Osteopathic Core Competencies for RowanSOM Students

Submitted by SOM Curriculum Committee Revised March 21, 2013

I. Medical Knowledge

Students will demonstrate the understanding and application of osteopathic, biomedical, clinical, epidemiologic, biomechanical, social, and behavioral sciences in the context of patient-centered care.

- **1.1 Basic Science Concepts**: Knowledge of basic science concepts and principles as they relate to normal human structure and function and the interaction between systems in maintaining homeostasis.
- a. Knowledge of the molecular, cellular, biochemical, and genetic mechanisms involved in normal human function across the lifespan.
- b. Knowledge of the physical structure of the human body at the macroscopic and microscopic level.
- **1.2 Mechanism of Disease and Clinical Presentation**: Knowledge of endogenous and exogenous agents (environmental, microbial, nutritional, etc.) involved in disease development and normal aging.
- a. Knowledge of the key elements of the patient presentations related to digestion and metabolism.
- b. Knowledge of the key elements of the patient presentations related to cognition, behavior, sensory & central nervous systems, substance abuse, and visceral and sensory pain.
- c. Knowledge of the key elements of the patient presentations related to the musculoskeletal system, including somatic pain.
- d. Knowledge of the key elements of the patient presentations related to the genitourinary system and human sexuality.
- e. Knowledge of the key elements of the patient presentations related to circulation and the respiratory system.
- f. Knowledge of the key elements of the patient presentations related to the endocrine system.
- g. Knowledge of the key elements of the patient presentations related to trauma, masses, edema, discharge, and the skin, hair and nails.
- h. Knowledge of the key elements of the patient presentations related to pregnancy, the peripartum, and the neonatal period.
- **1.3 Prevention and Wellness**: Knowledge of population-based health and wellness concepts in the prevention and management of disease.
- a. Knowledge of population-based health concepts and patients with presentations related to health promotion, chronic disease management, and human development.
- b. Knowledge of health promotion measures including nutrition and behavioral factors.
- c. Knowledge of the role of psychological, behavioral, cultural and spiritual dimensions of health and wellness.

- **1.4 Somatic Dysfunction**: Knowledge of the key concepts and principles in identifying and treating somatic dysfunction.
- a. Knowledge of altered structure and function involved in the development of disease and in normal aging.
- b. Knowledge of the interrelatedness of structure and function in the human body and how it guides physical examination for patient presentations.
- c. Knowledge supporting the use of osteopathic principles and practice and OMT, including the basic science of the mechanisms of OMT and of somatic dysfunction across body regions and the current evidence base for the clinical application of OMT.
- d. Knowledge of the indirect and direct types of OMT as well as the indications/contraindications for each of the following: counterstrain, muscle energy, myofascial release, high velocity low amplitude thrust, soft tissue, lymphatic, osteopathy in the cranial field, articulatory, balanced ligamentous tension, ligamentous articular strain, facilitated positional release, Still, visceral, and including treatment of Chapman reflexes, and treatment of trigger points.
- **1.5 Application of Scientific Concepts and Evidence**: Application of scientific concepts and the latest evidence to support clinical decision-making.
- a. Use of scientific concepts to evaluate, diagnose, and manage patients and to promote population health.
- b. Recognition of the limits of his/her medical knowledge and utilizes appropriate resources.
- c. Application of evidence based guidelines as a component of decision-making.

II. Patient Care

Students will demonstrate the ability to effectively treat patients and provide medical care that incorporates the osteopathic philosophy, patient empathy, awareness of behavioral issues, the incorporation of preventive medicine, and health promotion.

- **2.1 Information Gathering**: Ability to elicit essential and accurate patient data appropriate for the clinical situation.
- Conduct a complete, focused, or interval history as appropriate with infant, child, adolescent, adult, pregnant, and geriatric patients with emphasis on assessing potential structure-function and mindbody-spirit relationship influences.
- b. Perform a complete and appropriately focused physical examination of an infant, child, adolescent, adult, pregnant, and geriatric patient.
- c. Diagnose somatic dysfunction with the ten body regions.

