



**Fundamental Osteopathic Medical  
Competencies:**

**Guidelines for Osteopathic Medical  
Licensure and the Practice of  
Osteopathic Medicine**

March 2009



**FUNDAMENTAL OSTEOPATHIC MEDICAL COMPETENCIES:  
GUIDELINES FOR OSTEOPATHIC MEDICAL LICENSURE AND  
THE PRACTICE OF OSTEOPATHIC MEDICINE**

**TABLE OF CONTENTS**

Introduction..... 3

What Is Physician Competency? ..... 6

#1 - Osteopathic Patient Care ..... 7

#2 - Application of Knowledge for Osteopathic Medical Practice..... 14

#3 - Practice-Based Learning And Improvement in Osteopathic Medicine ..... 18

#4 - Interpersonal and Communication Skills in the Practice of Osteopathic Medicine .. 23

#5 – Professionalism in the Practice of Osteopathic Medicine..... 27

#6 - Systems-Based Practice in Osteopathic Medicine..... 35

References..... 39



## Introduction

In recent years, there has been a growing national trend toward developing a framework for defining, applying, teaching, and measuring the competency of a physician. Many organizations have developed criteria to define and measure competency. These include, but are not limited to, the American Association of Medical Colleges, the American Association of Colleges of Osteopathic Medicine, the American Board of Medical Specialties, the American Osteopathic Association, the Council on Osteopathic Postgraduate Training, the Federation of State Medical Boards, the International Association of Medical Regulatory Authorities, the U.S. government (“pay for performance” or P4P), third-party payers, and public interest groups.

Although consideration for determining physician competency is not a new concept, the progressive movement toward competency-based systems is arguably attributable to the 2001 report on “Crossing the Quality Chasm” published by the Institutes of Medicine. In early 2002, the Royal College of General Practitioners in England published a landmark document entitled “Good Medical Practice for General Practitioners.” The GMP document lists exceptional, acceptable, and unacceptable behaviors and practices for general practitioners reflective of their competency.

More recently, the FSMB and other organizations, including the AOA, the AOBEM, the NBME, and the NBOME, have sponsored several competency-accountability summits. One central theme that has prevailed is that of assessing and maintaining physician competency throughout the practice time of the physician. One outcome of Summit # 2 was the drafting of a “theoretical textbook” on Good Medical Practice to deliver a competency-based curriculum. The topics included the following:

1. Medical knowledge
2. Patient care
3. Professionalism
4. Communication
5. Practice-based learning
6. Systems-based practice

Professionalism has been one of the competency-based issues receiving inordinate attention. Various authorities have indicated that some of the measures to assess this competency include, but are not limited to, the following:

1. Altruism
2. Honor and integrity
3. Caring and compassion
4. Respect
5. Responsibility
6. Accountability
7. Excellence in scholarship
8. Leadership
9. Cultural sensitivity
10. Service
11. Codes of ethics

Of all the organizations supporting the concept of competency-based assessment, the AOA offers the most comprehensive list of competencies as it encompasses all current published positions on this issue, and it also includes those uniquely applicable to the osteopathic medical profession. Given this analysis, the AOA competencies were used as the basis of this document. However, believing that the osteopathic competency is thoroughly integrated throughout all the core competencies, this document incorporates the osteopathic principles and practices into the six Fundamental Osteopathic Competencies described herein in detail. It is noteworthy that most of the competency-based programs have been centered on GME, and did not clearly address the assessment at the osteopathic medical school level.

In 2004, the NBOME introduced the COMLEX-USA Level 2-Performance Evaluation (Level 2-PE) examination after nearly ten years of research. This was based on research that indicated that clinical competency assessment was not being measured adequately by the cognitive portion of the examination system alone. The NBOME was able to determine what an individual knew or knew how to do, but was unable to determine if the individual could in fact actually “do it.” Studies have shown that the clinical skills examination measures something distinctly different than the cognitive examination.

