YEAR 1: MEDICAL KNOWLEDGE (MK)

Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge in patient care, specifically:

	Enabling Competency		Milestones
Α	Describe the normal structure and function of the human body and of each of its major organ systems, across the life span.	MK1A1	Describe the normal structure and function of the human body at the sub-cellular, cellular, tissue, organ and body level.
		MK1A2	Discuss the normal process of pregnancy.
В	Explain various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, behavioral, and traumatic) of major diseases and conditions and the ways in which they operate on the body (pathogenesis).	MK1B1	Recognize variations of normal development and function of organs and systems due to various causes.
С	Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions.	MK1C1	Recognize abnormal anatomic and physiologic function of the human body.
D	Identify the proximate and ultimate factors that contribute to the development of disease and illness, and, that contribute to	MK1D1	List major contributors to health and disease in populations including mechanisms of action.
	health status within and across populations regionally, nationally, and globally.	MK1D2	Discuss how the determinants of health and disease relate to the host immune system, its development, function, and possible dysregulation.
		MK1D3	Recognize the genetic basis of disease as a complex interaction with social conditions and life experiences.
		MK1D4	Discuss the effects of socioeconomic status, diet, exercise, gender, and age on health and disease.
E	Demonstrate knowledge of the basic principles of human behavior throughout the life cycle, including development	MK1E1	Discuss the basic principles of normal human development from fetus to elder.
	during infancy, childhood, adolescence, adulthood and end of	MK1E2	Describe the normal family life cycle.
	life.	MK1E3	Discuss variations in family and individual life cycles in view of the heterogeneity of the U.S. population.
F	Recognize the medical consequences of common societal problems.	MK1F1	Describe the impact on health of life experiences, poverty, education, race, gender, culture, crime, and the health care system.

YEAR 1: PATIENT CARE/CLINICAL SKILLS (PC)

Students must be able to provide care that is compassionate, appropriate, and effective for treating health problems and promoting health, specifically:

	Enabling Competency		Milestones	
Α	Obtain an accurate, age-appropriate medical history.	PC1A1	List the elements of the full medical history.	
		PC1A2	Perform a focused history on an ambulatory adult patient.	
		PC1A3	Include Sexual history, Functional Status, Relevant Family History,	
			Community and Family Context of Care, Substance Abuse History, and	
			Cultural Competence in medical history. Explain to reluctant patients	
		20111	why these components are included in the history.	
		PC1A4	Demonstrate that the patient's autonomy and privacy are respected in	
	Demonstrate average technique in neufamoine heth a complete	DC4D4	the history taking process.	
В	Demonstrate proper technique in performing both a complete and a symptom-focused examination, addressing issues of	PC1B1	Sensitively perform a focused physical examination in healthy men and women and identify basic abnormalities.	
	patient modesty and comfort.	PC1B2	Demonstrate comfort with the examination while assuring patient	
			dignity, privacy, safety and satisfaction.	
		PC1B3	Sensitively perform male and female GU exam and female breast	
		DO4D4	exam.	
С	Derform routing technical precedures and tests under	PC1B4 PC1C1	Perform proper hand washing technique before each patient encounter. Identify important elements related to patient privacy, comfort and	
	Perform routine technical procedures and tests under supervision and with minimal discomfort to the patient.	PCICI	safety during basic procedures.	
	supervision and with minimal disconnect to the patient.	PC1C2	Describe proper procedure/protocol for gowning/draping of patients for	
			procedures.	
		PC1C3	Discuss technique(s) and basic science foundation for basic	
			procedures.	
		PC1C4	Perform basic procedures in a simulated setting. Discuss the indications	
			for, and risks of, these procedures.	
		PC1C5	Outline the important elements of, and process for, obtaining informed consent.	
		PC1C6	Perform proper hand washing technique before each patient encounter.	
D	Justify each diagnostic test ordered and management strategy	PC1D1	Identify the key questions to ask when developing a risk to benefit ratio	
	proposed with regard to cost, effectiveness, risks and		for any given diagnostic or therapeutic intervention.	
	complications, and the patient's overall goals and values.			
E	Apply clinical reasoning and critical thinking skills in	PC1E1	Generate a broad differential diagnosis based on mechanisms of	

	developing a differential diagnosis and management plan.		disease and patient characteristics
		PC1E2	Develop a plan to test diagnostic hypotheses.
F	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual	PC1F1	List mechanism of action, therapeutic indications and common side effects for major drug classes.
	patient.	PC1F2	Obtain a medication history and identify potential side effects and drug interactions.
G	Identify and incorporate into the care of patient's appropriate prevention strategies for common conditions.	PC1G1	Identify the most common causes of morbidity and mortality in specific patient populations and discuss recommended screening test for these conditions.
		PC1G2	Identify the levels of prevention.
		PC1G3	Describe available strategies of prevention (screening, vaccination, education/counseling, etc.) and their respective characteristics, limitations, and benefits.
		PC1G4	Discuss the use of national guidelines (e.g. US Preventive Services Task Force) in the care of individual patients.
		PC1G5	Critically evaluate the benefits and limitations of the use of guidelines for common conditions.
Н	Identify when patients have life-threatening conditions and	PC1H1	Identify the normal and abnormal parameters for vital signs.
	institute appropriate initial therapy.	PC1H2	Achieve certification in Basic Life Support.
I	Describe the scientific principles underlying diagnostic methodologies.	PC1I1	Describe the anatomical, histological and physiological principles that underlie physical, radiological and laboratory testing.
		PC1I2	Recognize that diagnostic tests are imprecise in measureable ways.
		PC1I3	Explain sensitivity, specificity, positive and negative predictive values, likelihood ratios, and describe how they are used in clinical decision making.

YEAR 1: INTERPERSONAL AND COMMUNICATION SKILLS (IC)

Students must demonstrate interpersonal and communication skills that facilitate effective interactions with patients and their families and other health professionals, specifically:

	Enabling Competency		Milestones
Α	Communicate effectively in oral format with patients, patients' families, colleagues, and other health care professionals.	IC1A1	Describe the important components of effective oral doctor-patient communication.
		IC1A2	Discuss barriers to effective oral doctor-patient communication in the clinical care setting.
		IC1A3	Demonstrate effective oral communication skills with patients in clinical setting.
		IC1A4	Effectively present the findings of a focused history and physical examination.
		IC1A5	Use oral communication skills effectively within the classroom setting.
В	Communicate effectively in written format with patients, patients' families, colleagues, and other health care	IC1B1	Describe the important components of effective written doctor-patient communication.
	professionals.	IC1B2	Discuss barriers to effective written doctor-patient communication in the clinical care setting.
		IC1B3	Effectively present the findings of a focused history and physical examination.
		IC1B4	Use written and electronic communication skills effectively within the classroom setting.
С	Demonstrate collaborative teamwork skills and the ability to work effectively with other members of the health care team.	IC1C1	Work collaboratively with peers in team setting to solve basic science problems.
		IC1C2	List the major elements of highly performing teams and how these concepts can be applied to patient care.
D	Sensitively address end-of-life issues with patients and their families, including do-not-resuscitate orders and pain	IC1D1	Describe the application of history-taking elements to end-of-life care, e.g., health care beliefs, support system.
	management.	IC1D2	Perform a basic evaluation of pain symptoms during history taking.
		IC1D3	Discuss death as a personal and cultural practice, including various
			conceptual approaches such as the Kubler-Ross stages of dying, or
			ideas about the afterlife.

