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UMass Chan Educational Program Objectives (Physician Competencies) 7 with Milestones 35

Physician as Professional (7 Milestones)

Always acting in the patient's best interest, this steadfast caregiver is compassionate and effective in high-stress situations. Honest, respectful interaction with patients and patient families preserves patient dignity and improves quality of care. Benefiting from intense mentoring, each graduating physician strives toward the highest ethical standards and life-long learning.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Behavior and Language	Pro1D. Demonstrates professionalism (i.e., honesty, integrity, altruism, compassion, boundaries, and respect) through behavior and language as a <u>learner</u>.	Pro1E. Demonstrates professionalism (i.e., honesty, integrity, altruism, compassion, boundaries, and respect) through behavior and language as a <u>clinical decision-maker</u>.	Pro1H. Demonstrates professionalism (i.e., honesty, integrity, altruism, compassion, boundaries, and respect) through behavior and language, as <u>befitting a physician</u>.
Ethics	Pro2D. Understands and recognizes fundamental ethical principles (i.e., patient confidentiality, respecting patient autonomy and boundaries, using electronic communications appropriately, and the reporting of medical errors, ethical concerns, and unethical behaviors).	Pro2E. Recognizes and performs in a manner consistent with fundamental ethical principles (i.e., patient confidentiality, respecting patient autonomy and boundaries, using electronic communications appropriately, and the reporting of medical errors, ethical concerns, and unethical behaviors).	Pro2H. Acts in a manner consistent with fundamental ethical principles (i.e., patient confidentiality, respecting patient autonomy and boundaries, using electronic communications appropriately, and the reporting of safety events, medical errors, ethical concerns, and unethical behaviors), as befitting a physician.
Teamwork	Pro3D. Understands the roles of health care professionals and consultants and works collaboratively in educational and/or clinical settings.	Pro3E. Team Participation: Demonstrates effective participation within interprofessional teams in educational and/or clinical settings.	Pro3H. Demonstrates effective and flexible participation within interprofessional teams in educational and clinical settings, as befitting a physician.
Standards and Scope of Practice	Pro4D. Establishes and maintains knowledge of the current standards of clinical care within their scope of practice.	Pro4E. Performs to the current standards of clinical care within their scope of practice.	Pro4H. Adheres to the current standards of clinical care within their scope of practice, as befitting a physician.

Attendance and Timely Responses	Pro5D. Attends to professional and administrative tasks including responding to school-related communication, punctual attendance, and accurate documentation in a timely manner as expected of a <u>learner</u>.	Pro5E. Professionalism: Completes professional and administrative tasks including responding to school-related communication, punctual attendance, and accurate documentation in a timely manner as expected of a <u>clinical decision- maker</u>.	Pro5H. Accomplishes professional and administrative tasks without prompting including responding to school-related communication, punctual attendance, and accurate documentation in a timely manner as <u>befitting a physician</u>.
Regulatory Measures	Pro6D. Gains awareness of the government and professional regulatory measures to monitor the qualifications of practitioners and ensure the quality of service that they provide.	Pro6E. Observes the application of the government and professional regulatory measures to monitor the qualifications of practitioners and ensure the quality of service that they provide.	Pro6H. Performs appropriately to the government and professional regulatory measures to monitor the qualifications of practitioners and ensure the quality of service that they provide, as befitting a physician.
Patient Centeredness	Pro7D. Attends to patient dignity and privacy with consideration of patient preferences and requirements in a non-stigmatizing way as expected of a <u>learner</u>.	Pro7E. Attends to patient dignity and privacy with consideration of patient preferences and requirements in a non-stigmatizing way as expected of a <u>clinical decision-maker</u>.	Pro7H. Attends to patient dignity and privacy with consideration of patient preferences and requirements in a non-stigmatizing way, as <u>befitting a physician</u>.

