. Convert paper into an appropriate presentation
 - p. Deliver the presentation

CLINICAL EPIDEMIOLOGY AND OUTCOMES RESEARCH

PART A: CLINICAL EPIDEMIOLOGY

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

- 1. Explain the discipline of clinical epidemiology to include the study of groups of people and the background evidence needed for clinical decisions in patient care.
- 2. List the clinical events of primary interest in clinical epidemiology, including: death, disease, disability, discomfort, and dissatisfaction.
- 3. Distinguish mass screening from case finding.
- 4. Discuss the following criteria used to determine for which diseases people should be screened:
 - a. Sensitivity
 - b. Specificity
 - c. Positive predictive value; negative predictive value
 - d. Number of false positives
 - e. Test factors (e.g., simplicity, cost, safety, patient acceptability)
- 5. For a given disease/condition, compare the advantages and disadvantages of applying multiple diagnostic tests all at once versus consecutively.
- 6. Discuss clinical decision analysis, including:
 - a. Defining the problem, alternative actions, and possible outcomes
 - b. Developing a decision tree to assign probabilities for each outcome
 - c. Assigning a value or utility for each outcome
- 7. Differentiate risk factors from prognostic factors for a given disease/condition (e.g., for acute myocardial infarction, older age and male gender are both risk factors and prognostic factors, whereas hypertension is a risk factor but hypotension is a prognostic factor).
- 8. Discuss the following five rates commonly used to predict prognosis:
 - a. Five-year survival

d. Remission

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b.	Case-	tata	alitx
υ.	Casc-	Tau	uuuu

e. Recurrence

- c. Response
- 9. Identify locations of potential bias in randomized, controlled clinical trials, including:
 - a. Patient selection
 - b. Patient allocation to study groups
 - c. Patient compliance
 - d. Definition of outcomes
 - e. Generalizability of results
- 10. Distinguish between clinical significance and statistical significance.
- 11. Analyze the following situations in which a physician's personal experience is insufficient to establish a relationship between a disease and its cause. Personal experience is insufficient when:
 - a. The disease is common
 - b. The disease has multiple causes
 - c. The disease has a low incidence
 - d. The disease has a long latency period
- 12. For non-experimental studies, define the following criteria for determining cause and effect:
 - a. Temporality
 - b. Strength of the measure of association
 - c. Presence of a dose/response relationship
 - d. Consistency of results
 - e. Biological plausibility
 - f. Specificity of effect

- 1. Recognize when to apply a specific screening test in a case finding situation.
- 2. Apply clinical decision analysis to the treatment of a given patient with a given disease.
- 3. Estimate risk of disease development for a given patient given a history of exposure to specific risk factors.
- 4. Decide whether a given association is one of cause and effect.

PART B: OUTCOMES RESEARCH

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

- 1. Explain the traditional negative clinical outcomes for a given surgical procedure, including death, disease, disability, and complications.
- 2. Discuss the modern clinical outcomes for a given surgical procedure, including discomfort, dissatisfaction, quality of life, and cost-effectiveness.
- 3. Identify the most frequently occurring negative outcome(s) of a given surgical procedure, (e.g., thrombosis following arterial venous prosthetic shunt formation).
- 4. Compare the following different ways of measuring outcomes for a given surgical procedure:
 - a. Chart reviews
 - b. Clinical evaluations
 - c. Questionnaires
- 5. Discuss each of the following steps in conducting prospective outcomes research:
 - a. Hypothesis formation
 - b. Computerized literature search
 - c. Selection of a study design

- d. Estimation of sample size
- e. Specification of inclusion and exclusion criteria
- f. Allocation of patients to groups
- g. Evaluating outcome(s)
- h. Analyzing data
- 6. Provide examples of potentially confounding patient variables, including age, sex, race, income, education, occupation, religion, marital status, residence, nationality, disease stage, comorbidities, and complications.
- 7. Provide examples of potentially confounding treatment variables, including extent of surgery, timing of surgery, anesthetic technique, postsurgical nursing care, drug therapy, chemotherapy, radiotherapy, physical therapy, and nutritional therapy.
- 8. Describe the following common problems in collecting useful outcomes data:
 - a. Inadequate sample size
 - b. Inaccurate characterization of patient population
 - c. Inappropriate comparison group
 - d. Uncontrolled patient variables
 - e. Uncontrolled treatment variables
 - f. Patient noncompliance

- 1. Demonstrate the ability to review the surgical literature critically.
- 2. Design a clinical outcomes research study.