YEAR 1: PROFESSIONALISM (PR)

Students must demonstrate a commitment to professional service, adherence to ethical principles, sensitivity to patients, and maintain personal health and well-being, specifically:

Enabling Competency			Milestones	
Α	Demonstrate honesty and integrity in all interactions with	PR1A1	Demonstrate honesty and integrity in all settings including the	
	patients, their families and colleagues.		classroom, in peer interactions, and during patient encounters.	
В	Identify and apply theories and principles that govern ethical	PR1B1	List and discuss the fundamental principles which are the basis of	
	decision-making to the practice of medicine.		modern medical ethics: autonomy, beneficence, non-malfeasance,	
			justice.	
		PR1B2	Discuss the ethical principles underlying informed consent.	
С	Recognize and discuss the implications of conflicts of interest	PR1C1	Discuss potential conflicts of interest experienced by providers and	
	inherent in various financial and organizational arrangements		payers arising from the reimbursement for medical care.	
	for the practice of medicine and in medical education and	PR1C2	List potential conflicts of interest that need to be disclosed when giving	
	research.		a presentation.	
		PR1C3	Describe potential conflicts of interest in the instructor-student, advisor-	
		55464	student relationship.	
_		PR1C4	Discuss the UNC SOM conflict of interest and disclosure policy.	
D	Protect patient privacy and confidentiality.	PR1D1	Outline confidentiality provisions and describe how these apply to	
		PR1D2	doctor-patient interactions.	
			Describe UNC patient privacy rules.	
E	Demonstrate personal accountability and admit professional	PR1E1	Describe intentional and non-intentional mistakes.	
	mistakes openly and honestly with one's colleagues and	PR1E2	Outline methods of addressing mistakes (e.g. hospital, legal,	
	instructors and critically evaluate these mistakes to promote		government).	
	professional development.	PR1E3	Discuss appropriate responses to professional mistakes.	
		PR1E4	Discuss the essential elements of the risk management process as it	
			applies to patient care.	
		PR1E5	Demonstrate ability to disclose and be accountable for mistakes with	
<u> </u>	December 1997	DD454	peers and faculty.	
F	Recognize unprofessional behaviors in one's self as well as in	PR1F1	List the professionalism competencies at UNC SOM.	
	peers and other health professionals with whom one interacts	PR1F2	Outline expectations related to medical student behavior outside of	
	and address these in a constructive manner.	PR1F3	school.	
		PR1F3	List possible consequences of unprofessional behavior in medical school.	
		PR1F4	Reflect on ways to prevent occurrences of unprofessional behavior in	
		FRIF4	one's self and develop a personal plan for improvement.	
		PR1F5	List institutional resources available to students with concerns re:	
		LVILD	List institutional resources available to students with concerns le.	

			professional behavior amongst peers, supervisors, etc.
G	Maintain personal health and well-being and achieve a	PR1G1	List personal priorities and values and reflect on the interaction
	balance between priorities of patient care and personal and		between these values and medical school.
	professional development.	PR1G2	Reflect on work-life balance in first year and develop a study/work plan
			for second year.
		PR1G3	Identify warning signs of imbalance, e.g., depression, substance
			misuse and resources for addressing issues associated with imbalance.
Н	Provide culturally sensitive care to patients of diverse cultures	PR1H1	Identify the core elements of cultural sensitivity and describe its
	and belief systems.		relevance to the delivery of high quality medical care.
		PR1H2	Recognize the impact of patients' life experiences, family, community,
			and ethnic background on health and response to illness.
		PR1H3	Demonstrate respect for and acceptance of diversity in gender, sexual
			identity, culture and ethnicity among peers and patients.
		PR1H4	Discuss the importance of diversity in gender, sexual identity, culture
			and ethnicity among peers and patients and how this diversity shapes
			interactions with peers and with patients.
I	Develop empathetic, caring relationships with patients.	PR1I1	Identify behaviors that communicate empathy and caring to patients
			and ones that do not.
		PR1I2	Demonstrate the use of affective components of empathic care,
			including self disclosure, expressions of emotion, and answering 'what
			would you do?' in clinical setting.
		PR1I3	Demonstrate empathy and caring in all patient encounters.
J	Identify gaps in medical knowledge, clinical skills (including	PR1J1	Recognize that professionalism entails a process of continuous self
	communication skills), and professionalism, and develop a		assessment and improvement.
	strategy for self-improvement.	PR1J2	Identify development gaps in knowledge, skills, and professionalism
			and formulate strategies to address these gaps.
K	Actively seek and respond to feedback about professional	PR1K1	Define feedback and list formative sources of feedback received during
	performance.		the academic year.
		PR1K2	List and describe proper methods to request and process feedback.
		PR1K3	Provide appropriate feedback to fellow medical students and faculty.
		PR1K4	Actively request and respond to feedback from faculty and fellow
			medical students.
		PR1K5	Actively request and respond to feedback from and patients in
			simulated setting.

YEAR 1: LIFELONG LEARNING (LL)

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their practice of medicine, specifically:

	Enabling Competency	Milestones	
Α	Demonstrate skills in retrieving, critically assessing, and	LL1A1	Retrieve pertinent biomedical information from electronic databases.
	integrating social and biomedical information into clinical	LL1A2	Obtain, analyze, and synthesize information from the medical literature.
	decision-making.	LL1A3	Define internal and external validity.
		LL1A4	Formally assess the internal and external validity of original clinical
			research.
В	Discuss the basic principles of basic, clinical and translational	LL1B1	Describe the fundamental components of basic, clinical and
	research and how this research is applied to patient care.		translational research.
		LL1B2	Discuss the fundamental principles underlying the conduct and
			application of clinical trials in patient care including consideration of
			conflict of interest.
		LL1B3	Describe the role of the Institutional Review Board.
С	Reflect upon clinical and educational experiences, evaluate	LL1C1	Provide self-evaluation of participation in small-group problem solving.
	positive and negative aspects, and make changes to improve		
	future experiences.		