- **2.2 Medical Decision-making**: Make informed decisions about diagnostic and therapeutic interventions based upon a synthesis of patient information and preferences, up-to-date evidence and clinical judgment.
- a. Present a complete, well organized summary of the findings of the patient's history and physical examination.
- b. Interpret the results of commonly ordered laboratory tests and radiologic studies
- c. Develop a complete problem list and combine problems where appropriate to develop a differential diagnosis.
- d. Educate their patients on the importance of health maintenance and disease prevention and recommend all nationally accepted routine screening tests and health maintenance visits.
- e. Apply osteopathic principles and practice to resolve complaints and concerns with which patients commonly present.
- f. Document in the medical record patient history, physical findings (including somatic dysfunction), diagnostic impression, and care plans (including any use of OMT).
- **2.3 Perform Essential Clinical Procedures**: Perform procedures essential to the delivery of routine medical care to patients.
- a. Perform effective indirect and direct types of OMT, including counterstrain, muscle energy, myofascial release, HVLA, soft tissue, lymphatic, cranial, articulatory, balanced ligamentous tension, LAS, FPR, Still, visceral, treatment of Chapman reflexes, and treatment of trigger points.
- b. Accurately measure all vital signs.
- c. Demonstrate all facets of Sterile Technique.
- d. Perform surgical knot tying, suture placement, and suture removal.
- e. Apply simple wound dressings.
- f. Perform the incision and drainage of a simple abscess.
- g. Read a chest x-ray.
- h. Read an abdominal CT scan.
- i. Read an abdominal obstruction series.
- j. Identify a fracture radiographically.
- k. Perform phlebotomy and administer intradermal, subcutaneous, and intramuscular injections.
- I. Obtain peripheral intravenous access.
- m. Read an EKG.
- n. Administer basic cardiac life support (BCLS).
- o. Insert a Foley catheter in both a male and female patient.
- p. Perform a pelvic exam on a female patient.
- q. Perform an uncomplicated, spontaneous vaginal delivery.
- r. Perform a mental status evaluation.
- s. Perform a cognitive status assessment (MMSE, Mini-Cog, Confusion Assessment Method).
- t. Perform a gait assessment.
- u. Perform a falls risk assessment.
- v. Perform depression screening adult, child, post-partum, and geriatric.
- w. Perform a functional assessment (ADLs and IADLs).
- x. Obtain and interpret orthostatic blood pressure.
- y. Perform a vision exam.
- z. Perform a hearing exam.

- aa. Obtain appropriate specimens for common laboratory tests.
- bb. Perform and interpret results of a lumbar puncture.
- cc. Perform endotracheal intubation.
- dd. Insert a nasogastric tube.
- ee. Describe diagnostic procedures, therapeutic options, and care plans at a level commensurate with the patient's health literacy.
- ff. Obtain informed consent, communicating appropriately based on the patient's health literacy.

III. Professionalism

Students should demonstrate and maintain the knowledge and skills required to diagnose and treat patients beneficently and to preserve the practice of medicine as a public trust.

- **3.1 Primacy of Patient Need**: Develop and demonstrate concern for the needs and interests of patients.
- a. Provide patient care that honors the patient's dignity
- b. Protect confidential information about or shared by the patient
- c. Invite the patient to share how he/she understands his/her malady
- d. Discuss the patient's concerns or worries in an open and nonjudgmental manner
- e. Respect the patient's rights to be fully involved in treatment decisions
- f. Assist the patient in understanding his/her condition, the benefits and burdens of available treatments, including the risk of failure, and the potential consequences of refusing treatment
- g. Assist the patient in weighing the burdens and benefits of treatment
- **3.2 Accountability**: Develop and demonstrate the readiness to protect patient safety and coordinate care.
- a. Acquire the knowledge and skills required to take care of patients
- b. Utilize appropriate knowledge and skills to take care of patients
- c. Recognize the limits of one's expertise and the need to refer patients to trustworthy professionals
- d. Recognize human fallibility and identify systematic improvements that could better protect patients from harm
- e. Respect the knowledge, skill, and dedication of other healthcare professionals and workers
- f. Acknowledge differences of opinion, recognizing the limits of one's own perspective, and welcome opportunities to learn from others
- g. Promote an environment of open and respectful communication so that all members of the interdisciplinary health care team can understand their role, articulate their concerns, and identify or assist the professional responsible for coordinating the patient's care

- **3.3 Advocacy**: Develop and demonstrate awareness of the needs and interests of underserved or vulnerable populations and working to improve their medical care.
- a. Demonstrate knowledge about barriers that limit access and/or impede adherence to treatment
- b. Collaborate with others to improve the distribution and quality of medical care, especially in underserved communities or regions
- c. Demonstrate willingness to speak on behalf of those whose needs for healthcare are not being met
- **3.4 Fidelity:** Develop and demonstrate the capacity to place the interests of patients above one's own.
- a. Recognize personal biases and how they can affect patient care, and strive to suspend their influence
- b. Recognize the potential for conflicts of interests and scrupulously avoid them.
- c. Prevent personal loyalties from undermining or devaluing the interests of patients
- **3.5 Integrity**: Develop and demonstrate the virtues of truthfulness and self-care.
- a. Ensure any publications are factual and well supported by reliable evidence
- b. Avoid exaggerating the quality of services or the results of interventions
- c. Accurately report the training and credentials of physicians and staff
- d. Use appropriate precautions to safeguard oneself, one's patient and one's colleagues
- e. Recognize the importance of maintaining healthy habits in both professional and personal life

IV. Interpersonal and Communication Skills

Students will demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.