ETHICAL AND LEGAL ISSUES IN SURGICAL PRACTICE

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

Se	ction One: Ethical, and legal issues associated with the practice of medicine
1.	Define the following terms, and analyze their application to the practice of surgery
	Abortion
	Advance Directives
	(1) Patient Self-Determination Act
	(2) Living Will (your state requirements)
	(3) Durable Power of Attorney for Health Care
(4)	Right to Die concept
	Authoritarianism (importance of patient choices)
	Autonomy
	(1) As 'capacity for self-determination'
	(2) As 'right to self-determination'
	Beneficence
	Bioethics
	Casuistry (based on the study of case histories)
	Causation
	Civil law
	Codes of ethics
	Competence
	Confidentiality
	Continuity of care
	Cost of care

(1) Cost-benefit analysis

(2) Cost-containment, including use of clinical pathways
(3) Access to health care
(4) Rights to health care
Covenant
Criminal law
Death (including various legal definitions)
Deontological ethics
'Do Not Resuscitate' decisions
Duty
Ethics
(1) As the analysis of human behavior according to given principles, values, virtues, and/or according to specific methods of reasoning
(2) As the rules or patterns of behavior expected within certain groups (e.g., professions, religious communities) or by virtue of holding a specific role
Eugenics
Euthanasia
"Futile" treatment
Hospital Ethics Committee
Impaired physician
Informed consent
Institutional Review Board
Justice
(1) As 'distributive'
(2) As 'retributive'

(3) As 'commutative' (justice in transactions)
Liability (including forms and limits of coverage)
Malpractice
Managed care
Medical ethics
Morality
Natural law
Natural rights
Negligence
Omission (morally not performing an act or not performing a moral act)
Palliative care
Paternalism (relation with patients)
Peer review
Physician-assisted suicide
Pragmatism
Prima facie duty
Principles
Privacy
Quality assurance (and associated concepts such as Continuous Quality Improvement)
Quality of life
Research on human and animal subjects
Right
(1) As a 'negative right'

(2) As a 'positive right'
Rule
Situation ethics
Social contract
Standard of care
Surrogate decision-maker (proxy)
Teleological ethics
Tort
Truthfulness
Utilitarianism
Utilization review (and related concepts)
Values (patient defines benefit and quality)
Virtue ethics
Withdrawal or withholding treatment

- 2. Identify and evaluate similarities and differences between the ethical and the technical aspects of clinical decision making.
- 3. Specify the ethical and legal values and principles associated with the profession of surgery and clinical surgical decision-making.
- 4. Discuss ethical and legal considerations for the development and use of new technologies in human subjects, including stem cell research, cloning, and gene therapy.
- 5. Assess the professional and institutional resources and methods for managing ethical and legal issues including the management of conflict.

Section Two: The physician-patient relationship

6. Analyze and explain the ethical and legal characteristics of the physician-patient relationship, including:

- a. Establishing the relationship
- b. Maintaining the relationship, including continuity of care
- c. Observing a patient's right to privacy and the confidentiality of clinical information
- d. Severing the relationship; patient abandonment
- 7. Predict possible implications of 'managed care' on the traditional physician-patient relationship.

Section Three: The medical record

- 8. Analyze the ethical and legal considerations of the medical record by performing these tasks:
 - a. Describe the essential components of a medical record that meet both clinical and legal requirements.
 - b. Describe the role of the inpatient/outpatient medical record and its use as:
 - (1) An accurate and complete account of the surgical management of a patient
 - (2) A legal document
 - c. Specify the legal implications of altering or destroying medical records.
 - d. Identify the proper method of making corrections or additions to the medical record.