YEAR 1: SYSTEMS-BASED PRACTICE (SB)

Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value, specifically:

	Enabling Competency		Milestones	
Α	Use electronic and other information tools [e.g., including electronic health records and computer order entry] for	SB1A1	Describe HIPAA and security implications of electronic health information.	
	systems-based patient care.	SB1A2	Describe the basic elements of an EMR and CPOE.	
		SB1A3	Compose a patient care note in an electronic record.	
		SB1A4	Access external software applications for use with patient care.	
В	Identify necessary elements for coordinated care of patients with complex and chronic diseases.	SB1B1	Identify major community and on-line resources available to patients with chronic disease and their families.	
		SB1B2	Describe the different levels of care available to patients in the United States.	
		SB1B3	Discuss the rules and regulations impacting the coordination of care for patients (e.g., Stark).	
С	Advocate for enhanced access to health care for members of underserved populations.	SB1C1	List systems-based factors that limit patient access to health care.	
		SB1C2	Describe venues (institutional, state, national) within which physicians can advocate for improved access to care.	
D	Describe the principles underlying the delivery of high quality patient care and effective patient systems.	SB1D1	Describe the major principles underlying high quality patient care.	
E	Outline the roles of the various members of the healthcare team and describe how these roles can be integrated for optimal patient care.	SB1E1	Discuss the roles and responsibilities of health care team member in the care of patients	

YEAR 1: IMPROVING THE HEALTH OF POPULATIONS (HP)

Students must demonstrate an understanding of the improvement of the health of populations, for both specific clinical populations and to diseases and conditions important to North Carolina and the US, specifically:

	Enabling Competency		Milestones
Α	Describe and apply principles of population health	HP1A1	Define relevant terms such as population, public health, etc, and
	improvement for specific populations with attention to access,		describe key principles pertaining to population health improvement.
	cost and clinical outcomes including quality of care, morbidity	HP1A2	Compare and contrast between health and medical care of populations.
	and mortality, functional status and quality of life.	HP1A3	Identify measures of cost, quality, and access and discuss how these
			measures are used at the population level.
		HP1A4	List national organizations involved with the development and
			application of quality measures.
В	Identify factors that place populations at risk for disease or	HP1B1	Define and calculate risk (cumulative incidence) and define risk factors.
	injury, and select appropriate strategies for risk reduction.	HP1B2	Define and contrast primary, secondary, and tertiary prevention.
		HP1B3	Discuss how population-level risk measures are applied to individuals.
		HP1B4	Compare and contrast methods used to evaluate the effectiveness of
			preventive strategies.
		HP1B5	Describe the prevalence and impact of major diseases in North
			Carolina.
С	Describe various approaches to the organization, financing,	HP1C1	Describe the organization and financing of the health care system in the
	and delivery of health care in the United States and other		United States.
	countries and the role of physicians in developing and	HP1C2	Compare and contrast different health care organization and delivery
	implementing health policy.		models and describe the role of "safety net."
		HP1C3	Describe models of physician and hospital payment and approaches to
		110404	controlling health care costs.
		HP1C4	Describe the impact of the health care system on health and illness in
		LIDAGE	the U.S. and globally.
		HP1C5	Describe the roles of primary care physicians and specialists in the U.S.
		HP1C6	compared to other countries. Discuss factors impacting the current health care workforce in the
		HF ICO	United States.
D	Identify disparities across populations in North Carolina and	HP1D1	Define and contrast <i>health care</i> disparity and <i>health</i> disparity.
-	nationally, and discuss physician roles in reducing these	HP1D2	Compare and contrast the role of physicians, health systems, and
	disparities.		society in creating and maintaining disparities.
	'	HP1D3	Identify major diseases in which there are disparities in terms of access,
			quality, and outcomes within NC and nationally.
Е	Apply principles of patient safety and quality improvement to	HP1E1	Discuss the importance of patient safety and describe the basic
E	Apply principles of patient safety and quality improvement to	HP1E1	

enhance patient care.		elements of patient safety programs.
	HP1E2	Define medical error and discuss the incidence of medical error in the
		United States and the impact of medical error on patient outcomes.
	HP1E3	Identify quality measures and describe how these measures are
		validated.
	HP1E4	Discuss the principles of quality improvement and describe the basic
		elements of quality improvement programs.

YEAR 2: MEDICAL KNOWLEDGE (MK)

Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge in patient care, specifically:

	Enabling Competency		Milestones
A	Describe the normal structure and function of the human body and of each of its major organ systems, across the life span.	MK2A1	Describe the normal structure and function of all major organ systems as systems, outlining how anatomy, cell biology, and physiology work together.
		MK2A2	Discuss the normal process of growth in childhood, and maturation through adulthood to the end-of-life.
В	Explain various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, behavioral, and traumatic) of major diseases and conditions and the ways in which they operate on the body (pathogenesis).	MK2B1	Describe the various causes of disease and how these are manifest in organ system dysfunction.
С	Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions.	MK2C1	Describe the pathology and pathophysiology underlying the clinical manifestations of common conditions.
D	Identify the proximate and ultimate factors that contribute to the development of disease and illness, and, that contribute to health status within and across populations regionally,	MK2D1	Describe the determinants of health and disease, and provide specific examples of how these determinants influence health outcomes in common/major diseases.
	nationally, and globally.	MK2D2	Discuss social conditions and behaviors that predispose patients to disease and decreased function (e.g. alcohol addiction, obesity).
Е	Demonstrate knowledge of the basic principles of human behavior throughout the life cycle, including development	MK2E1	Describe human developmental milestones and characteristic behavioral changes expected throughout the life cycle.
	during infancy, childhood, adolescence, adulthood and end of	MK2E2	Outline the taxonomy of abnormal human behavior and development.
	life.	MK2E3	Recognize dysfunctions of the family life cycle.
F	Recognize the medical consequences of common societal problems.	MK2F1	Recognize the contribution of social conditions and problems to the health and disease outcomes of patients.

YEAR 2: PATIENT CARE/CLINICAL SKILLS (PC)

Students must be able to provide care that is compassionate, appropriate, and effective for treating health problems and promoting health, specifically:

	Enabling Competency		Milestones
Α	Obtain an accurate, age-appropriate medical history.	PC2A1	Perform a complete medical history on an adult patient integrating across organ systems and including elements necessary for development of a therapeutic plan.
		PC2A2	Obtain a medical history from a pediatric patient incorporating parent(s) as appropriate.
		PC2A3	Describe issues related to obtaining a medical history from geriatric patients and patients at the end of life.
		PC2A4	Discuss differences in the approach to the patient history based on patient's presenting complaint.
В	Demonstrate proper technique in performing both a complete and a symptom-focused examination, addressing issues of	PC2B1	Sensitively perform and interpret the results of a full physical examination in patients with common abnormalities.
	patient modesty and comfort.	PC2B2	Discuss differences in the approach to the physical examination based on patient presenting complaint.
		PC2B3	Perform a pediatric physical exam.
С	Perform routine technical procedures and tests under supervision and with minimal discomfort to the patient.	PC2C1	Discuss technique(s) and basic science foundation for advanced procedures.
		PC2C2	Perform advanced procedures in a simulated setting. Discuss the indications for, and risks of, these procedures.
		PC2C3	Identify important elements related to patient privacy, comfort and safety during advanced procedures.
		PC2C4	Perform basic procedures under supervision and with minimal discomfort of the patient. Discuss the indications for, and risks of, these procedures.
D	Justify each diagnostic test ordered and management strategy proposed with regard to cost, effectiveness, risks and complications, and the patient's overall goals and values.	PC2D1	Explain the rationale, expected results, cost, risks and complications of diagnostic tests and therapeutic strategies commonly used in the clinical setting.
		PC2D2	List the common testing methodologies, the advantages and disadvantages of the tests, how test samples are procured, and how to prepare patients to undergo the tests.
E	Apply clinical reasoning and critical thinking skills in developing a differential diagnosis and management plan.	PC2E1	Generate a broad differential diagnosis based on pathological mechanisms and disease prevalence, and identify the most likely diagnoses on that list.