To address the concern over physician competency raised in a number of arenas, the NBOME Sub-Committee on Competency and Evidence-Based Medicine sought to define the osteopathic medical competencies. The Sub-Committee also attempted to determine what measurable elements were available to assess the competencies and what outcomes could be anticipated from the assessments. The Sub-Committee recognized that different assessment tools might have to be applied at different times in the life cycle of the physician.

The NBOME hopes that this document will prove thought-provoking, and that it will continue to generate serious discussion on the direction that education, the profession, the regulatory authorities, and the public choose to take in regards to establishing the parameters for physician competency.

The report is offered for use by all those considering methods and means for determining whether or not a physician possesses a measurable demonstration of sufficient knowledge, skill sets, experience, values, and behaviors that meet established professional standards, supported by the best available medical evidence, and that are in the best interest of the patient's well-being and health.

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## **What Is Physician Competency?**

Physician competency is a measurable demonstration of suitable or sufficient knowledge, skill sets, experience, values, and behaviors that meet established professional standards, supported by the best available medical evidence, that are in the best interest of the well-being and health of the patient.

The competent physician is accountable to both the public and the profession, and is an advocate for the patient in the context of the needs of society as a whole.

The assurance of the competency of a physician is a shared responsibility of the individual physician, the teaching facility, the entity that grants the legal privilege to practice medicine, the medical profession, and the public. This assurance begins with establishing admission requirements to the medical school that reflect societal needs and promote the concept of patient- and community-centered care. It is nurtured by the inculcation of the physician in medical school and is enhanced by programs providing graduate medical education through a competency-based curriculum. It is maintained through the specialty board system, through continuing medical education, and a personal commitment to life-long learning on the part of the physician.

# #1 - Osteopathic Patient Care

## **Definition:**

Osteopathic patient care is the ability to effectively determine and monitor the nature of a patient's concern or problem; to develop, maintain, and to bring to closure the therapeutic physician-patient relationship; to appropriately incorporate osteopathic principles, practices, and manipulative treatment; and to implement effective diagnostic, management, and treatment plans, including appropriate patient education and follow-up, that are based on best medical evidence. In the service of the highest quality of patient care, the osteopathic physician must be able to take appropriate leadership of a health care team and foster effective communication between health care professionals.

## **COMPETENCY 1.0 (Osteopathic Patient Care)**

*Candidates must demonstrate the ability to determine and monitor the nature of a patient's concern or problem using a patient-centered approach that is appropriate to the age of the patient and that is culturally sensitive. They must be able to provide patient care that incorporates a strong fund of applied osteopathic medical knowledge and best medical evidence, osteopathic principles and practices, sound clinical judgment, and patient and family preferences.*

*Candidates must demonstrate the ability to effectively gather data from patients, family members, and other sources, while establishing, maintaining, and concluding the therapeutic relationship. They must be able to show effective interpersonal and communication skills, empathy for the patient, awareness of biopsychosocial issues, and scrupulous protection of patient privacy. They must demonstrate the ability to perform a physical examination, including osteopathic structural and palpatory components, as well as the ability to perform basic clinical procedures important for generalist practice. Candidates must demonstrate the ability to effectively perform osteopathic manipulative treatment.*

*Candidates must demonstrate the ability to incorporate health promotion and disease prevention into the care of patients, to carry out effective patient education and counseling, and to formulate and implement appropriate, evidence-based, and cost-effective treatment plans.*

*Candidates must demonstrate the ability to work effectively with other members of the health care team in providing patient-focused care, including synthesizing and documenting their clinical findings, impression, and plan in a written format, and to use information technology to support their diagnostic and therapeutic decisions as well as for patient education. Candidates must demonstrate the ability to provide these elements of effective patient care in the outpatient, inpatient, and homecare settings, and across the life cycle.*

### **REQUIRED ELEMENT 1.1 (data-gathering)**

*The candidate must demonstrate the ability to gather accurate, essential data from all sources, including the medical interview with the patient, secondary sources, medical records, and physical examination, including structural and palpatory examinations, regardless of patient age or clinical setting.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.1:**

The candidate demonstrates the ability to . . .