Physician as Scientist (3 Milestones)

This intellectually curious lifelong learner seeks new knowledge and clinical approaches to improve patient outcomes. Possessing knowledge in established and evolving scientific disciplines and significant research experience, each graduating physician can translate discovery into practice.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Core and Evolving Knowledge	Sci1D. Establishes, maintains, and, as appropriate, applies knowledge of core and evolving biomedical, clinical, translational, pharmacological, and other cognate sciences.	Sci1E. Applies knowledge of core and evolving biomedical, clinical, translational, pharmacological, and other cognate sciences.	Sci1H. Explains the core and evolving biomedical, clinical, translational, pharmacological, and other cognate sciences applying these principles to health and disease, as befitting a physician.
Scientific Method	Sci2D. Establishes, maintains, and, as appropriate, applies knowledge of the scientific method as an iterative, problem-solving process to improve patient care.	Sci2E. Applies the scientific method as an iterative, problem- solving process to improve patient care.	Sci2H. Explains and evaluates the application of the scientific method as an iterative, problem- solving process to improve patient care, as befitting a physician.
Evidence Based Reasoning	Sci3D. Identifies, articulates, and, as appropriate, applies currently accepted and evidence-based approaches to the treatment of patients.	Sci3E. Applies currently accepted and evidence-based approaches to the treatment of patients.	Sci3H. Explains currently accepted and evidence-based approaches to the treatment of patients, as befitting a physician.

Physician as Communicator (4 Milestones)

This approachable provider focuses on patient-centered care. Transparent, sensitive, and culturally competent, communication with diverse patients and their families builds strong, effective relationships. Skilled at fostering collaboration with healthcare team members and providing quality documentation, the graduating physician is prepared to achieve the highest standards of care.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Patient Communication	Com1D. Communicates appropriately during all stages of the doctor-patient relationship including assessing patient's understanding of communications.	Com1E. Communicates effectively during all stages of the doctor- patient relationship including assessing patient's understanding of communications.	Com1H. Communicates effectively during all stages of the doctor/patient relationship including self-assessment of own communication skills and consistent assessment of patient's understanding and preferences, as befitting a physician.
Written Communication	Com2D. Communicates with colleagues and team members in a responsible and responsive manner through appropriate <u>written</u> communication including medical record documentation, and/or other assignments.	Com2E. Documentation: Communicates with all colleagues and team members through appropriate <u>written</u> communication including accurate and complete medical record documentation, and/or other assignments.	Com2H. Communicates effectively with all members of the healthcare team utilizing <u>written</u> communication including accurate, timely and complete medical record documentation; responsiveness to outreach via the electronic health record (EHR), as befitting a physician.
Integration of Patient Factors	Com3D. Inquires about the impact of families, culture, language, and social determinants of health on the way that patients experience and communicate about illness and responds appropriately.	Com3E. Displays ability to integrate impact of families, culture, language, and social determinants of health on the way that patients experience and communicate about illness and responds appropriately.	Com3H. Adept at integrating the impact of families, culture, language, and social determinants of health on the way that patients experience and communicate about illness and responds as befitting a physician.
Verbal Communication	Com4D. Communicates with colleagues and team members in a responsible and responsive manner through appropriate <u>verbal</u> communication including oral presentations using a standardized format.	Com4E. Oral Presentation: Communicates with all colleagues and team members through appropriate <u>verbal</u> communication including using well-organized oral case presentations and while speaking with consultants and ancillary team members.	Com4H. Communicates effectively with all members of the healthcare team utilizing <u>verbal</u> communication including using the appropriate oral presentation format, speaking with multidisciplinary caregivers, and when negotiating conflict, as befitting a physician.

Physician as Clinical Problem Solver (7 Milestones)

This astute professional applies critical thinking and evidence-based Scientific knowledge to address the needs and preferences of each individual patient, and provide customized, responsive care. Highly developed clinical decision-making and data gathering skills ensure that each graduating physician is able to deliver the highest quality of patient care.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
History Taking	Sol1D. Acquires, synthesizes, and evaluates patient's medical history.	Sol1E. Demonstrates skills in acquiring, synthesizing, and evaluating the patient's medical history identifying key information gathered.	Sol1H. Consistently demonstrates skills in acquiring, synthesizing, and evaluating patient's history, as befitting a physician.
Physical Exam	Sol2D. Performs elements of a physical exam relevant to the clinical situation and patient concerns including identifying common abnormalities.	Sol2E. Conducts organized complete or focused physical exam including identifying abnormalities using diagnostic tools, if applicable.	Sol2H. Appropriately selects and conducts complete or focused physical exams, using appropriate diagnostic tools and interpreting abnormalities, as befitting a physician.
Analyzing Data	Sol3D. Evaluates patient's medical history, physical exam(s), diagnostic data, and utilizes literature sources to formulate a basic care plan.	Sol3E. Evaluates patient's medical history, physical exam(s), diagnostic data, and can effectively utilize literature sources to determine care appropriate to the patient.	Sol3H. Has the skills to evaluate all available information (history, physical exam, diagnostic data) relevant to the patient, and can effectively utilize literature sources to develop a patient-centered care plan, as befitting a physician.
Management Plan Formulation	Sol4D. Identifies and differentiates clinical reasoning strategies to formulate differential diagnoses and develop management plans while acknowledging limitations of scientific/medical knowledge.	Sol4E. Demonstrates clinical reasoning strategies and can choose and interpret diagnostic tests to formulate differential diagnoses and develop management plans while considering limitations of scientific/medical knowledge.	Sol4H. Employs clinical reasoning strategies and diagnostic testing to formulate differential diagnoses and develops management plans that reflect patient preference and best available evidence using judgment, as befitting a physician.

