POLICY TITLE
UNC School of Medicine TEC 2.0 Competencies and Milestones

PURPOSE AND SCOPE
To establish the program and learning objectives that the profession and public expect of a physician.

RESPONSIBLE PARTY AND REVIEW CYCLE
Senior Associate Dean for Medical Student Education and Education Committee shall review this document each fiscal year with input from Foundation, Application, and Individualization Phase Committees and informed by the results of annual program evaluation efforts.

LCME REFERENCE(S)
Standard 6.1: Program and Learning Objectives

HISTORY OF APPROVALS AND UPDATES
Approved by Education Committee October 17, 2022

POLICY
The following are the 2022 UNC School of Medicine Competencies and accompanying Enabling Competencies.

MILESTONES FOR UNC MEDICAL STUDENTS

PATIENT CARE AND PROCEDURES

Performance of History and Physical

Perform a problem-focused or complete (written or oral) history and physical examination as indicated and obtain necessary diagnostic studies, including imaging, laboratory and procedural tests.

PC 1	Undesirable	Entry				Aspirational
Thoroughness of History	Not engaged. Not focused on patient interaction.	Actively observes history taking by another clinician; engaged in learning during the encounter. May ask some questions of patient.	Performs part of a history or a basic history. Important information may be lacking or may be overly inclusive.	Performs a reasonably complete history. Gathers necessary elements to arrive at a correct diagnosis or short differential diagnosis. May be overly inclusive.	Performs a complete history. No major information is missed; perhaps a few small details forgotten; may be overly inclusive.	Targeted and appropriate history, including pertinent positives and negatives. Thoroughly and efficiently elicits patient's history.

PC 2	Undesirable	Entry				Aspirational
Organization of History	Disruptive when asking questions or entering the conversation.	Captures fragmented information without an intentional approach.	Demonstrate a disorganized approach to the patient interview, or heavily relies upon a template, but eventually captures pertinent information.	Demonstrates some organization in questioning the patient, with some reliance on template or notes. Misses some helpful information or broadly inclusive without focus.	Demonstrates an organized, structured approach to history taking. Able to independently obtain sufficient data with minimal reliance on a template or checklist.	Demonstrates an organized, structured, hypothesis-driven approach. Able to elicit all important aspects of HPI, medical history, current medications, family and social history.

PC 3	Undesirable	Entry				Aspirational
Thoroughness of Physical Exam	Not focused on patient interaction; performing unrelated activities such as texting.	Actively observes physical exam obtained by another clinician. Engaged in the encounter. May act hesitant or afraid to engage in PE.	Performs a rudimentary physical exam. Needs guidance to complete or to perform correctly.	Performs a reasonably complete physical exam with minimal guidance. Captures major physical findings pertinent to the case.	Performs exam independently with organized approach and inclusion of indicated maneuvers.	Performs a targeted, efficient, and accurate physical exam. Exam is appropriate based on clinical history. Able to identify subtle or unusual physical exam findings.

PC 4	Undesirable	Entry				Aspirational
Organization and Accuracy of Physical Exam (PE)	Performs PE skills in an inappropriate manner which could lead to patient harm.	Displays rudimentary knowledge of basic anatomy. With coaching, uses some physical exam equipment and/or perform vital signs.	Sequentially executes routine physical exam maneuvers but may perform incorrectly. (e.g., auscultate through clothing, insufficient pressure). Recognizes normal PE findings.	Performs standard PE maneuvers accurately. Recognizes major abnormal PE findings. May perform advanced or subtle maneuvers incorrectly.	Correctly performs standard PE and specific maneuvers as indicated by presentation and findings.	Demonstrates an organized, structured hypothesis-driven approach to the PE. Able to adapt physical exam skills to adverse situations (e.g., Emergency room, crying infant, significant pain).

Clinical Reasoning and Judgement

Interpret clinical information and formulate a prioritized differential diagnosis that reflects the use of medical knowledge in a probabilistic reasoning process while demonstrating safe and ethically sound clinical judgement commensurate with level of training.

PC 5	Undesirable	Entry				Aspirational
Thought process	Does not engage with preceptor or team in discussions. May act avoidant or distracted.	Asks questions or makes comments that are focused on factual clarifications and do not demonstrate recognition of key issues or priorities.	Asks questions or makes comments that reflect awareness of some key issues; unable to prioritize.	Asks questions or makes comments that reflect awareness of key issues and priorities, but this may be inconsistent or context specific.	Asks questions or makes comments that reflect a systematic identification of key issues and priorities in multiple situations.	Student's questions or comments reflect an ability to navigate complex situations or safely manage patients across settings and circumstances.