Section Four: Informed consent

- 9. Analyze the concept of informed consent by performing these tasks:
 - a. Define competence, and discuss its application in obtaining informed consent.
 - b. Determine how to ensure that patient consent to treatment is given voluntarily.
 - c. Describe your institutional requirements for informed consent.
 - d. Review the concept that physicians disclose all risks that would be considered material to the competent person (Canterbury v. Spence).

- e. Discuss the role of second opinion in surgical decision-making.
- f. Recommend a response to patient's refusal of recommended treatment.
- g. Discuss the ethical and legal issues associated with the performance of prophylactic surgery.
- h. Define the physician's responsibilities in the performance of experimental procedures.
- i. Define the ethical and legal obligations to inform patients of a physician's HIV status.
- 10. Analyze patient advance directives, including:
 - a. Identify federal, state, institutional, and individual responsibilities under the Patient Self-Determination Act.
 - b. Review statutory requirements for legally valid advance directives.
 - c. Compare and contrast living wills versus durable powers of attorney
- 11. Summarize ethical and legal issues associated with death and dying, considering:
 - a. "Do Not Resuscitate" orders
 - b. Discontinuing or foregoing treatment
 - c. Withholding or withdrawing life-prolonging medical treatment
 - d. Nutrition and hydration
 - e. Euthanasia
 - f. Physician-assisted suicide
 - g. Determination of death

Section Five: Professional responsibility

- 12. Formulate an appropriate approach to the management of:
 - a. The impaired physician
 - b. Physician error

- (1) Own error (2) Another's error
- 13. Explain the ethical and legal implications of refusing requested medical treatment under the following circumstances:
 - a. Where treatment would be futile
 - b. Where medical treatment poses risks to the physicians or others
 - c. Where the physician opposes the treatment for moral reasons
 - d. Where the physician opposes treatment for economic reasons
- 14. Identify the physician's ethical obligation to participate in:
 - a. Medical review of individual physician/surgeon activities
 - b. General evaluation of surgical therapies
- 15. Discuss the following aspects of medical staff appointment and disciplinary decisions:
 - a. Role of economic credentialing
 - b. Utilization review
 - c. Implications of the American's with Disabilities Act
- 16. Review the confidentiality of medical peer review records and proceedings.
- 17. Discuss the responsibilities of the profession to provide access to health care.
- 18. Discuss political and social activism in the profession regarding:
- a. Membership and participation in professional associations
- b. Communication with legislators
- c. Community activism and education
- d. Participation in physician "union" activities

Section Six: Professional licensure and certification

- 19. Describe the processes and identify the agencies associated with: a. Residency program accreditation b. Physician/surgeon certification c. Licensure d. Credentialing 20. Assess the value of recertification. Section Seven: Professional liability 21. Analyze the characteristics and issues involved in the current malpractice climate by performing the following tasks: a. Characterize the relationships between the legal and medical professions and the insurance industry in resolution of malpractice claims. b. Discuss the function and process of litigation in resolving malpractice claims. c. Summarize the issues and goals involved in legislative reform of the civil justice system in the area of professional liability. 22. Compare various types of professional liability insurance with regard to forms of coverage, limits of coverage, availability, and cost. 23. Outline the process of a medical liability action and the role of each of the following in the process: a. Subpoena d. Settlement b. Discovery e. Directed verdict c. Deposition f. Appeal
- 24. Outline the process of a medical malpractice trial.
- 25. Describe criteria for the entry of legal actions into the National Practitioner Data Bank.
- 26. Estimate the significance of the following variables:
 - a. Potential litigious situations

- b. Malpractice avoidance/practice management techniques
- c. Corporate negligence or negligent credentialing
- d. Spoliation of evidence
- 27. Review the general rules for:
 - a. Professional liability insurance carrier involvement
 - b. Attorney selection
 - c. Preparation of defense
 - d. Role and selection of expert witnesses
- 28. Discuss the role, practices, and procedures of the following in reducing professional liability:
 - a. Risk management
 - b. Quality assurance
- 29. Review the legal aspects of ex parte contacts with attorneys representing physicians in malpractice actions.