Procedures	Sol5D. Identifies and articulates the indications and risks of selected medical procedures.	Sol5E. Observes medical procedures in the clinical setting verbalizing indications and risks and/or performs medical procedures in simulated scenarios using appropriate technique.	Sol5H. Explains the indications, risks, procedural steps for common medical procedures and can perform effectively, as befitting a physician.
Problem Solving Hazards and Bias	Sol6D. Identifies and articulates common and implicit biases and hazards in successful problem- solving processes and develops strategies to negate effects to improve patient safety and person-centered care.	Sol6E. Cognizant of common and implicit biases and hazards in successful problem-solving processes and continually develops strategies in order to improve patient safety and care.	Sol6H. Explains common and implicit biases and hazards in successful problem-solving processes and employs strategies to negate effects to improve patient safety and care, as befitting a physician.
Medical Practice and Principles	Sol7D. Establishes and maintains knowledge of medical principles and practices used to determine care appropriate to an individual patient.	Sol7E. Applies evidence-based practices and medical principles to determine care appropriate to an individual patient.	Sol7H. Delivers care that is evidence informed, customized and responsive to individual patients, as befitting a physician.

Physician as Patient & Community Advocate (3 Milestones)

This humanitarian is concerned about the health of people within our diverse communities, across the commonwealth and the world. As a patient advocate, the graduate promotes health care accessibility and overall community health. By providing care to vulnerable populations in our community, each graduating physician understands how to attend to patients in need.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Determinants of Health	Adv1D. Recognizes the need to understand the determinants of health of individual patients and vulnerable populations to improve patient care.	Adv1E. Understands the determinants of health of individual patients and vulnerable populations, recognizing the impact on healthcare access, wellness and disease and uses knowledge to improve patient care.	Adv1H. Explains the determinants of health of individual patients and vulnerable populations and undertakes to improve patient care, as befitting a physician.
Improving Health	Adv2D. Recognizes the need to advocate for improving the health of individual patients and populations in need.	Adv2E. Advocacy: Applies the skills needed to advocate for improving the health of individual patients and populations in need.	Adv2H. Advocates to improve the health of individual patients and populations in need, as befitting a physician.
Common Good	Adv3D. Recognizes the need to contribute to the common good and participates in projects that enhance the well-being of others.	Adv3E. Understands the physician's obligation of contributing to the common good and designs projects or activities that enhance the well-being of others.	Adv3H. Undertakes the physician's obligation to contribute to the common good and enhance the well-being of others, as befitting a physician.

Physician as Person (5 Milestones)