PC 6	Undesirable	Entry				Aspirational
Differential diagnosis	Does not engage with preceptor or team in clinical discussion. May act avoidant or distracted. Not focused on needs of the patient.	Actively engages in discussion of case; follows the clinical reasoning thought process of others.	Identifies some key problems in the case. Differential is too limited (single diagnosis) or too broad (generic differential that is not sorted into the top 2-3 possibilities).	Identifies all major problems in the case. Differential is focused on the top 2-3 relevant possibilities and includes acute threats (even if not most likely diagnosis).	Exhibits a logical approach to identifying major and minor problems. Recognizes appropriate priorities.	Efficiently identifies major and minor problems. Tailors prioritization in light of patient-specific considerations, including socioeconomic status.

PC 7	Undesirable	Entry				Aspirational
Diagnostic work-up	Does not engage with preceptor or team in clinical discussion. May act avoidant or distracted. Not focused on needs of the patient.	Actively engages in discussion of case; follows the clinical reasoning thought process of others.	Lists some possible diagnostic tests, but uncertain which apply in a given case.	Articulates a generic list of possible next steps; broad, unfocused, diagnostic work-up.	Articulates appropriate next steps of diagnostic work-up in optimal order.	Clearly outlines appropriate next steps in light of patient specific issues and consideration of costs. Models effective use of history and physical exam to guide the need for further diagnostic testing

PC 8	Undesirable	Entry				Aspirational
Health Information Systems	Does not seek out patient information from the medical record in development of clinical decisions.	Passively engages with the medical record such as observing others use the record or only using information provided by a third party (preceptor, resident, etc.)	Engages with the health record to find specific information pertinent to a patient's care but requires guidance for most tasks within the health record system.	Proactively uses the medical record to accurately summarize a patient's history and guide clinical decision making with minimal guidance; may require some guidance for extracting some key pieces of information.	Effectively uses all features of the electronic medical records and other health information systems and uses information from these systems to appropriately guide patient care but may not recognize shortcomings in the information provided.	Effectively uses all features of the electronic medical records and other health information systems, acknowledging system shortcomings (e.g. biases, abbreviated rendering of a patient's illness experience), and uses information from these systems to appropriately guide patient care.

PC 9	Undesirable	Entry				Aspirational
Assessment and plan	Does not engage with preceptor or team in discussions. May act avoidant or distracted.	Actively engages in discussion of case; follows the clinical reasoning thought processes of others.	Requires guidance to articulate key problems and formulate assessment.	Able to identify key problems; offers tentative assessment and general treatment options.	Commits to an assessment in discussion with supervisor and provides a basic outline of treatment plan.	Provides accurate assessment and appropriate, patient-specific treatment plan. Explains potential next steps to the patient/family during encounter.

INTERPERSONAL AND COMMUNICATION SKILLS

Communication with Patient/Family

Demonstrate effective communication skills that facilitate effective communication with patients and their families

IC 1	Undesirable	Entry				Aspirational
Rapport with patients and families	Conducts interview in a manner that is condescending, rude or uncaring. Demonstrates inappropriate behaviors (e.g. lack of awareness of, or respect for, interpersonal boundaries.)	Conducts appropriately polite patient interview: introduces self, calls patient by name, explains role on care team. Directive in approach; relies heavily upon a template of scripted questions.	Conducts patient interview in a caring manner that fosters the development of a therapeutic relationship. Some persistent reliance on a template but demonstrates active listening.	Elicits the patient's perspective and circumstances and calibrates language and vocabulary to that of the patient. Communicates complex information using non-technical language and avoids medical jargon.	Takes ownership for building a relationship, using statements of legitimization, affirmation, apology, and respect as appropriate. Manner encourages patient trust and disclosure of relevant concerns.	Fosters collaborative decision-making. Attentive to, and effective in, the education of patient/family. Explains potential next steps to the patient/family during encounter.

Communication with Colleagues

Present cases to supervisors or teams.

IC 2	Undesirable	Entry				Aspirational
Content of presentations to colleagues	Presentation misleading; may include findings that were not elicited in the patient encounter *(or in the research project or in provided paper case materials)*.	Reports inaccurate and/or omits basic information that would be necessary to guide the formulation of an appropriate treatment *(or research, or learning)* plan.	Provides a mostly accurate and complete presentation but may rely upon additional information provided by another team member or may include extraneous information.	Provides an accurate, complete, and logical summary of findings. More selective regarding pertinent information to report. May struggle to be appropriately succinct.	Provides a systematic and appropriately concise yet thorough presentation. Accurately reflects the encounter *(or project or case content)*. Reports any uncertainties in data gathering.	Provides a presentation that demonstrates a strong understanding of the case *(or project or encounter)* and instills trust in colleagues to act upon the information provided. Presents uncertainties in data with a plan for resolution.

