Virginia Tech Carilion School of Medicine
Educational Program Objectives and Subcompetencies
Curriculum Committee Votes for Consideration
BIC1, BIC2, MCC
August 2023
Competency Domain 1: Patient Care
Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

PC1_Educational Program Objective 1: Gathering Essential and Accurate Information
Demonstrate efficient and appropriately detailed patient-centered interview, physical and mental health examination skills for a variety of clinically complex presentations.

Subcompetency 1: Interview skills
Demonstrate efficient and appropriately detailed patient-centered interview skills for a variety of clinically complex presentations.

Subcompetency 2: Physical and mental status examination
Demonstrate efficient and appropriately detailed patient-centered physical and mental health exam skills for a variety of clinically complex presentations.

PC2_Educational Program Objective 2: Clinical and Diagnostic Reasoning
Filter, prioritize, and synthesize history, physical and mental status examinations, using critical thinking skills to interpret diagnostic data and reach a diagnosis in a variety of clinically complex presentations.

Subcompetency 3: Differential diagnosis
Filter, prioritize, and synthesize the history, physical exam and diagnostic testing to develop and recognize a differential diagnosis, based on physiologic, anatomic, etiologic, organ system, and category-based knowledge and analysis, for a variety of clinically complex presentations.

PC3_Educational Program Objective 3: Patient Management Plans
Devise and adapt evidence-based treatment plans towards patient-centered management of a variety of clinically complex presentations in collaboration with broader support systems and specialty consultations.

Subcompetency 4: Diagnostic tests and specialty consultations
Describe, including the science underlying various diagnostic assays, interpret, and prioritize cost-effective evidence-based diagnostic testing and consultative services.

Subcompetency 5: Treatment plans
Formulate, appraise and adapt appropriate treatment plans, including mechanisms of action of drug therapies, and management of a variety of clinically complex presentations.

Subcompetency 6: Incorporating broader support in management plans
Incorporates broader support systems in the development of patient management plans.

PC4_Educational Program Objective 4: Health Maintenance and Prevention
Provide care to patients, families, and communities aimed at preventing health problems and maintaining health.

Subcompetency 7: Identifying and communicating preventive care recommendations
Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health
PC5_Educational Program Objective 5: Procedural Skills
Demonstrate applied knowledge and technical skills necessary to prepare and safely perform general procedures of a physician.

Subcompetency 8: Clinical procedures
Demonstrate applied knowledge, and technical skills necessary to prepare and safely perform general procedures of a physician.
Competency Domain 2: Medical Knowledge
Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

MK1_Educational Program Objective 6: Biopsychosocial Scientific Principles Fundamental to Health
Applies basic science principles to patient care.

Subcompetency 9: Basic science foundation
Demonstrate foundational basic science assimilation in patient care.

MK2_Educational Program Objective 7: Scientific Approach to Clinical Situations
Uses a scientific approach in clinical reasoning and research.

Subcompetency 10: Scientific approach to clinical situations
Apply a scientific approach in clinical reasoning and research.

MK3_Educational Program Objective 8: New Healthcare Knowledge and Practice
Conducts research using systems thinking to inform clinical practice.

Subcompetency 11: Research
Compose feasible research questions and hypotheses to generate evidence that informs clinical practice.
Competency Domain 3: Systems-Based Practice
Demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively identify and collaboratively utilize on other resources in the system to provide optimal health care.

SBP1_Educational Program Objective 9: Systems Thinking
Demonstrates an understanding and ability to apply a systems thinking mindset and approach to clinical and team-based situations.

Subcompetency 12: Systems thinking
Ability to understand, analyze, and improve the approach to patient, team, and systems issues through identifying the interdependencies that exist between system components with the goal of enhancing problem-solving and decision-making to positively influence patient health and system improvement.

SBP2_Educational Program Objective 10: Patient Safety and Quality Improvement
Promotes patient safety, effectively communicates, and engages in efforts to mitigate and disclose errors.

Subcompetency 13: Prevention of patient safety events
Analyze patient safety events, identify contributing systems issues, and propose error prevention strategies.

Subcompetency 14: Patient safety
Demonstrate care that promotes patient safety, models clear communication, and engages in efforts to mitigate errors.

Subcompetency 15: Disclosure of patient safety events
Identifies, reports and discloses patient safety concerns in a timely manner using recommended system reporting structures.

Subcompetency 16: Quality improvement
Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project.

SBP3_Educational Program Objective 11: System Navigation for Patient Centered Care
Collaborates with health system and community partners to innovate and advocate for improvements that optimize patient outcomes.

Subcompetency 17: Care coordination of a patient’s care
Contributes to effective and timely coordination of a patient’s care.

Subcompetency 18: Transitions of care and handoffs
Ability to contribute to and lead effective and safe patient handoffs between units, shifts, and healthcare delivery settings.

Subcompetency 19: Population and community health needs and inequities
Ability to assess and address healthcare inequities of patients in local, regional, and national contexts with the goal of improving outcomes for diverse patient populations.
SBP4_Educational Program Objective 12: Physician Role in Healthcare Systems
Advocates for equitable patient care and facilitates education and action for changes within the healthcare system.

Subcompetency 20: Healthcare delivery and change agency
Ability to understand the core aspects of complex healthcare delivery systems, including during times of different emergent challenges, including pandemics, and be a change agent that improves patient and population health and health systems.

Subcompetency 21: Policy and advocacy
Ability to understand local and federal macrosystems of care and advocate for change at the local level to improve health.