This self-reflective professional is passionate about helping people live healthier lives and commits to a lifelong journey of health, fulfillment, and professional growth in medicine. Each of our graduates draws on personal life experiences and unique perspectives to enrich and embrace the diversity and caring culture of the medical community.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Learning Engagement	Per1D. Seeks and participates in educational and/or clinical opportunities to develop their personal and professional knowledge and skills.	Per1E. Continuously seeks and participates in opportunities to advance their personal and professional knowledge and skills with curiosity and humility.	Per1H. Appreciates the need for lifelong learning in the profession and will seek and participate in personal and professional opportunities, as befitting a physician.
Open-mindedness	Per2D. Demonstrates open- mindedness toward others by accepting others' perceptions and feedback as a <u>learner</u>.	Per2E. Demonstrates open- mindedness toward others by accepting others' perceptions and feedback as a <u>clinical decision-maker</u>.	Per2H. Practices open-mindedness toward others by accepting others' perceptions and feedback, as <u>befitting a physician</u>.
Self-Awareness and Assessment	Per3D. Demonstrates self- awareness and self-assessment skills to identify personal (emotional/behavioral), professional, and/or educational development areas.	Per3E. Develops self-awareness and self-assessment skills to identify personal (emotional/behavioral), professional, and educational development areas.	Per3H. Appreciates self-awareness and self-assessment skills for continual development, as befitting a physician.
Relationship Development	Per4D. Recognizes the need to develop skills to foster a sense of inclusion, cooperation, and well- being with colleagues, team members, and patients to support relationship building.	Per4E. Develops fulfilling relationships by fostering a sense of inclusion, cooperation, and well-being with colleagues, team members, and patients.	Per4H. Participates in fulfilling relationships with colleagues, team members, and patients by fostering a sense of inclusion, cooperation, and well-being, as befitting a physician.
Self-Care	Per5D. Recognizes need for personal (emotional/behavioral) and professional (skills/well-being) support, seeks out appropriate resources as needed.	Per5E. Utilizes appropriate resources for personal (emotional/behavioral) and professional (skills/well-being) support as needed.	Per5H. Practices personal and professional development and self-care using support resources as needed, as befitting a physician.

Physician as Healthcare System Navigator (6 Milestones)

This thoughtful professional understands the complexities and improvement opportunities within our nation's health care system. They know the continuum of care and how interrelated systems optimally lead to delivering the safest, highest-quality care at the proper cost. They understand the role of informatics and the imperative of improving access, equity, and outcomes across all populations.

Focus	Discovery (2.5 Development Target)	Exploration (3.5 Development Target)	Horizons (4.0 Graduation Target)
Quality Improvement and Patient Safety	Nav1D. Recognizes the dual roles of quality improvement and patient safety in healthcare, including identifying deficiencies in existing processes and change initiatives.	Nav1E. Understands the dual roles of quality improvement and patient safety in healthcare, participating in the identification of, and response to, performance gaps in in existing processes.	Nav1H. Comprehends the potential for harm within the provision of healthcare and participates in protocols that protect patients including the steps that follow safety events, as befitting a physician.
Healthcare Process	Nav2D. Recognizes the structures and processes that relate to the provision of healthcare, including financing and transitions of care.	Nav2E. Operates within a variety of healthcare settings, collaborating with interprofessional personnel, and gaining higher-level knowledge of processes including financing and transitions of care.	Nav2H. Describes how healthcare is financed, including government and private payer platforms, the roles of government, employers and individuals, and models including single payer systems, health maintenance organizations, preferred provider organizations, and accountable care organizations, as befitting a physician.
Informatics	Nav3D. Recognizes the significance of healthcare informatics, including strengths and vulnerabilities of the electronic health record (EHR).	Nav3E. Using the EHR: Understands the functional capabilities of the EHR, use and re-use of data, interoperability, security, and confidentiality, incorporating all of this into clinically oriented activity.	Nav3H. Describes informatics applications including computerized provider order entry, health information exchange, and clinical decision support including the potential impacts of service interruptions and information breaches, as befitting a physician.
Health Equity	Nav4D. Establishes and maintains knowledge of terms, concepts, and influences related to population health and health equity.	Nav4E. Applies knowledge of population health and health equity to how health outcomes vary within and across populations.	Nav4H. Delivers care that anticipates how health outcomes vary within and across populations including the impact of bias, structural racism, language, and culture on healthcare, as befitting a physician.

Value Based Practice	Nav5D. Establishes and maintains knowledge related to value-based practice, defined as providing the best possible care while minimizing costs to patients, providers, delivery systems, and payers.	Nav5E. Uses knowledge of value-based practice as clinical experience is accumulated in a variety of healthcare delivery settings.	Nav5H. Explains and evaluates the concept of and rationale for value-based practice while using while using evidence-based medicine, guidelines, and tools, as befitting a physician.
Healthcare Systems	Nav6D. Recognizes that the healthcare system is comprised of stakeholders including patients, families, delivery systems, providers, and leaders.	Nav6E. Understands how the patient experience and outcomes are impacted by systems of care and applies that knowledge to decision-making and action.	Nav6H. Describes how patient experience and outcomes of care are impacted by the function of healthcare delivery systems and how healthcare providers and leaders function within these systems, as befitting a physician.