- 1.1.1 communicate effectively and interview patients and families in various clinical settings.
- 1.1.2 apply an appropriate knowledge base regarding health and disease to medical history-taking and physical examination.
- 1.1.3 apply an appropriate knowledge base regarding psychosocial and cultural issues that contribute to illness and behavior as they pertain to the medical history-taking and physical examination.
- 1.1.4 interpret relevant laboratory, imaging, and other diagnostic studies in the context of patient care.
- 1.1.5 thoroughly assess a patient's condition(s), while providing for the patient's comfort and privacy.
- 1.1.6 take a comprehensive history (including symptoms, psychological factors, and social factors).
- 1.1.7 accurately determine a patient's living circumstances and the depth and scope of the patient's support network structure.
- 1.1.8 explicitly cite a patient's view of the problem or problems, and how they are to be best addressed.

### **REQUIRED ELEMENT 1.2 (differential diagnosis)**

*The candidate must demonstrate the ability to formulate a differential diagnosis based on the patient evaluation and epidemiologic data, to prioritize diagnoses appropriately, and to determine the nature of the concern or problem, in the context of the life cycle and the widest variability of clinical environments.*

## **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.2:**

The candidate demonstrates the ability to . . .

- 1.2.1 list a number of potential diagnoses that are likely considerations given the medical history, physical examination findings, and epidemiologic data available, recognizing the effect of psychosocial and cultural factors.
- 1.2.2 generate and test multiple hypotheses (i.e., structure the clinical question or questions) during the course of the medical interview and physical examination.
- 1.2.3 prioritize diagnoses and provide a prognosis.

## **REQUIRED ELEMENT 1.3 (management)**

*The candidate must demonstrate the ability to develop an appropriate evidence-based, cost-effective, patient-centered management plan including monitoring of the problem, which takes into account the motivation, willingness, and ability of the patient to provide diagnostic information and relief of the patient's physical and psychological distress. Within the context of evidence-based and cost-effective care, the candidate must be able to assess the patient's motivation, willingness, and ability to cooperate with the diagnostic and therapeutic plan.*

## **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.3:**

The candidate demonstrates the ability to . . .

- 1.3.1 elicit a patient's perspective and negotiate the diagnostic and treatment plan.
- 1.3.2 recognize and address relief of a patient's suffering and distress while maintaining patient dignity.
- 1.3.3 incorporate best evidence in data-gathering, diagnosis, and treatment.
- 1.3.4 determine the cost-vs.-benefit ratio of various diagnostic and treatment options.
- 1.3.5 monitor and manage the course of diseases or conditions over time.
- 1.3.6 notify patients in a timely manner of the results of information important to their medical care, including diagnostic studies.

#### **REQUIRED ELEMENT 1.4 (OPP/HPDP)**

*The candidate must demonstrate the ability to provide health care services that are consistent with osteopathic principles and practices, including an emphasis on preventive medicine and health promotion that is based on best medical evidence.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.4:**

The candidate demonstrates the ability to . . .

- 1.4.1 incorporate integration of osteopathic principles and practices in history-taking and physical examination.
- 1.4.2 integrate the principles of preventive medicine and health promotion in all interactions with patients, including lifestyle change recommendations when appropriate.
- 1.4.3 utilize best evidence in incorporating screening, health promotion, or disease prevention in encounters with patients.

#### **REQUIRED ELEMENT 1.5 (procedures)**

*The candidate must demonstrate skill and proficiency in performing basic clinical procedures essential to a generalist osteopathic medical practice or to a specific area of practice, including osteopathic manipulative treatment.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.5:**

The candidate demonstrates the ability to . . .