IC 3	Undesirable	Entry				Aspirational
Flow and style of presentations to colleagues	Does not engage with colleagues in discussion. May act avoidant or distracted.	Gives an awkward (maybe stumbling) presentation; highly dependent on preceptor or other team member to articulate findings.	Relies heavily upon notes. Presentation disjointed; information presented in an illogical order.	Refers to notes only intermittently. Presentation cohesive and orderly. Focus is on delivery of information and not interpretation.	Presents information in a fluid manner with minimal reference to notes. Confidence allows more focus on discussion and interpretation of the case or project rather than the process of presentation.	Gives a smooth, poised presentation. Able to integrate relevant data and respond to inquiries without disruption of thought process.

Written Communication with Colleagues

In written communication, present information systematically and in a concise yet thorough manner that accurately reflects relevant research, background information, and the patient encounter.

IC 4	Undesirable	Entry				Aspirational
Content of written materials	Written materials are misleading; may include information that was not elicited in the research, background information, or patient encounter.	Reports inaccurate and/or omits basic information that would be necessary to guide the formulation of an appropriate plan or argument.	Reports some accurate and complete information, but additional information would be necessary to guide the formulation of an appropriate plan. May include extraneous information.	Reports an accurate, complete and logical summary of findings. Could be more selective regarding pertinent information to report. May struggle to be appropriately succinct.	Reports information in a systematic and appropriately concise yet thorough manner. Accurately reflects the research, background information, or encounter. Cites relevant scholarship where applicable but may not discuss it. Reports any uncertainties in data gathering.	Demonstrates a strong understanding of the case or topic and instills trust in colleagues to act upon the information provided. Cites and discusses relevant scholarship. Presents uncertainties in data with a plan for resolution.

MEDICAL KNOWLEDGE

Demonstrate Deep Knowledge
Demonstrate deep knowledge of the sciences essential for one's chosen field of practice.

MK 1	Undesirable	Entry				Aspirational
Integration	Mastery of prior learning is insufficient to support currently expected activities.	Demonstrates limited recall of information covered by earlier coursework.	Reviews/confirms information covered by earlier coursework with preceptor/team.	Demonstrates a firm recall of prior information.	Identifies relevant prior learning and relates that information to new case or problem.	Extrapolates newly acquired knowledge base, forming new connections.

MK 2	Undesirable	Entry				Aspirational
Depth	Mastery of prior learning is insufficient to support currently expected activities.	Demonstrates limited knowledge base. Understanding is descriptive, i.e. focuses on how things appear, without questioning.	Displays understanding hinging upon protocols or patterns rather than founded in an understanding of underlying physiologic mechanisms or foundational principles.	Displays understanding of appropriate underlying mechanisms/principles but may struggle to apply to a given case.	Immediately and insightfully places new information in proper context.	Creates unique insights and solutions to existing problems.

Approach to Learning
Collect, analyze, interpret, and prioritize new information to enhance one's knowledge in the various disciplines related to medicine.

MK 3	Undesirable	Entry				Aspirational
Analysis	Does not demonstrate desire to expand knowledge base.	Demonstrates a superficial approach. Frequently confuses association and cause.	Sorts information to align with underlying principles.	Discriminates between competing hypotheses and understands how hypotheses might be strengthened or disproved.	Identifies and challenges one's own assumptions; looks beyond basic information provided.	Broadly inclusive analysis; challenges accepted hypotheses.

MK 4	Undesirable	Entry				Aspirational
Inquiry	Does not engage. May act avoidant or distracted.	Focuses on information needed to complete requirements. Formulates questions with some difficulty and/or seldom asks questions.	Seeks to improve performance in the task at hand. Poses questions to clarifyspecific skills or case elements.	Seeks to use task at hand to deepen general knowledge. Formulates questions to master conceptual understanding.	Systematically tracks and pursues emerging questions.	Exhibits capability to help others articulate gaps in understanding and formulate questions.

MK 5	Undesirable	Entry				Aspirational
Use of information resources	Does not demonstrate desire to expand knowledge base.	Draws solely upon existing personal knowledge base or lay information.	Bases analysis on secondary information resources such as lectures, textbooks or aggregated resources such as "Up to Date."	In addition to secondary resources, begins to cite literature, such as a single article or a review article.	Incorporates multiple primary sources, inclusive of differing findings or conclusions.	Demonstrates critical appraisal of the information sources and weights value of each in addressing the issue at hand.