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		PC2E2	Develop a basic diagnostic and therapeutic plan based on this
			differential diagnosis.
F	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual patient.	PC2F1	Discuss the mechanism of action, common adverse effects, effectiveness, risks, and costs of pharmacological therapeutics used to treat core medical conditions. Include discussion of brand versus generic medication.
		PC2F2	Discuss the use of alternative medications.
G	Identify and incorporate into the care of patient's appropriate prevention strategies for common conditions.	PC2G1	Apply principles of clinical epidemiology to select and evaluate prevention strategies for clinical cases.
		PC2G2	Complete a motivational interview and identify the basic principles of
			behavior change related to prevention.
Н	Identify when patients have life-threatening conditions and institute appropriate initial therapy.	PC2H1	Discuss the etiology, presentation, and management of common life-threatening conditions.
I	Describe the scientific principles underlying diagnostic methodologies.	PC2I1	Discuss the basic scientific principles of radiologic diagnostic tests, and be able to give examples of how these tests should be used appropriately in patient care.
		PC2I2	Describe how common clinical laboratory tests are used in diagnosis and treatment monitoring.
		PC2I3	Apply the concepts of sensitivity, specificity, positive and negative predictive values, and likelihood ratios to decisions regarding patient testing.

YEAR 2: INTERPERSONAL AND COMMUNICATION SKILLS (IC)

Students must demonstrate interpersonal and communication skills that facilitate effective interactions with patients and their families and other health professionals, specifically:

	Enabling Competency		Milestones
Α	Communicate effectively in oral format with patients, patients' families, colleagues, and other health care professionals.	IC2A1	Effectively present the findings of a full history and physical examination in oral format.
		IC2A2	Assess the health literacy of at least one patient and discuss how health literacy impacts the care of this patient.
		IC2A3	Use an interpreter/simulator to facilitate communication with patients and their families.
		IC2A4	Effectively present scholarly research and actively participate in and lead small-group discussions.
В	Communicate effectively in written format with patients, patients' families, colleagues, and other health care	IC2B1	Effectively document the findings of a full history and physical examination in written format.
	professionals.	IC2B2	Research and write an analytic paper critically assessing the social dimensions of health, illness, or medical care.
С	Demonstrate collaborative teamwork skills and the ability to work effectively with other members of the health care team.	IC2C1	Work collaboratively as a member of a team to solve clinical problems.
D	Sensitively address end-of-life issues with patients and their families, including do-not-resuscitate orders and pain management.	IC2D1	Assess functionality, pain, support needs, familiarity with functions of DNR orders, health care power of attorney, advance directives, capacity/competence.
		IC2D2	Discuss the basic elements of therapeutic pain management.
		IC2D3	Identify the core elements of advance directives and palliative care.

YEAR 2: PROFESSIONALISM (PR)

Students must demonstrate a commitment to professional service, adherence to ethical principles, sensitivity to patients, and maintain personal health and well-being, specifically:

	Enabling Competency		Milestones
Α	Demonstrate honesty and integrity in all interactions with patients, their families and colleagues.	PR2A1	Demonstrate honesty and integrity in all settings including the classroom, in peer interactions, and during patient encounters.
В	Identify and apply theories and principles that govern ethical decision-making to the practice of medicine.	PR2B1	Discuss underlying ethical principles and recommended action for patients with ethical issues impacting care decisions.
С	Recognize and discuss the implications of conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine and in medical education and	PR2C1	Discuss potential conflicts of interest experienced by providers and payers arising from the reimbursement for medical care. Identify potential conflicts of interest in medical practice.
	research.	I KZOZ	identify potential conflicts of interest in medical practice.
D	Protect patient privacy and confidentiality.	PR2D1	Identify potential breaches to patient privacy and describe strategies to mitigate these risks.
E	Demonstrate personal accountability and admit professional	PR2E1	Discuss medical errors and their impact on patient care and outcomes.
	mistakes openly and honestly with one's colleagues and instructors and critically evaluate these mistakes to promote professional development.	PR2E2	Describe the role of morbidity and mortality conferences in promoting professional development.
F	Recognize unprofessional behaviors in one's self as well as in	PR2F1	Identify unprofessional behavior(s) in observed patient interactions.
	peers and other health professionals with whom one interacts and address these in a constructive manner.	PR2F2	Provide constructive feedback to peers and professors in small group settings and evaluations.
G	Maintain personal health and well-being and achieve a balance between priorities of patient care and personal and	PR2G1	Discuss challenges to the development of an appropriate work-life balance.
	professional development.	PR2G2	Develop third year schedule request reflective of personal and professional priorities and work-life balance.
Н	Provide culturally sensitive care to patients of diverse cultures and belief systems.	PR2H1	Incorporate the core elements of cultural sensitivity into interactions with patients while obtaining histories and performing physical examinations.
		PR2H2	Discuss the role of life experiences, culture and belief systems on patient choice of diagnostic and therapeutic alternatives.
		PR2H3	Identify the clinically important contextual issues related to family, social class, ethnicity, gender and sexual identity.
I	Develop empathetic, caring relationships with patients.	PR2I1	Reflect on personal patient encounters and identify opportunities to enhance patient interactions.
J	Identify gaps in medical knowledge, clinical skills (including communication skills), and professionalism, and develop a strategy for self-improvement.	PR2J1	Develop a list of profession-related strengths and weaknesses and identify strategies for self-improvement.

K	Actively seek and respond to feedback about professional	PR2K1	Actively request and respond to feedback from patients in clinical
	performance.		setting.
		PR2K2	Actively request and respond to feedback from other members of the
			health care team.
		PR2K3	Provide appropriate feedback to other members of the health care
			team.

YEAR 2: LIFELONG LEARNING (LL)

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their practice of medicine, specifically:

	Enabling Competency		Milestones	
A	Demonstrate skills in retrieving, critically assessing, and integrating social and biomedical information into clinical decision-making.	LL2A1	Critically assess and apply biomedical information to address diagnostic, prognostic and/or treatment questions in clinical care setting.	
В	Discuss the basic principles of basic, clinical and translational research and how this research is applied to patient care.	LL2B1	Discuss how research findings are incorporated into clinical decision making and identify barriers to this incorporation. Develop a clinical question based on a real patient, identify relevant research findings, critically evaluate the validity and reliability of that research, and discuss the application of these findings to the care of	
С	Reflect upon clinical and educational experiences, evaluate positive and negative aspects, and make changes to improve future experiences.	LL2C1	this patient. Identify ways of improving one's own performance in small-group problem solving.	