- 1.5.1 perform phlebotomy and administer intradermal, subcutaneous, and intramuscular injections.
- 1.5.2 obtain peripheral intravenous access.
- 1.5.3 perform endotracheal intubation or percutaneous cricothyroidotomy.
- 1.5.4 perform a Heimlich maneuver.
- 1.5.5 insert a nasogastric tube.
- 1.5.6 perform an osteopathic structural examination and osteopathic manipulative treatment.
- 1.5.7 administer basic cardiac life support (BCLS) and advanced cardiac life support (ACLS).

- 1.5.8 control external blood loss by pressure and/or the appropriate use of a tourniquet.
- 1.5.9 perform simple closed needle thoracostomy in a life-saving setting.
- 1.5.10 apply simple wound dressings and splints.
- 1.5.11 perform simple suturing, closure of a simple laceration.
- 1.5.12 perform an incision and drainage of a simple abscess or fluid collection.
- 1.5.13 Take a sample for culture and sensitivity.
- 1.5.14 perform a lumbar puncture.
- 1.5.15 perform a needle aspiration of a joint
- 1.5.16 insert a Foley catheter in male and female patients.
- 1.5.17 perform sensitive physical examination maneuvers, including breast examinations, female pelvic examinations, Pap smears, prostate examinations, and male genital examinations.
- 1.5.18 perform an uncomplicated, spontaneous vaginal delivery.
- 1.5.19 perform a standard history and physical examination, including mini-mental and basic neurologic examinations.

**REQUIRED ELEMENT 1.6 (patient education)**

*The candidate must demonstrate the ability to counsel and educate patients appropriately.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.6:**

The candidate demonstrates the ability to assess a patient's health literacy specifically in regard to . . .

- 1.6.1 the nature of the concern, problem, or illness.
- 1.6.2 diagnostic procedures and therapeutic options.
- 1.6.3 negotiation of the diagnostic and treatment plan.
- 1.6.4 informed consent.
- 1.6.5 information technology and best evidence.

- 1.6.6 incorporating interest, respect, support, and empathy during interactions and counseling.
- 1.6.7 demonstrating cultural awareness when communicating with the patient or health care designates.

**REQUIRED ELEMENT 1.7 (teamwork/documentation)**

*The candidate must demonstrate the ability to work effectively with other members of the health care team in providing patient-centered care, including synthesizing and documenting clinical findings, impressions, and plans, and using information technology to support diagnostic and therapeutic decisions.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.7:**

The candidate demonstrates the ability to . . .

- 1.7.1 communicate verbally with other members of the health care team, including those from other disciplines in order to provide effective and comprehensive patient-centered care.
- 1.7.2 communicate in writing with other members of the health care team, including those from other disciplines, to synthesize and document their clinical findings in patient care, diagnostic considerations, and therapeutic plans.
- 1.7.3 use information technology and best available evidence to support diagnostic and therapeutic decisions.
- 1.7.4 communicate the expectation that other team members provide appropriate information back.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMLEX Level</b>
<b>1.1</b>	Demonstration of the ability to gather accurate, essential data	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ Simulators</li> <li>▪ Computer simulations</li> <li>▪ Record reviews</li> <li>▪ 360° instrument</li> <li>▪ Simulated staff</li> </ul>	Level 1 Level 2-CE Level 2-PE
<b>1.2</b>	Demonstration of the ability to formulate a differential diagnosis	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ MCQs</li> <li>▪ Simulators</li> <li>▪ Models</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>1.3</b>	Demonstration of the ability to develop an appropriate patient-centered management plan	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ MCQs</li> <li>▪ Record reviews</li> <li>▪ Patient surveys</li> <li>▪ Portfolios</li> </ul>	Level 2-CE Level 2-PE Level 3
<b>1.4</b>	Demonstration of the ability to provide health care services consistent with osteopathic principles and practices, including an emphasis on preventive medicine and health promotion	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ MCQs</li> <li>▪ 360° instrument</li> <li>▪ Global ratings</li> <li>▪ Patient surveys</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>1.5</b>	Demonstration of skill and proficiency in performing basic clinical procedures	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ Simulators</li> <li>▪ Global ratings</li> <li>▪ Checklists</li> <li>▪ Procedure/case logs</li> <li>▪ Patient surveys</li> <li>▪ Portfolios (including video)</li> </ul>	Level 2-PE
<b>1.6</b>	Demonstration of the ability to counsel and educate patients	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ Global ratings</li> <li>▪ Patient surveys</li> <li>▪ Portfolios (mainly video)</li> </ul>	Level 2-PE
<b>1.7</b>	Demonstration of the ability to work effectively with other members of the health care team and to use information technology	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ MCQs</li> <li>▪ 360° instrument</li> <li>▪ Portfolios</li> <li>▪ Global ratings</li> <li>▪ Simulated staff</li> </ul>	Level 2-PE