- 1. Illustrate various moral concepts using examples from health care, especially those cases that have set a legal precedent or significantly influenced medical ethics (e.g., Roe v. Wade, Quinlan, Bouvia, Cruzan, Sakiewicz, Tuskegee Syphilis Study).
- 2. Describe the pluralistic nature of the United States and the role of health care as a 'public arena.'
- 3. Determine the course of action to be followed in the event of a malpractice claim, including interaction with plaintiffs, lawyers, and insurance companies.
- 4. Outline the appropriate steps to take when one suspects that a colleague is impaired.
- 5. Identify the professional liability concerns of other members of the healthcare team, including nurses, pharmacists, dieticians, and other medical specialists.

- 6. Obtain proxy consent in appropriate cases, including those involving minors.
- 7. Demonstrate proper methods of correcting medical records.
- 8. Participate in discussions and decisions regarding the discontinuation or foregoing of treatment.
- 9. Ascertain patient and family wishes regarding discontinuation or foregoing treatment.
- 10. Write orders for treatment limitation in appropriate cases.
- 11. Participate in the identification and resolution of cases involving surgical error.
- 12. Determine the degree of personal involvement in professional liability issues.
- 13. Formulate a plan for involvement in the political and legislative arenas regarding civil justice reform of professional liability litigation.
- 14. Determine a personal plan for achieving recognition and certification in surgery or its subspecialties.
- 15. Participate in surgical case review activities.
- 16. Participate in utilization review activities.
- 17. Review options for reform of the U.S. healthcare system, and identify possible consequences of reform proposals for surgical practice, patient access to care, and the cost of health care.

PRACTICE MANAGEMENT

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

Junior Level: PGY-I, PGY-II

- 1. Analyze the surgeon's responsibilities to society as they are associated with the management of a surgical practice.
- 2. Summarize the responsibilities and obligations of a surgeon regarding his/her social leadership in the community and health care facilities.
- 3. Analyze how the health care delivery system affects the socioeconomic well being of the local community and nation.

- 4. Discuss the characteristics and relationships of the multiple components of the health care delivery system, including:
 - a. Treatment facilities such as hospitals, long-term care facilities, community clinics
 - b. Health care legislation currently in effect
 - c. Management/provision of health care, including third party payment systems:
 - (1) Medicare and Medicaid requirements
 - (2) Employer-provided health insurance
 - (3) Private health insurance
 - (4) Responding to insurance denials
 - (5) Dealing with gatekeepers
 - (6) Case management (Large Case Management) procedures
 - (7) Closed panel managed care plans
 - d. Diagnosis and processing codes; use of Fee Allowance Schedule
 - e. Physician practice organizations
 - f. Medical equipment and pharmaceutical manufacturing, sales, and distribution
- 5. Assess the cost-containment responsibilities of a physician in the ordering of diagnostic and therapeutic measures, to include consideration of effectiveness and efficiency.
- 6. Demonstrate familiarity with the political, economic, and social changes and trends likely to affect future surgical practice.
- 7. Discuss the characteristics and importance of effective interpersonal communication with colleagues, consultants, clinical and administrative support personnel, and patients.
- 8. Describe approaches about how to involve the patient's family and spiritual counselor in clinical decisions and discussions.
- 9. List the institutional and social service agencies in your community, and describe their role in the surgical management of patients and in assisting families.
- 10. Summarize the career options available at the conclusion of the residency, including:

a.	General surgery practice (private practice or academic)
b.	Fellowship in subspecialty
c.	Other choices (e.g., research, entrepreneurial business, administration)
	scuss the types and characteristics, potential and shortcomings of organizational ares that affect the practice and fiscal aspects of surgical practice, including:
a.	Solo practice
b.	Group practice
	(1) Partnership
	(2) Professional Association
	(3) Corporation
	(4) Group practice without walls (GPWW)
	(5) Limited liability corporation (LLC)
c.	Academic practice
d.	Health Maintenance Organization (HMO)
	(1) Preferred Provider Organization (PPO)
	(2) Independent Practice Association (IPA)
	(3) Staff model (to employ providers directly)
e.	Exclusive Provider Organization (EPO)
f.	Federal
	(1) Medicare
	(2) Medicaid
	(3) Title XX of the Social Security Act
	(4) Older Americans Act
	(5) Veterans Administration

12. Summarize significant aspects of the following critical issues as they relate to surgical practice management:			
a.	a. Legislative/regulatory requirements		
	(1) Americans with Disabilities Act (ADA)		
	(2) Clinical Laboratory Improvement Amendments (CLIA)		
b.	Federal/professional regulatory institutions		
	(1) Health Care Financing Administration (HCFA)		
	(2) Joint Commission for the Accreditation of Healthcare Organizations (JCAHO)		
	(3) Occupational Safety and Health Administration (OSHA)		
c.	Societal expectations		
	(1) Affirmative action		
	(2) Equal opportunity		
	(3) Sexual harassment		
13. Describe patient eligibility variability through the Medicare program, financed through HCFA, for coverage of:			
a.	Elderly		
b.	Disabled persons receiving Social Security		
c.	Persons with end-stage renal disease		
d.	Certain federal employees		
14. Define the range of current coverage and aspects of implementation for the following:			
a.	Medicare Part A and Part B		
b.	Diagnosis-related groups (DRG's)		

c. Medigap

- 15. Describe the range of support available for home and community-based care for the elderly.
- 16. Demonstrate a working knowledge of the organization, content, and analysis of the outpatient record.
- 17. Demonstrate a working knowledge of International Classification of Diseases (ICD) and Current Procedural Terminology (CPT) coding and data analysis.
- 18. Outline a plan for evaluating personal and professional considerations in making a career choice.
- 19. Recognize the importance of spouse and family involvement in making career choices, including choice of geographic location.

Senior Level: PGY-III, PGY-IV, PGY-V

- 1. Select a specific planning methodology to be used in career decisions.
- 2. Review the availability, requirements, and application procedures for post-residency fellowships under consideration.
- 3. Review and critique the following issues as they relate to a planned surgical practice:
 - a. Health care delivery systems, including managed care
 - b. Health care economics
 - c. Political and legislative processes in health care
- 4. Obtain demographic studies of potential practice locations to include population and medical demographics.
- 5. Outline the essential characteristics of the business side of medical practice, including:
 - a. Content and interpretation of financial reports
 - b. Management of human resources
 - c. Facilities design and management, including site selection and equipment requirements
 - d. Accounting procedures such as billing and collections

- 6. Analyze the financial issues associated with the selection of the career options under consideration.
- 7. Describe and evaluate the essential components of the following topics associated with the management of a planned surgical practice:
 - a. Financial management and accounting
 - b. Coding, billing, and collections
 - c. Selection and management of facilities, including real property and equipment
 - d. Human resources management
 - e. Marketing and planning
 - f. Data management using computer technology
 - g. Contractual and legal issues
 - h. Quality assurance
 - i. Risk management (professional and employer)
 - j. Cost-containment
- 8. Describe the content, managed care relationships, interpretation, and utilization of the following financial documents:
 - a. Balance sheet
 - b. Income and expense statement
 - c. Accounts payable and receivable
 - d. Collection analysis
- 9. Determine the insurance requirements related to the planned surgical practice, including:
 - a. Casualty, fire, and theft
 - b. Liability/malpractice
 - c. Personal health and disability

- d. Personal life
- 10. Outline quality assurance activities required in surgical practice, including:
- a. Clinical record adequacy and accuracy
- b. Risk management
- c. Documentation of morbidity and mortality
- d. Periodic review of morbidity and mortality
- e. Appropriate provision of second opinion
- 11. Formulate plans to acquire and maintain managerial skills appropriate for the practice.