YEAR 2: SYSTEMS-BASED PRACTICE (SB)

Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value, specifically:

	Enabling Competency		Milestones
Α	Use electronic and other information tools [e.g., including electronic health records and computer order entry] for systems-based patient care.	SB2A1	Use an electronic medical record, computerized patient medical record, and picture archiving and communication system in patient care setting.
В	Identify necessary elements for coordinated care of patients with complex and chronic diseases.	SB2B1	Describe the different types of flow sheets and how these are used in patient care.
		SB2B2	Discuss the role of community-based resources in the coordinated care of patients with a chronic illness.
		SB2B3	Discuss the role of primary and specialty physicians in the coordinated care of patients with a chronic illness.
		SB2B4	Describe the important elements of the referral process.
С	Advocate for enhanced access to health care for members of underserved populations.	SB2C1	Describe "safety net" programs designed to assist indigent and underserved patients.
D	Describe the principles underlying the delivery of high quality patient care and effective patient systems.	SB2D1	Describe the basic elements of highly functioning health delivery systems.
E	Outline the roles of the various members of the healthcare team and describe how these roles can be integrated for	SB2E1	Recognize barriers to effective health care team function and how to overcome these barriers to provide optimal patient care.
	optimal patient care.	SB2E2	Describe how health care team members are effectively integrated to optimize patent care in the hospital and clinic setting.

YEAR 2: IMPROVING THE HEALTH OF POPULATIONS (HP)

Students must demonstrate an understanding of the improvement of the health of populations, for both specific clinical populations and to diseases and conditions important to North Carolina and the US, specifically:

	Enabling Competency		Milestones
A	Describe and apply principles of population health improvement for specific populations with attention to access, cost and clinical outcomes including quality of care, morbidity and mortality, functional status and quality of life.	HP2A1	Describe the use of rapid cycle quality improvement techniques for improving patient care at the practice level.
В	Identify factors that place populations at risk for disease or injury, and select appropriate strategies for risk reduction.	HP2B1	Describe prevalence and impact of major diseases in US society and contrast with prevalence in specific population subgroups.
		HP2B2	Identify non-clinical strategies used to improve health.
С	Describe various approaches to the organization, financing, and delivery of health care in the United States and other countries and the role of physicians in developing and implementing health policy.	HP2C1	Consider a specific aspect of health care organization, delivery models, physician and hospital payment, and the healthcare workforce.
D	Identify disparities across populations in North Carolina and nationally, and discuss physician roles in reducing these disparities.	HP2D1	Discuss the role of health literacy (including numeracy) on care delivery processes and outcomes.
E	Apply principles of patient safety and quality improvement to enhance patient care.	HP2E1	Identify clinical situations in which patient safety may be jeopardized.

YEAR 3: MEDICAL KNOWLEDGE (MK)

Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge in patient care, specifically:

	Enabling Competency		Milestones
Α	Describe the normal structure and function of the human body and of each of its major organ systems, across the life span.	MK3A1	Integrate knowledge of the expected changes in organ function as well as normal physiologic changes across the lifespan into the care of patients with core medical problems.
В	Explain various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, behavioral, and traumatic) of major diseases and conditions and the ways in which they operate on the body (pathogenesis).	MK3B1	Explain the pathophysiologic factors underlying the clinical manifestations of common diseases.
С	Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions.	MK3C1	Use knowledge of pathology and pathophysiology to develop diagnostic and therapeutic plans for patients with common conditions.
D	Identify the proximate and ultimate factors that contribute to the development of disease and illness, and, that contribute to	MK3D1	Describe the determinants of disease and health for major clinical situations prevalent in N.C. including regional variation.
	health status within and across populations regionally, nationally, and globally.	MK3D2	Recognize the influence of common determinates of health and illness on patients.
		MK3D3	Integrate knowledge of social conditions and behaviors that predispose patients to disease and decreased function into the management plan for individual patients.
E	Demonstrate knowledge of the basic principles of human behavior throughout the life cycle, including development	MK3E1	Recognize the behavioral milestones of normal child development and adult maturation, and use these milestones in patient care.
	during infancy, childhood, adolescence, adulthood and end of life.	MK3E2	Identify common behavioral pathology that contributes to health and illness in common disease/injury states.
		MK3E3	Incorporate life cycle stage into management planning in patient care.
F	Recognize the medical consequences of common societal problems.	MK3F1	Create discharge/management plans that address the impact of social conditions and problems on patients.

YEAR 3: PATIENT CARE/CLINICAL SKILLS (PC)

Students must be able to provide care that is compassionate, appropriate, and effective for treating health problems and promoting health, specifically:

	Enabling Competency	Milestones	
Α	Obtain an accurate, age-appropriate medical history.	PC3A1	Obtain appropriately focused and accurate history and physicals across all age groups and clinical settings.
		PC3A2	Identify and address barriers to history taking including patient's right to refuse to provide information and to censor information.
		PC3A3	Compare and contrast appropriate versus inappropriate methods for obtaining a history e.g. persuasion compared to manipulation and coercion.
В	Demonstrate proper technique in performing both a complete and a symptom-focused examination, addressing issues of patient modesty and comfort.	PC3B1	Perform an independent, reliable examination across all organ systems with respect to age and gender and identifying major abnormalities found.
С	Perform routine technical procedures and tests under supervision and with minimal discomfort to the patient.	PC3C1	Assist with the performance of advanced procedures. Discuss the indications for, and risks of, these procedures.
		PC3C2	Discuss under what circumstances a procedure should be halted including withdrawal of consent.
D	Justify each diagnostic test ordered and management strategy proposed with regard to cost, effectiveness, risks and complications, and the patient's overall goals and values.	PC3D1	Choose appropriate tests and management strategies based on effectiveness, risk, cost, and patient goals and values for core clinical conditions.
		PC3D2	Demonstrate that shared decision making is reflected in development of the diagnostic and management plan.
		PC3D3	Recognize the role of elective medications and procedures in patient care and discuss how to balance the risks and benefits in individual patients.
E	Apply clinical reasoning and critical thinking skills in developing a differential diagnosis and management plan.	PC3E1	Integrate information obtained from history, physical and diagnostic testing, and the medical literature to generate an appropriate differential diagnosis (incorporating knowledge of pretest probability, testing characteristics, and post test probability) and basic management plan for core patient types.
		PC3E2	Develop appropriate care plans which reflect the cost, risks, and benefits of various diagnostic and therapeutic measures in the context of the patient's goals.
		PC3E3	Discuss how a patient is involved in developing care plans.
F	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual	PC3F1	Select appropriate medications to treat core conditions in inpatient and outpatient settings.

	patient.	PC3F2	Discuss the rationale for selection of these medications including indications, side effects, cost, and effectiveness.
		PC3F3	Perform medication reconciliation for patients at time of discharge.
G	Identify and incorporate into the care of patient's appropriate prevention strategies for common conditions.	PC3G1	Apply principles of clinical epidemiology to select and evaluate prevention strategies for patients with core medical conditions.
		PC3G2	Counsel patients about preventive services in non-judgmental terms.
Н	Identify when patients have life-threatening conditions and	PC3H1	Achieve certification in Advanced Cardiac Life Support.
	institute appropriate initial therapy.	PC3H2	Participate in code-blue, trauma response, and rapid response for adult and pediatric patients.
I	Describe the scientific principles underlying diagnostic methodologies.	PC2I1	Discuss the cost and morbidity implications of diagnostic test imprecision and incidental findings associated with diagnostic evaluations.
		PC2I2	Incorporate knowledge of the scientific principles underlying laboratory and radiologic diagnostic methodologies into the care of patients with core medical problems.
		PC2I3	Provide examples of the impact of test variability on laboratory results and how these variables can be managed to minimize the impact on patient care decisions.