## #2 - Application of Knowledge for Osteopathic Medical Practice

### **Definition:**

The application of knowledge for osteopathic medical practice is the understanding and application of osteopathic, biomedical, clinical, epidemiological, biomechanical, social, and behavioral sciences in the context of patient-centered care. This includes all aspects of the cognitive domain and critical thinking required for safe and effective osteopathic medical practice. Examples include understanding, comprehension, application, analysis, synthesis, and evaluation.

### **COMPETENCY 2.0 (Application of Knowledge for Osteopathic Medical Practice)**

*Candidates must demonstrate the understanding and application of osteopathic, biomedical, clinical, epidemiological, biomechanical, social, and behavioral sciences in the context of patient-centered care.*

### **REQUIRED ELEMENT 2.1 (osteopathic medical knowledge base)**

*The candidate must demonstrate an understanding of and the ability to apply the concepts and principles of the osteopathic, biomedical, clinical, epidemiological, biomechanical, social, and behavioral sciences by recognizing the key elements of the patient presentations in all of the following domains:*

1. *Asymptomatic and general symptoms*
2. *Symptoms and disorders of digestion and metabolism*
3. *Symptoms and disorders of sensory alterations*
4. *Symptoms and disorders of motor alterations*
5. *Symptoms and disorders related to human sexuality and urination*
6. *Symptoms and disorders of respiration and circulation*
7. *Symptoms and disorders of thermoregulation*
8. *Symptoms and disorders of the tissues and trauma*
9. *Symptoms and disorders of human development*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.1:**

The candidate demonstrates the ability to . . .

- 2.1.1 understand the concepts and principles of the osteopathic, biomedical, clinical, epidemiological, biomechanical, social, and behavioral sciences, and to apply these to the understanding, management, and treatment of patient presentations.

- 2.1.2 incorporate new developments in osteopathic medical knowledge and concepts over time.
- 2.1.3 retain applicable medical science knowledge appropriate for osteopathic patient care.
- 2.1.4 appropriately use informatics to attain medical knowledge and skills, including osteopathic principles.
- 2.1.5 identify the level of medical evidence in medical journal articles and abstracts.

**REQUIRED ELEMENT 2.2 (physician interventions)**

*The candidate must demonstrate an understanding of the important physician interventions required to evaluate, manage, and treat the clinical presentations that will or may be experienced in the course of practicing osteopathic medicine by properly applying the following competencies and physician tasks, incorporating applied medical sciences, osteopathic principles, and best available medical evidence:*

- *Osteopathic patient care*
- *Application of knowledge for osteopathic medical practice*
- *Practice-based learning and improvement*
- *Interpersonal and communication skills*
- *Professionalism*
- *Systems-based practice*

*This would also include, but not be limited to, incorporating the following physician tasks:*

1. *Health promotion and disease prevention*
2. *History and physical examination*
3. *Appropriate use and prioritization of diagnostic technologies*
4. *An understanding of the mechanisms of disease and the normal processes of health*
5. *Health care delivery*
6. *Osteopathic principles, practices and manipulative treatment as related to the appropriate clinical encounters*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.2:**

The candidate demonstrates the ability to . . .