Junior Level: PGY-I, PGY-II

- 1. Discuss post-residency career options with:
 - a. Faculty
 - b. Other residents
 - c. Family
- 2. Locate sources for review of:
 - a. Social, legal, and ethical issues associated with post-residency career decisions
 - b. Health care economics and structure
- 3. Begin to accumulate information about surgical practice opportunities, including type of practice and location.
- 4. Accumulate information about pertinent fellowship opportunities.
- 5. Explore other post-residency career choices.
- 6. Assess own interpersonal skills and their impact on career choice.

- 7. Develop and implement strategies for improving interpersonal communications skills.
- 8. Select and implement a logical plan for making decisions about a post-residency career. Include a timetable and milestones.
- 9. Involve appropriate family members in career planning.
- 10. Accumulate a notebook with basic laws covering office management (e.g., CLIA)
- 11. Maintain accurate and current documentation of patient care experiences while in training, utilizing the appropriate software package for ACGME-RRC documentation and American Board of Surgery application completion. Determine and follow a plan of action for meeting required case number minimums.
- 12. Develop a personal resume/curriculum vitae and collection file for updating scholarly accomplishments and other credentials appropriate for preparing professional announcements.
- 13. Locate sources for review of the physician's role in cost-containment.

Senior Level: PGY-III, PGY-IV, PGY-V

- 1. Obtain specific information about post-residency fellowships including availability, requirements, and application procedures.
- 2. Gather information about specific types of surgical practice of personal interest.
- 3. Analyze current medical and population demographics associated with the types and locations of surgical practice being considered.
- 4. Prepare a detailed financial plan for each selected career option. Include repayment of educational loans in the plan.
- 5. Select type of surgical practice to pursue.
- 6. Review practice facility requirements, including:
 - a. Location, including proximity to hospital, consultants, diagnostic services
 - b. Space, including floor plan, patient flow, waiting room capacity
 - c. Patient access, including parking
 - d. Equipment

- 7. Develop a business plan for surgical practice.
- 8. Develop an accounting system for surgical practice.
- 9. Determine requirements and select systems to manage:
 - a. Clinical records
 - b. Finance, accounting, billing, and collection
 - c. Schedules and appointments
- 10. Complete a financial plan for the proposed surgical practice to include:
 - a. Start up costs
 - b. Revenue generation including fee schedules
 - c. Practice expenses
 - d. Insurance requirements and costs
 - e. Human resources compensation and costs
 - f. Income projections
 - g. Equipment costs, including maintenance
- 11. Determine human resource requirements, including recruiting and training.
- 12. Prepare professional job descriptions for all personnel requirements.
- 13. Construct a basic plan for fair and appropriate personnel mentoring and evaluation.
- 14. Complete licensure and registration requirements for your chosen location.
- 15. Complete applications for hospital staff membership and clinical privileges.
- 16. Develop a marketing strategy for the chosen community.
- 17. Formulate a plan for personal and practice promotion to include:
 - a. Active participation in medical staff affairs
 - b. Attendance at appropriate hospital and medical staff committee meetings and meetings of local medical societies

- c. Participation in medical education programs for:
 - (1) Medical staff
 - (2) Residents and medical students
 - (3) Nursing and hospital ancillary staff
 - (4) Public
- d. Participation in emergency call as appropriate
- e. Involvement in clinical and/or basic science research
- f. Participation in community social, cultural, and service activities
- g. Being available, dependable and visible
- 18. Formulate plans to maintain clinical skills appropriate for practice through continuing medical education (CME) activities:
 - a. Preparation for recertification
 - b. CEM documentation for relicensure
- 19. Prepare materials for Website formulation appropriate for dispensing information for patients and colleagues in surgery and other disciplines.