YEAR 3: INTERPERSONAL AND COMMUNICATION SKILLS (IC)

Students must demonstrate interpersonal and communication skills that facilitate effective interactions with patients and their families and other health professionals, specifically:

	Enabling Competency		Milestones
Α	Communicate effectively in oral format with patients, patients' families, colleagues, and other health care professionals.	IC3A1	Demonstrate effective oral communication skills with patients and their families in the clinical care setting.
		IC3A2	Demonstrate effective oral communication skills with colleagues and other health professionals in clinical care settings.
		IC3A3	Effectively present the findings of a history and physical examination, diagnostic test results, and management plan.
		IC3A4	Demonstrate the development of professionally appropriate relationships with patients.
В	Communicate effectively in written format with patients, patients' families, colleagues, and other health care professionals.	IC3B1	Effectively communicate the findings of a history and physical examination, diagnostic test results, daily progress notes, procedures, and management plan in the electronic medical record.
		IC3B2	Edit medication list and problem list in the ambulatory electronic medical record.
		IC3B3	Use templates of care for chronic disease in the ambulatory care.
		IC3B4	Draft orders in the electronic medical records.
С	Demonstrate collaborative teamwork skills and the ability to work effectively with other members of the health care team.	IC3C1	Apply teamwork skills in collaboration with other members of the health care team to provide appropriate health care to patients.
D	Sensitively address end-of-life issues with patients and their families, including do-not-resuscitate orders and pain management.	IC3D1	Identify salient end-of-life issues for discussion with patient and family; actively participate in discussion with patient and family alongside other treatment team members.
		IC3D2 IC3D3	Develop recommendations for treatment plans involving end-of-life care. Assess alternatives, risks and benefits regarding options for pain and
		10303	symptom control at the end-of-life.

YEAR 3: PROFESSIONALISM (PR)

Students must demonstrate a commitment to professional service, adherence to ethical principles, sensitivity to patients, and maintain personal health and well-being, specifically:

	Enabling Competency		Milestones
Α	Demonstrate honesty and integrity in all interactions with patients, their families and colleagues.	PR3A1	Demonstrate honesty and integrity in all settings including the classroom, in peer interactions, and during patient encounters.
В	Identify and apply theories and principles that govern ethical decision-making to the practice of medicine.	PR3B1	Describe the process for obtaining a DNR order and discuss the ethical principles underlying advanced care/end-of-life planning.
		PR3B2	Identify when consultation with ethics committees or with colleagues is advised.
		PR3B3	Assist with obtaining an informed consent from a patient.
С	Recognize and discuss the implications of conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine and in medical education and research.	PR3C1	Describe a potential conflict of interest witnessed in clinical setting in which the student has worked and how this conflict should be addressed.
D	Protect patient privacy and confidentiality.	PR3D1	Identify clinical situations where truth-telling and confidentiality may conflict and discuss appropriate strategies to deal with these situations.
E	Demonstrate personal accountability and admit professional mistakes openly and honestly with one's colleagues and instructors and critically evaluate these mistakes to promote professional development.	PR3E1	Present a medical error and complications report on an assigned patient.
F	Recognize unprofessional behaviors in one's self as well as in peers and other health professionals with whom one interacts and address these in a constructive manner.	PR3F1	Describe instances of unprofessional behavior [in yourself or others] that you have observed on clerkships.
G	Maintain personal health and well-being and achieve a	PR3G1	Reflect on work-life balance and its impact on specialty choice.
	balance between priorities of patient care and personal and professional development.	PR3G2	Recognize situations in which patient needs trump personal needs.
Н	Provide culturally sensitive care to patients of diverse cultures and belief systems.	PR3H1	Demonstrate cultural and gender sensitivity skills in interactions with patients, families, peers, and colleagues.
		PR3H2	Identify the impact of culture and belief systems on patient and family decision making in the patient care setting.
I	Develop empathetic, caring relationships with patients.	PR3I1	Demonstrate empathic caring relationships with patients in difficult clinical situations (e.g. end-of-life).
		PR3I2	Reflect on difficult patient encounters and identify opportunities to enhance patient interactions.
J	Identify gaps in medical knowledge, clinical skills (including communication skills), and professionalism, and develop a	PR3J1	Enumerate learning objectives and personal development strategies that address areas of weakness.

	strategy for self-improvement.		
K	Actively seek and respond to feedback about professional performance.	PR3K1	Set goals for clinical rotations and seek out feedback regarding self-identified goals.
		PR3K2	Reflect on feedback received from faculty and others in clinical settings.
		PR3K3	Create a plan to modify behavior based on feedback received from patients, peers and faculty.

YEAR 3: LIFELONG LEARNING (LL)

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their practice of medicine, specifically:

	Enabling Competency		Milestones	
Α	Demonstrate skills in retrieving, critically assessing, and integrating social and biomedical information into clinical decision-making.	LL3A1	Critically assess and apply biomedical information to develop a plan of care for core patient types.	
В	Discuss the basic principles of basic, clinical and translational research and how this research is applied to patient care.	LL3B1	Discuss how clinical and research roles may conflict, and how processes of consent may differ. Describe the process of obtaining appropriate informed consent for	
			participation in research.	
С	Reflect upon clinical and educational experiences, evaluate positive and negative aspects, and make changes to improve future experiences.	LL3C1	Provide self evaluation of clinical encounters and progress towards achievement of competencies.	

YEAR 3: SYSTEMS-BASED PRACTICE (SB)

Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value, specifically:

	Enabling Competency		Milestones	
Α	Use electronic and other information tools [e.g., including electronic health records and computer order entry] for systems-based patient care.	SB3A1	Use an electronic medical record (EMR), computerized patient medical record (CPOE), and picture archiving and communication system (PACS), in the care of assigned patients.	
В	Identify necessary elements for coordinated care of patients	SB3B1	Use flow sheets in the care of core patient types.	
	with complex and chronic diseases.	SB3B2	Arrange for a patient referral and follow up with primary care team.	
		SB3B3	Develop a case management plan for a patient.	
		SB3B4	Attend multidisciplinary conference such as a tumor board.	
С	Advocate for enhanced access to health care for members of underserved populations.	SB3C1	Actively assist in arranging for appropriate community resources for a patient who is being discharged, or who has access challenges.	
D	Describe the principles underlying the delivery of high quality patient care and effective patient systems.	SB3D1	Discuss the application of high quality patient care principles to the care of individual patients and examples where these principles were not followed and the ensuing impact on patient care.	
E	Outline the roles of the various members of the healthcare team and describe how these roles can be integrated for	SB3E1	Develop patient care plans integrating the roles of health care team members in the hospital and clinic setting.	
	optimal patient care.	SB3E2	Describe how health care team members are effectively integrated to optimize patent care across different levels of care.	