- 2.2.1 use scientific concepts to evaluate, diagnose, and manage clinical patient presentations and population health in the practice of osteopathic medicine.
- 2.2.2 recognize the limits of his or her medical knowledge.

- 2.2.3 apply evidence-based guidelines throughout the scope of practice.
- 2.2.4 assess the value of the information and knowledge introduced by the patient during a clinical encounter.
- 2.2.5 apply principles and methods of conducting research.
- 2.2.6 create and maintain patient records.
- 2.2.7 deal effectively with cultural differences, disabilities, and language barriers in communicating with patients.
- 2.2.8 apply ethical and medical jurisprudence principles to osteopathic patient care.
- 2.2.9 apply coding and billing principles to osteopathic medical practice.
- 2.2.10 recognize and utilize community resources and demographic data related to the general population and populations demonstrating musculoskeletal dysfunction.
- 2.2.11 appraise health care policies and how such policies can be altered for the benefit of the patient.
- 2.2.12 work with a health care team and serve as leader of a health care team.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMPLEX Level</b>
<b>2.1</b>	Demonstration of medical knowledge application appropriate to practice patient-centered osteopathic medicine	<ul style="list-style-type: none"> <li>▪ Informatics</li> <li>▪ OSCE</li> </ul>	Level 1 Level 2-CE Level 3
<b>2.1.1</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ SP exams</li> </ul>	Level 1 Level 2-CE Level 3
<b>2.1.2</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ SP exams</li> </ul>	Level 1 Level 2-CE Level 3
<b>2.1.3</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ SP exams</li> </ul>	Level 1 Level 2-CE Level 3
<b>2.1.4</b>		<ul style="list-style-type: none"> <li>▪ New tool</li> </ul>	Levels 1 – 3
<b>2.1.5</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> </ul>	Levels 1 – 3
<b>2.2</b>	Demonstration of investigative and analytical thinking in clinical situations	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ SP exams</li> </ul>	Level 1 Level 2-CE Level 3
<b>2.2.1</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ New tool</li> </ul>	Levels 1 – 3
<b>2.2.2</b>		<ul style="list-style-type: none"> <li>▪ New tool</li> <li>▪ Portfolios</li> </ul>	Level 2-CE Level 3
<b>2.2.3</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ OSCE</li> <li>▪ New tool</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.4</b>		<ul style="list-style-type: none"> <li>▪ New tool</li> </ul>	Level 2-PE
<b>2.2.5</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> </ul>	Levels 1 – 3
<b>2.2.6</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ OSCE</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.7</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ New tool</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.8</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ OSCE</li> <li>▪ New tool</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.9</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ New tool</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.10</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ OSCE</li> <li>▪ New tool</li> </ul>	Levels 1 – 3 Level 2-PE
<b>2.2.11</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> </ul>	Levels 1 – 3
<b>2.2.12</b>		<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ OSCE</li> <li>▪ New tool</li> </ul>	Level 2-CE Level 2-PE Level 3

## #3 - Practice-Based Learning And Improvement in Osteopathic Medicine

### **Definition:**

Practice-based learning and improvement is the continuous evaluation of osteopathic clinical practice utilizing evidence-based medicine approaches to develop best practices that will result in optimal patient care outcomes.

### **COMPETENCY 3.0 (Practice-Based Learning and Improvement in Osteopathic Medicine)**

*Candidates must demonstrate the ability to describe and apply fundamental epidemiologic concepts, clinical decision-making skills, evidence-based medicine principles and practices, fundamental information mastery skills, methods to evaluate relevance and validity of research information, and the clinical significance of research evidence.*

*Candidates must demonstrate the use of best medical evidence, strategies for integrating evidence into clinical practice, and systematic methods relating to continuous evaluation of osteopathic clinical practice patterns and practice-based improvements, including the elimination of medical errors and the promotion of improved health.*

### **REQUIRED ELEMENT 3.1 (fundamental epidemiologic concepts)**

*The candidate must demonstrate the ability to describe and apply fundamental epidemiologic concepts to practice-based learning and improvement.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.1:**

The candidate demonstrates the ability to . . .