PRACTICE-BASED LEARNING AND IMPROVEMENT

Compare Data about Current Performance

Compare data about current performance at the individual, team, and/or systems level with expected outcomes, and identify and implement the learning strategies needed to improve performance while remaining flexible to the changing needs of the health care system.

PBL 1	Undesirable	Entry				Aspirational
Receptivity to Feedback	Openly resistant to, or passive in, direct observation or feedback processes.	Demonstrates difficulty receiving constructive criticism. May be avoidant, defensive or dismissive.	Demonstrates receptivity to the concept of feedback but focuses on elements that reinforce personal view of performance.	Demonstrates understanding of areas for improvement by acknowledging key aspects of feedback and/or seeking further clarification.	Demonstrates understanding of areas for improvement and actively seeks feedback from supervisors.	Actively and publicly seeks feedback from multiple sources, including those who are not supervisors.

PBL 2	Undesirable	Entry				Aspirational
Interpretation of Feedback	Openly resistant to, or passive in, direct observation or feedback processes.	Rationalizes performance or provides excuses rather than seeking to understand.	Minimally acknowledges feedback.	Proactively seeks clarifying information from supervisor or colleague to refine interpretation of feedback.	Demonstrates personal insight into past performance that facilitates understanding of external feedback.	Able to organize and articulate feedback for better personal or group understanding; "translates" feedback.

PBL 3	Undesirable	Entry				Aspirational
Self-knowledge	Does not seek to acknowledge limitations. Overly confident.	Fundamental gaps in knowledge and skill preclude self-knowledge; student may act overwhelmed or may not engage.	May be aware of limitations in knowledge and skill but does not verbalize to supervisors; or overstates limitations and defers appropriate responsibility.	Acknowledges limitations and asks for assistance. Assumes appropriate responsibility.	Demonstrates strong sense of ownership. Forthright acknowledgment of limitations engenders trust.	Anticipates potential limitations and proactively seeks guidance and/or learning opportunities. Understands health systemic constraints to and opportunities for self-improvement.

PBL 4	Undesirable	Entry				Aspirational
Self-assessment	Does not demonstrate value for self-assessment. Resists prompts to self-assess, or superficially cites adequate performance.	Relies exclusively upon externally initiated feedback. Absent or grossly inaccurate self-assessment.	If probed for self-assessment, response is superficial or token. States "I do not know" or shares uncertainties to solicit teaching.	If probed, self-assessment indicates prior independent consideration of performance. Self-assessment may be limited in scope, task orientated.	Spontaneously evaluates what went well and what did not go well in a given situation. Self-assessment is accurate and broad; addresses integration of skills and knowledge as well as personal capacity with regard to other factors (time, burnout, systemic resource availability, etc).	Applies insight from current and multiple prior activities to assess overall developmental progress.

PBL 5	Undesirable	Entry				Aspirational
Learning Plan	Refuses or minimally participates in setting learning goals or formal processes for developing plans (e.g. reflection meetings).	Relies exclusively upon external guidance to select next steps; inconsistent follow-through.	Pursues personal learning in response to external guidance; consistent follow-through.	Develops possible plan including concrete steps for improvement in specific areas but seeks external validation prior to implementation; completes recommended steps.	Independently generates plan for personal improvement, or actively contributes to plan for group.	Diligent in follow-through with respect to set goals; effective in pursuit of learning goals.

SYSTEMS-BASED PRACTICE

Elements of Effective Team Building

Discuss the elements of effective team building and use appropriate techniques to create, participate in and lead effective teams.

SBP 1	Undesirable	Entry				Aspirational
Initiative and contribution	Consistently demonstrates inefficiency, errors, or poor attitude.	Requires reminders from team or supervisor to complete responsibilities or to participate.	Actively engages in core individual and/or team activities.	Actively seeks opportunities to contribute. Reliably follows through on assigned tasks.	Spontaneously identifies needs of the patient/team and addresses these independently, as appropriate. Treats respectful disagreement as a feature of effective teamwork.	Effectively collaborates with team members and coordinates efforts to optimize care or learning outcomes.

SBP 2	Undesirable	Entry				Aspirational
Prioritization	Does not recognize need for, or is unwilling to accept guidance in setting priorities between multiple projects or patients.	Manages basic personal tasks and priorities. Struggles to identify key issues when presented with complex or multiple tasks.	Manages individual tasks well. Able to identify key issues when faced with multiple projects or patients but requires supervision to determine priorities.	Prioritizes among multiple projects or patient care activities. May be derailed by interruptions or distractions.	Independently prioritizes work to address multiple projects or patient care activities. Able to maintain focus despite distractions and interruptions.	Collaborates effectively with others to maintain team focus and address priorities.