YEAR 3: IMPROVING THE HEALTH OF POPULATIONS (HP)

Students must demonstrate an understanding of the improvement of the health of populations, for both specific clinical populations and to diseases and conditions important to North Carolina and the US, specifically:

	Enabling Competency	Milestones	
A	Describe and apply principles of population health improvement for specific populations with attention to access, cost and clinical outcomes including quality of care, morbidity and mortality, functional status and quality of life.	HP3A1	Use measures of cost, quality, and access to assess the outcomes of care for one primary care and one subspecialty care population.
В	Identify factors that place populations at risk for disease or injury, and select appropriate strategies for risk reduction.	HP3B1	Use clinical strategies for assessing risk as well as evidence-based clinical strategies for reducing risk in the inpatient and outpatient setting.
С	Describe various approaches to the organization, financing, and delivery of health care in the United States and other countries and the role of physicians in developing and implementing health policy.	HP3C1	Identify the impact of financial policies (of health systems; of insurance companies) on health and health care of individual patients seen in clinical rotations.
D	Identify disparities across populations in North Carolina and nationally, and discuss physician roles in reducing these	HP3D1	Identify diseases and conditions in patients seen during clinical rotations that may be influenced by health care disparities.
	disparities.	HP3D2	Discuss the physician's role in addressing these disparities.
E	Apply principles of patient safety and quality improvement to enhance patient care.	HP3E1	Identify potential patient safety issues and identify strategies to improve outcomes in the clinical setting. Identify a change or changes in patient care at UNC that have resulted from a quality improvement project.

YEAR 4: MEDICAL KNOWLEDGE (MK)

Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge in patient care, specifically:

	Enabling Competency		Milestones	
Α	Describe the normal structure and function of the human body and of each of its major organ systems, across the life span.	MK4A1	Integrate knowledge of the expected changes in organ function as well as normal physiologic changes across the lifespan into the care of critically ill and emergent patients and patients at the end-of-life.	
В	Explain various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, behavioral, and traumatic) of major diseases and conditions and the ways in which they operate on the body (pathogenesis).	MK4B1	Discuss the pathogenesis of major conditions related to area(s) of specialty/disciplinary interest.	
С	Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions.	MK4C1	Describe the altered structure and function of organ systems producing disease across the lifespan and incorporate this knowledge into the care of individual patients.	
D	Identify the proximate and ultimate factors that contribute to the development of disease and illness, and, that contribute to health status within and across populations regionally,	MK4D1	Implement interventions to reduce the impact of disease determinants (or improve the likelihood of health improvements) in the care of individual patients.	
	nationally, and globally.	MK4D2	Describe the determinants of disease and health for major clinical situations prevalent nationally and globally.	
E	Demonstrate knowledge of the basic principles of human behavior throughout the life cycle, including development during infancy, childhood, adolescence, adulthood and end of life.	MK4E1	Practice advanced behavioral modification strategies to help patients achieve life style changes.	
F	Recognize the medical consequences of common societal problems.	MK4F1	Describe strategies to ameliorate the impact of social conditions and problems on the health and disease outcomes of patients.	

YEAR 4: PATIENT CARE/CLINICAL SKILLS (PC)

Students must be able to provide care that is compassionate, appropriate, and effective for treating health problems and promoting health, specifically:

	Enabling Competency		Milestones
A	Obtain an accurate, age-appropriate medical history.	PC4A1	Reliably obtain accurate information from patients, including children and patients with special situations (e.g., end-of-life, bedbound/demented patients, by telephone).
		PC4A2	Adjust interview to overcome potential barriers including socioeconomic circumstance, literacy levels, ethnicity and cultural practices.
В	Demonstrate proper technique in performing both a complete and a symptom-focused examination, addressing issues of patient modesty and comfort.	PC4B1	Perform focused physical examination in area(s) of specialty/disciplinary interest.
С	Perform routine technical procedures and tests under supervision and with minimal discomfort to the patient.	PC4C1	Perform selected advanced procedures under supervision and with minimal discomfort of the patient. Discuss the indications for, and risks of, these procedures.
D	Justify each diagnostic test ordered and management strategy proposed with regard to cost, effectiveness, risks and complications, and the patient's overall goals and values.	PC4D1	Explain the risks and benefits of diagnostic tests and management strategies to patients and family members.
E	Apply clinical reasoning and critical thinking skills in developing a differential diagnosis and management plan.	PC4E1	Integrate information obtained from history and physical examinations, and diagnostic testing, and review of the clinical literature to formulate an appropriate differential diagnosis and plan of care for critically ill and emergent patients.
F	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual	PC4F1	Differentiate between alternative medications for common conditions based on therapeutic effectiveness and cost considerations.
	patient.	PC4F2	Identify cost-related barriers to patient medication use.
G	Identify and incorporate into the care of patient's appropriate prevention strategies for common conditions.	PC4G1	Select appropriate prevention strategies for disease management within populations including intended and unintended consequences.
		PC4G2	Appropriately select and integrate prevention strategies into management of patients in area(s) of specialty/disciplinary interest.
Н	Identify when patients have life-threatening conditions and institute appropriate initial therapy.	PC4H1	Participate in the diagnosis and management of common life- threatening conditions.
I	Describe the scientific principles underlying diagnostic methodologies.	PC4I1	Incorporate knowledge of the scientific principles underlying laboratory and radiologic diagnostic methodologies into the care of critically ill and emergent patients.
		PC4I2	Describe the scientific basis for the diagnostic tests used in area(s) of specialty/disciplinary interest.

YEAR 4: INTERPERSONAL AND COMMUNICATION SKILLS (IC)

Students must demonstrate interpersonal and communication skills that facilitate effective interactions with patients and their families and other health professionals, specifically:

	Enabling Competency		Milestones	
Α	Communicate effectively in oral format with patients, patients'	IC4A1	Use literacy-level appropriate language to overcome health literacy	
	families, colleagues, and other health care professionals.		barriers in clinical care setting.	
В	Communicate effectively in written format with patients,	IC4B1	Use literacy-level appropriate language to overcome health literacy	
	patients' families, colleagues, and other health care		barriers in clinical care setting.	
	professionals.	IC4B2	Use written and electronic communication skills effectively within the	
			clinical care setting (e.g., discharge summaries, medication lists, giving	
			bad news, discussing DNR orders).	
С	Demonstrate collaborative teamwork skills and the ability to	IC4C1	Demonstrate teamwork skills and initiative, working collaboratively with	
	work effectively with other members of the health care team.		all members of the health care team in challenging clinical environments	
			(e.g., ICU, ER).	
D	Sensitively address end-of-life issues with patients and their	IC4D1	Assist with the creation of a multi-dimensional treatment plan for	
	families, including do-not-resuscitate orders and pain		patients at end-of-life.	
	management.	IC4D2	Collaborate with a patient in creating an advanced directive.	