PALLIATIVE CARE

COMPETENCY-BASED KNOWLEDGE OBJECTIVES:

- 1. Discuss the evolution of palliative care. Utilize the following terms in your discussion of the evolution: to alleviate, to mitigate, to lessen pain, and to give temporary relief.
- 2. Discuss the principles and rationale for the goal of palliative care as achieving the best quality of life for patients and their families, utilizing the following core principles:
 - a. Respect the dignity of patient and caregivers.
 - b. Be sensitive to and respectful of the wishes of patient and family.

- c. Use the most appropriate measures that are consistent with patient choices.
- d. Ensure alleviation of pain and management of other physical symptoms.
- e. Recognize, assess, and address psychologic, social, and spiritual and religious problems.
- f. Ensure appropriate continuity of care by the patient's primary and specialist physicians.
- g. Provide access to any therapy that may realistically be expected to improve the patient's quality of life.
- h. Provide access to appropriate palliative care and hospice care.
- i. Respect the patient's right to refuse treatment.
- j. Recognize the physician's responsibility to forgo treatments that are futile.
- 3. Summarize and give examples of how to comply with patient and family expectations in the five domains of quality end of life care from the patient's perspective:
 - a. Receiving adequate pain and symptom management
 - b. Avoiding inappropriate prolongation of dying
 - c. Achieving a sense of control
 - d. Relieving burden
 - e. Strengthening relationships with loved ones
- 4. Outline considerations for determining measures of quality of life.
- 5. Illustrate how one would go about assessing quality of life for:
 - a. Patient
- b. Caregivers
- 6. Explain the significance and interrelationship between these two basic clinical tasks as they relate to palliative care:
 - a. Communication skills b. Symptom control/management
- 7. Analyze the significance of and mechanisms for implementing a team approach for caring for the patient with advanced illness, include consideration of:

- a. Other physicians
- b. Nursing staff
- c. Other health care team members
- 8. Analyze and discuss the significance of the "active, optimistic, interventionist" tradition of surgery for cure as compared with the needs of the patient who is "beyond cure" regarding these issues:
 - a. Time to pursue various treatments
 - b. Realistic vs. unrealistic goal accomplishment
 - c. Use of these verbs: cut, sew, resect vs. bypass, stabilize, decompress
- 9. The literature indicates that the most prominent concern voiced by patients facing life-limiting disease is of pain and poorly controlled symptoms. Evaluate the surgeon's professional and ethical obligation in dealing with this patient concern. Discuss this issue, considering:
 - a. The surgeon has the patient's comfort as priority
 - b. Every resource is accessed to attain patient comfort

- 1. Complete an evaluation and treatment plan for a patient who is at the end of life and for whom integration of life-prolongation and palliation are important considerations. Consider the following:
 - a. Patient risks
 - b. Treatment options
 - c. Patient goals and values
- 2. Utilize the principles of appropriate palliative care to counsel patients and their families about surgical and medical procedures to be employed, including obtaining informed consent after discussing the risks, benefits, and alternatives to the procedure.
- 3. Demonstrate communication skills in end of life care through establishing interpersonal relationships with patients while discussing problems with them.

- 4. Establish collegiality with non-surgical partners in patient care, especially regarding the spiritual care of the patient.
- 5. Utilize professional resources such as Websites to assist and improve patients' palliative care.
- 6. Perform selected palliative general surgical procedures such as:
 - a. Drainage of effusions (ascites, pleural, pericardial)
 - b. Intervention for obstructions (respiratory, gastrointestinal, urologic, vascular)
 - c. Control of pain
 - d. Palliative tumor resection
 - e. Supportive intervention (tissue sampling, vascular access, enteral feeding tubes)

Attitudes:

- 1. Recognize the concerns of patients and their families regarding their fear of uncontrolled pain.
- 2. Respond positively and actively to the efforts of other members of the healthcare team for the total care of the patient, including consideration of:
 - a. Non-medical consequences of treatment
 - b. Quality of life issues
 - c. Spiritual needs of patient and caregivers
 - d. Interpersonal relationships