SBP 3	Undesirable	Entry				Aspirational
Influence on group dynamics	Blocks communication; promotes unhealthy group norms; consistently distracts group from tasks; refuses to participate in improvement.	Does not contribute to or reinforce unhealthy group norms; sometimes distracts group from tasks.	Tries to promote healthy group norms; supports group focus on tasks.	Promotes healthy group norms; consistently directs focus of the group on tasks. Participates in group improvement efforts.	Demonstrates positive group leadership and promotes healthy group norms. Consistently directs focus of the group on tasks. Leads in group improvement efforts. Acknowledges value of diversity amongst team members.	Actively promotes group effectiveness, diversity, and improvement processes. Viewed by others as a leader or mentor.

Population and System Dynamics

Understand how both population and systems level issues can impact patient health and care, utilizing this information to improve the patient experience and advocate for equitable systemic change.

SBP 4	Undesirable	Entry				Aspirational
System Dynamics	Fails to acknowledge information pertaining to population or systems level issues even when prompted.	Acknowledges that population and systems level issues may impact patient health but fails to see how physicians and other healthcare providers can impact or use knowledge of these issues for patient benefit.	Uses available data on population and systems level issues and risk factors to identify how patient care may be impacted but is not yet able to actively address and mitigate these issues.	Uses available data of population and systems level issues and risk factors to help inform individual patient care, to understand the evolution of health care access over time, and to effectively guide patients through the health care system when issues arise.	Uses resources to understand, address and prevent issues from population and systems level risk factors in advance but requires guidance to anticipate these issues.	Proactively anticipates how population and systems level forces have shaped and continue to shape patient care, and engages available resources to maximize beneficial systemic impacts on the patient.

PROFESSIONALISM

Duties and Obligations

Demonstrate a commitment to the duties and obligations of the medical profession, its health care institutions, and its individual practitioners to patients, communities, and society through timely attention to coursework, administrative responsibilities, and patient care.

PR 1	Undesirable	Entry				Aspirational
Timeliness	Does not make an effort to arrive or complete professional tasks in a timely manner.	Occasionally arrives late but expresses active desire to be present and engaged; may require frequent reminders to complete professional tasks (academic, administrative or patient care) on time.	Consistently arrives in a timely manner; may require frequent reminders to complete professional tasks (academic, administrative or patient care) on time.	Consistently arrives in a timely manner but may require minor reminders to complete larger tasks (academic, administrative or patient care) on time.	Consistently arrives in a timely manner but may require minor reminders to complete smaller, administrative tasks on time; provides appropriate notice and justification when unable to meet deadlines.	Consistently arrives and completes professional tasks in a timely manner independently; provides appropriate notice and justification when unable to meet deadlines.

Professionalism: Honesty and Transparency

Demonstrate honesty and integrity regarding coursework, scholarly activity, administrative responsibilities, and patient care.

PR 2	Undesirable	Entry				Aspirational
Honesty	Misrepresents relevant experience (e.g., student presents themself to patient as a doctor). Dishonest regarding any academic work, one's whereabouts, or whether assigned duties are completed.	Displays general integrity regarding coursework and assignments. May attempt to circumvent rules for tasks perceived to be of minor importance or may have intermittent lapses in accountability for whereabouts.	Displays integrity regarding patient care duties and/or coursework, scholarly activity, research, and assignments.	Demonstrates honesty if unable to complete assigned tasks. Behaviors inspire confidence amongteammates and supervisors.	Demonstrates full transparency about conflicts of obligation and/or any "near-misses" or errors made. Acknowledges contributions of others.	Contributes actively to group processes that encourage honesty and accountability among members; which may include appropriate reporting of lapses in others.

Professionalism: Demonstrate Compassion and Respect

Demonstrate compassion and respect for all persons regardless of differences in values, beliefs, and experiences.

PR 3	Undesirable	Entry				Aspirational
Respect for all	Openly judgmental or hostile toward certain individuals or groups.* *If this is observed, the individual noting the behavior should seek guidance from UNC's Equal Opportunity, Affirmative Action and Disability Services.*	Acknowledges thatdifferences in values, beliefs, and experiences with fellow students, faculty and patients exist.	Listens respectfully to personal views and opinions of classmates, faculty and/or patients with differing views; may not express willingness to consider altering one's personal stance.	Empathetically listens in a non-judgmental manner. Acknowledges the perspectives of others and demonstrates willingness to critically analyze one's personal views.	Models non-judgmental interactions across settings or situations. Actively encourages others to share opposing views.	Strives to create a group or work environment that supports non-judgmental interactions among all members.