- 3.1.1 identify and interpret means, medians, variances, standard deviations, p-values, confidence intervals, and effect size.
- 3.1.2 interpret measures of disease frequency (incidence, prevalence).
- 3.1.3 recognize the distinction between causality and association.
- 3.1.4 interpret measures of diagnostic certainty (sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), likelihood ratios, pretest probability, and posttest probability).

3.1.5 interpret measures of therapeutic efficacy (absolute risk reduction (ARR), relative risk reduction (RRR), number needed to treat (NNT), number needed to harm (NNH), confidence intervals (CI), and random allocation of trial participants).

3.1.6 recognize and apply the difference between screening and diagnostic testing.

### **REQUIRED ELEMENT 3.2 (clinical decision-making tools)**

*The candidate must demonstrate the ability to describe and apply clinical decision-making tools.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.2:**

The candidate demonstrates the ability to . . .

3.2.1 understand and apply decision-making tools.

3.2.2 understand sources of design bias and limitations, and the sources of scientific uncertainty.

3.2.3 interpret and apply pretest and posttest probabilities.

### **REQUIRED ELEMENT 3.3 (evidence-based medicine principles and practices)**

*The candidate must demonstrate the ability to describe and apply evidence-based osteopathic medicine principles and practices.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.3:**

The candidate demonstrates the ability to apply the five steps of the evidence-based medicine approach to a clinical question, namely . . .

3.3.1 converting the need for information (e.g., prevention, diagnosis, therapy, prognosis, causation) into an answerable clinical question.

3.3.2 demonstrating the ability to obtain the best available evidence, including application of the levels of evidence utilized, with which to answer a clinical question with maximum efficiency.

3.3.3 demonstrating critical appraisal of the available evidence for its validity, impact and applicability.

3.3.4 integrating the critical appraisal with clinical expertise and the patient's unique biology, values, ethnicity, and circumstances.

- 3.3.5 evaluating the effectiveness and efficacy in executing steps 1 through 4 and seeking ways to improve both in the future
- 3.3.6 demonstrating the ability to monitor and evaluate outcomes in osteopathic clinical practice.

**REQUIRED ELEMENT 3.4 (clinical significance of research evidence)**

*The candidate must demonstrate the ability to describe and apply the clinical significance of research evidence.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.4:**

The candidate demonstrates the ability to . . .

- 3.4.1 interpret the results of a randomized control trial (RCT), including concepts of relative risk reduction (RRR) vs. absolute risk reduction (ARR), how to understand number needed to treat (NNT), p-values, confidence intervals (CI), risk/benefit analysis, and the number needed to harm (NNH) as applied to osteopathic clinical practice.
- 3.4.2 calculate and interpret pretest/posttest probabilities in diagnostic and screening tests, as applied to osteopathic clinical practice.

**REQUIRED ELEMENT 3.5 (translating evidence into practice)**

*The candidate must demonstrate the ability to evaluate the relevance and validity of research as well as to identify and incorporate levels of evidence.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.5:**

The candidate demonstrates the ability to . . .

- 3.5.1 understand and apply the hierarchical approach to levels of evidence.
- 3.5.2 identify the most valid study design for interpreting articles relating to diagnosis, prognosis, and therapy, including surgical, medical and osteopathic interventions.
- 3.5.3 understand the importance of systematic research reviews.

**REQUIRED ELEMENT 3.6 (treating with best medical evidence)**

*The candidate must demonstrate the ability to describe and apply principles directed at treating patients with the best medical evidence.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.6:**

The candidate demonstrates the ability to . . .

- 3.6.1 apply principles of evidence-based medicine in osteopathic patient care.
- 3.6.2 describe and perform quality assurance activities with the goal to change practice protocols as necessary.