YEAR 4: PROFESSIONALISM (PR)

Students must demonstrate a commitment to professional service, adherence to ethical principles, sensitivity to patients, and maintain personal health and well-being, specifically:

	Enabling Competency		Milestones
Α	Demonstrate honesty and integrity in all interactions with	PR4A1	Demonstrate honesty and integrity in all settings including the
	patients, their families and colleagues.		classroom, peer interactions, and during patient encounters.
		PR4A2	Demonstrate techniques which are useful in dealing with difficult
			situations involving patients and their families.
В	Identify and apply theories and principles that govern ethical	PR4B1	Identify resources within the hospital, and the medical and legal
	decision-making to the practice of medicine.		community to assist practitioners in resolving complex ethical
			dilemmas.
		PR4B2	Apply fundamental ethical principles to case management of critically ill and emergent patients.
		PR4B3	Discuss when involuntary treatment options should be considered or initiated.
С	Recognize and discuss the implications of conflicts of interest	PR4C1	Describe a potential conflict of interest or potential conflict of interest in
	inherent in various financial and organizational arrangements		a research program to which the student has been exposed.
	for the practice of medicine and in medical education and		
	research.		
D	Protect patient privacy and confidentiality.	PR4D1	Describe how patient health information may be appropriately used
			within the research setting.
E	Demonstrate personal accountability and admit professional	PR4E1	Provide error disclosure to a patient in a simulated setting.
	mistakes openly and honestly with one's colleagues and		
	instructors and critically evaluate these mistakes to promote professional development.		
F	Recognize unprofessional behaviors in one's self as well as in	PR4F1	List the formal mechanisms through which unprofessional behavior is
•	peers and other health professionals with whom one interacts	1 1341 1	addressed at the state and national level.
	and address these in a constructive manner.	PR4F2	Describe possible consequences of improper professional behavior by
	and dadiese med sensuative mainlen.	111412	residents, and by practicing physicians in the academic and private
			practice setting.
		PR4F3	Apply appropriate resources to address improper professional behavior
			in peers and other health professionals.
G	Maintain personal health and well-being and achieve a	PR4G1	Discuss strategies for balancing patient care responsibilities and
	balance between priorities of patient care and personal and		personal and professional development.
	professional development.	PR4G2	Develop a study/work plan for PGY1 year.
Н	Provide culturally sensitive care to patients of diverse cultures	PR4H1	Incorporate knowledge of patients' life experiences, family, community
	and belief systems.		and ethnic background to provide culturally sensitive care to patients of

			diverse cultures and belief systems.
I	Develop empathetic, caring relationships with patients.	PR4I1	Demonstrate empathic caring relationships with patients in area(s) of specialty/disciplinary interest.
	J Identify gaps in medical knowledge, clinical skills (including communication skills), and professionalism, and develop a strategy for self-improvement.	PR4J1	Develop a plan for continued self-improvement of knowledge, skills, and professionalism during PGY 1 year.
ŀ	Actively seek and respond to feedback about professional performance.	PR4K1	Demonstrate insight as to profession-related strengths and weaknesses based on feedback from peers, colleagues, and faculty and develop a plan for personal and professional development based on this feedback.

YEAR 4: LIFELONG LEARNING (LL)

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their practice of medicine, specifically:

	Enabling Competency		Milestones	
Α	Demonstrate skills in retrieving, critically assessing, and	LL4A1	Critically assess and apply biomedical information to address	
	integrating social and biomedical information into clinical		diagnostic, prognostic and/or treatment questions in area(s) of	
	decision-making.		specialty/disciplinary interest.	
В	Discuss the basic principles of basic, clinical and translational	LL4B1	Describe the application of research findings to patient care in area of	
	research and how this research is applied to patient care.		specialty/disciplinary interest.	
		LL4B2	Explain research findings to patients.	
С	Reflect upon clinical and educational experiences, evaluate	LL4C1	Identify ways of improving one's own clinical performance and how to	
	positive and negative aspects, and make changes to improve		move towards fully achieving competencies.	
	future experiences.			

YEAR 4: SYSTEMS-BASED PRACTICE (SB)

Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value, specifically:

	Enabling Competency		Milestones	
Α	Use electronic and other information tools [e.g., including electronic health records and computer order entry] for	SB4A1	Use electronic health information to identify possible enhancements in patient care systems.	
	systems-based patient care.	SB4A2	Use an electronic patient registry.	
В	Identify necessary elements for coordinated care of patients with complex and chronic diseases.	SB4B1	Incorporate community and online resources into care of patients with complex and chronic diseases. Identify which resources are optimal for individual patients.	
		SB4B2	Discuss when it is appropriate for a patient to move between levels of care including discharge.	
		SB4B3	Describe the important elements of patient hand-off/care transitions.	
С	Advocate for enhanced access to health care for members of underserved populations.	SB4C1	Describe alternative hospital/physician payment policies including charity care and discuss the impact of these policies on patient access to care.	
D	Describe the principles underlying the delivery of high quality patient care and effective patient systems.	SB4D1	Identify specific opportunities for enhancement of patient care delivery systems across different levels of care.	
E	Outline the roles of the various members of the healthcare team and describe how these roles can be integrated for optimal patient care.	SB4E1	Develop patient care plans integrating the roles of health care team members across different levels of care.	

YEAR 4: IMPROVING THE HEALTH OF POPULATIONS (HP)

Students must demonstrate an understanding of the improvement of the health of populations, for both specific clinical populations and to diseases and conditions important to North Carolina and the US, specifically:

	Enabling Competency		Milestones
Α	Describe and apply principles of population health improvement for specific populations with attention to access, cost and clinical outcomes including quality of care, morbidity and mortality, functional status and quality of life.	HP4A1	Use data from a population (e.g., a panel of patients) using available data sources (e.g., EHR, public health surveillance data, claims data) to assess one aspect of population health and identify ways to improve the care system for this population.
В	Identify factors that place populations at risk for disease or injury, and select appropriate strategies for risk reduction.	HP4B1	Describe the limitations of clinical prevention strategies and compare/contrast these to non-clinical prevention strategies for risk reduction.
С	Describe various approaches to the organization, financing, and delivery of health care in the United States and other countries and the role of physicians in developing and implementing health policy.	HP4C1	Discuss the role of physicians as leaders and describe ways physicians can engage and influence health policy.
D	Identify disparities across populations in North Carolina and nationally, and discuss physician roles in reducing these	HP4D1	Identify health disparities in a specific population and develop physician and health system-based strategies to mitigate these disparities.
	disparities.	HP4D2	Discuss the effectiveness of strategies to improve health literacy.
E	Apply principles of patient safety and quality improvement to enhance patient care.	HP4E1	Describe lessons learned from participation in a project to improve patient safety and present findings and recommendations. Incorporate the principles of quality improvement to improve the care of
		111 762	patients with core medical problems.