Subcompetency 22: Transition to practice
Ability to identify needs and engage in successful and effective transitions between professional phases towards independent practice.

Subcompetency 23: Leadership
Ability and individual qualities necessary to effectively lead teams and situations to improve patient health and health systems.
**Competency Domain 4: Practice-Based Learning and Improvement**

Demonstrate the ability to investigate and evaluate one’s care of patients, to critically appraise and assimilate scientific evidence, and to continuously improve patient care based on through constant self-evaluation, self-reflection, and life-long learning.

**PBLI1_Educational Program Objective 13: Evidence Based and Informed Practice**
Employs critical analysis and appraisal to apply relevant scientific evidence to guide individualized patient care.

- **Subcompetency 24: Critical thinking and inquiry**
  Demonstrates ability to incorporate scientific evidence and patient care experience to generate new clinically relevant knowledge

- **Subcompetency 25: Appraisal and evidence-based medicine applications**
  Critically appraise and apply evidence to guide individualized patient care.

**PBLI2_Educational Program Objective 14: Commitment to Personal Growth and Reflective Practice**

Incorporates reflective practice, humble adaptability, and individualized improvement plans to foster a commitment to personal growth and patient care excellence.

- **Subcompetency 26: Personal performance data**
  Proactively seeks performance data in a spirit of humble adaptability.

- **Subcompetency 27: Reflective practice**
  Incorporates reflective practice and individualized improvement plans as a commitment to personal growth and improve patient care.

- **Subcompetency 28: Personal and professional learning plans**
  Creates, implements, and measures informed learning plans.
Competency Domain 5: Professionalism
Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

PROF1_ Educational Program Objective 15: Professional Behavior and Ethical Principles
Models professional behavior, adheres to ethical principles, and utilizes appropriate resources.

  Subcompetency 29: Professionalism adaptations
  Ability to demonstrate professionalism adaptations that allow for identifying professionalism triggers/lapses and the demonstration of professional behavior in routine/complex situations and in coaching others.

  Subcompetency 30: Ethical principles, practice, and solutions
  Ability to demonstrate a comprehensive understanding and necessary skills to act upon ethical principles in medical practice with patients and healthcare professionals.

  Subcompetency 31: Responsible conduct of research
  Ability to demonstrate responsible conduct of research and scholarly activity throughout all phases of work, including planning, implementation, and dissemination.

PROF2_ Educational Program Objective 16: Accountability/Conscientiousness
Demonstrates behavior that is conscientious, accountable, and proactive in implementation of strategies that maximize patient and systems outcomes.

  Subcompetency 32: Conscientious behaviors
  Ability to demonstrate conscientious behaviors for effective and responsible medical practice as a student physician.

PROF3_ Educational Program Objective 17: Self-Awareness and Help-seeking
Recognizes and creates methods to acquire professional growth and well-being resources.

  Subcompetency 33: Self-awareness and well being
  Ability to demonstrate self-awareness and promote well-being to develop a holistic approach to patient care and maintain personal resilience.

  Subcompetency 34: Help-seeking for professional growth
  Ability to demonstrate the skills and mindset necessary to recognize limitations, seek appropriate help, and proactively improve knowledge and skills.
Competency Domain 6: Interpersonal and Communication Skills
Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families and family systems, and members of the healthcare team.

ICS1_ Educational Program Objective 18: Patient and Family-Centered Communication
Utilizes and models critical self-reflection and awareness to establish rapport and effective communication approaches with patients and family systems.

Subcompetency 35: Rapport and therapeutic relationships
Ability to establish and maintain therapeutic relationships with patients in a spectrum of encounter complexity.

Subcompetency 36: Communication approaches to minimize barriers
Ability to demonstrate communication approaches that minimize barriers in healthcare interactions with patients, healthcare professionals, and other stakeholders.

Subcompetency 37: Shared-decision making
Ability to engage in and demonstrate shared decision-making skills that facilitate adjustment of communication strategies based on patient and family needs, expectations, and values to create personalized care plans.

ICS2_ Educational Program Objective 19: Interprofessional and Team Communication
Effectively communicates and collaborates with individuals from different health professional backgrounds and disciplines within a team or healthcare setting.

Subcompetency 38: Collaborative consultations
Effectively partners as an integrated member of the team and appropriately seeks/provides consultation to optimize health care delivery.

Subcompetency 39: Teaming and team performing improvement
Applies active listening and bidirectional adaptive communication style to align with team needs and model effective feedback.

ICS3_ Educational Program Objective 20: Communication within the Healthcare System
Effectively communicates within complex healthcare environments through appropriate verbal, written, and team-based methods to meet the needs of patients.

Subcompetency 40: Oral presentations and electronic health record documentation
Ability to communicate in an accurate, concise, and organized manner in oral case presentations and electronic health record documentation while ensuring patient privacy and confidentiality.

Subcompetency 41: Communication of systems issues
Ability to effectively communicate with stakeholders about systems issues, inclusive of assessing, addressing and improving healthcare delivery systems issues.

ICS4_ Educational Program Objective 21: Scientific Communication with Patients, Colleagues, and Academic Community
Effectively communicates inquiry-based issues, scientific information, research findings, and medical knowledge to diverse audiences in a clear, accurate, and understandable manner.

Subcompetency 42: Communication of scientific evidence
Effectively communicates scientific evidence and implications of evidence in the healthcare setting.