- **4.1 Communication**: Utilize appropriate and effective communication strategies to both elicit and provide health care information to patients and their families
- a. elicit the patient's complete and accurate present and past medical, surgical, social, family, allergy, medication history, and mechanism of injury or condition
- b. generate, document and test numerous reasonable hypotheses during the course of interviewing patients
- c. share information using appropriate language that the patient and/or the patient's legal decision maker can understand; summarize discussions and check for understanding; and conclude conversations by ensuring all questions and concerns have been thoroughly addressed
- d. recommend and explain appropriate prevention and health promotion strategies, including lifestyle changes, and follow-up plans
- e. develop and maintain accurate, comprehensive, timely, and legible medical records

- **4.2 Rapport Building**: Create and sustain a therapeutically sound relationship with patients in order to effectively meet their health care needs
- a. use open-ended and closed-ended questions appropriately and listen actively, using appropriate verbal and nonverbal (e.g., eye contact) techniques
- b. communicate interest in, respect for, and support for the patient in a manner sensitive to gender, racial, and cultural diversity
- c. take responsibility when an error occurs in a patient's care, apologize promptly, explain what occurred and the short- and long-term implications
- d. communicate and encourage patient responses, as appropriate, during clinical procedures.
- **4.3 Interprofessional Team Collaboration:** Work effectively with others, including peers, residents, faculty and other health care professionals, as members of a health care team
- a. collaborate with other health care professionals in the care of the patient demonstrating effective personal skills and interpersonal dynamics
- b. communicate a coherent story of illness, diagnosis, and treatment
- appropriately communicate with consultants and other health care professionals upon and after
 patient referral, providing the required background information and clarity regarding roles to ensure
 continuity of care

V. Practice-Based Learning and Improvement

Students will learn to continuously evaluate osteopathic clinical practice utilizing evidence-based medicine approaches to develop best practices that will result in optimal patient care outcomes.

- **5.1 Fundamental Epidemiologic Concepts**: Demonstrate an understanding of study designs and basic statistical concepts in order to interpret the scientific literature.
- a. Define and interpret basic epidemiological terms and concepts including incidence, prevalence, relative risk, sensitivity, and specificity.
- b. Identify different basic study designs including cohort studies, case-control, randomized controlled trials and meta-analytic.
- c. Interpret basic statistics used to measure central tendency, variability, and statistical significance.
- **5.2 Evidence-Based Medicine Principles and Practice:** Identify, evaluate, and integrate evidence from scientific & clinical studies related to patients' health care needs
- a. Develop skills in searching the medical literature to identify relevant peer-reviewed resources for specific research topics and clinical questions.
- b. Apply the knowledge of study designs and statistical methods to the appraisal of clinical studies and the effectiveness of preventive, diagnostic and therapeutic interventions.
- c. Utilize the critical appraisal of the medical literature together with clinical expertise and the patient's unique biology, values, ethnicity, and circumstances in patient care decision-making.

- **5.3 Self-reflection and Life-long Learning**: Demonstrate skills necessary to support independent lifelong learning and ongoing professional development.
- a. Utilize information technology to manage information, access credible on-line medical information and support life-long education.
- b. Demonstrate the ability to communicate the best clinical evidence to patients and colleagues.
- c. Learn to utilize self-evaluation strategies and develop plans for improvement to support professional growth and effectiveness as a practicing physician.

VI. System-Based Practice

Medical students must demonstrate an awareness of the larger context and system of health care and its impact on patient care.

- **6.1 Health care systems**: Apply knowledge of health care systems to optimize the delivery of patient care.
- a. Demonstrate knowledge of different practice and health delivery systems and services across the continuum of care.
- b. Demonstrate an understanding of the legal and regulatory frameworks governing the practice of medicine which affect payment, reimbursement and health care decisions across various practice and payment models (e.g. Medicaid, Medicare, managed care, Medical Home).
- c. Demonstrate an understanding of cost containment principles and their application to the delivery of patient care.
- d. Recognize the role of societal and global issues affecting health, health policy and health care delivery.
- **6.2 Team-based practice**: Demonstrate knowledge of the role and functions of the health care team in providing holistic patient care.
- a. Demonstrate knowledge of the roles and scope of practice of other team members.
- b. Describe the process of team development and the practices of effective teams and team members.
- c. Integrate the unique knowledge, skills and abilities of other health professions to inform patient care decisions.
- **6.3 Patient advocacy and safety:** Advocate for continuous quality improvement and safety in the delivery of patient-centered care.
- a. Explain the role of the physician as an advocate for patients in the delivery of quality care and in navigating system complexities.
- b. Identify and use effective methods and standards of care to promote patient safety, while respecting patient and community values and priorities/ preferences for care.
- c. Recommend appropriate care settings and community resources based upon patient care needs and recognize the physician's role in ensuring safe transitions across care settings.