### **REQUIRED ELEMENT 3.7 (integrating evidence into clinical practice)**

*The candidate must demonstrate the ability to describe and apply strategies for integrating evidence into osteopathic clinical practice.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.7:**

The candidate demonstrates the ability to . . .

- 3.7.1 use information technology to manage and access online medical information.
- 3.7.2 communicate evidence (including osteopathic principles and practice) to patients and colleagues.

### **REQUIRED ELEMENT 3.8 (continuous evaluation and improvement of osteopathic clinical practice)**

*The candidate must demonstrate the ability to describe and apply systematic methods relating to continuous evaluation of osteopathic clinical practice patterns, practice-based improvements, and the reduction of medical errors.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.8:**

The candidate demonstrates the ability to . . .

- 3.8.1 apply the outcome of audits, appraisals, and performance reviews to practice.
- 3.8.2 develop and implement evaluation strategies for changing practice based on patient outcomes relative to external benchmarks and self-reflection (e.g., clinical assessment programs, the AOA Clinical Assessment Program (CAP), and HEDIS-type criteria).
- 3.8.3 implement practice-based improvements by tracking, recording, and reducing medical errors.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMLEX Level</b>
<b>3.1</b>	Demonstration of the ability to describe and apply fundamental epidemiologic concepts	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ SP exams</li> <li>▪ Computer simulations</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-PE
<b>3.2</b>	Demonstration of the ability to describe and apply clinical decision-making tools	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ SP exams</li> <li>▪ Computer simulations</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>3.3</b>	Demonstration of the ability to describe and apply evidence-based medicine principles and practices	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ SP exams</li> <li>▪ Computer simulations</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-CE Level 2-PE
<b>3.4</b>	Demonstration of the ability to describe and apply the clinical significance of research evidence	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ SP exams</li> <li>▪ Computer simulations</li> <li>▪ Portfolios</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>3.5</b>	Demonstration of the ability to evaluate relevance and validity of research	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ Directed computerized search tools</li> </ul>	Level 1 Level 2-CE Level 3
<b>3.6</b>	Demonstration of the ability to describe and apply principles directed at treating patients with the best medical evidence	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ Directed computerized search tools</li> </ul>	Level 1 Level 2-CE Level 3
<b>3.7</b>	Demonstration of the ability to describe and apply strategies for integrating evidence into osteopathic clinical practice	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ Directed computerized search tools</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>3.8</b>	Demonstration of the ability to describe and apply systematic methods relating to continuous evaluation of osteopathic clinical practice patterns and practice-based improvements	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Case simulations</li> <li>▪ Portfolios</li> <li>▪ Case/chart audits</li> </ul>	Level 1 Level 2-CE Level 3

## #4 - Interpersonal and Communication Skills in the Practice of Osteopathic Medicine

### **Definition:**

Interpersonal and communication skills are written, verbal and non-verbal behaviors that facilitate understanding of the patient's perspective. These skills include building the physician-patient relationship, opening the discussion, gathering information, providing empathy, listening, sharing information, reaching agreement on problems and plans, and providing closure. The communication approach to patients is comprehensive and patient-centered. These skills extend to communication with patients' families and members of the health care team. The application of the holistic approach of osteopathic medicine, being aware of the psychosocial, biomedical and biomechanical influences, should be integrated into the interpersonal and communication skills of the physician.

### **COMPETENCY 4.0 (Interpersonal and Communication Skills in the Practice of Osteopathic Medicine)**

*Candidates must demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams by applying related osteopathic principles and practices.*

### **REQUIRED ELEMENT 4.1 (establish and maintain physician-patient relationship)**

*The candidate must demonstrate patient-centered care, including the ability to effectively build the physician-patient partnership, open patient interviews by encouraging the patient to fully express concerns, gather information appropriately, understand the patient's perspective, share information appropriately, reach agreement on problems or plans, and provide appropriate closure.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.1:**

The candidate demonstrates the ability to . . .

- 4.1.1 allow the patient to complete his/her opening statement without interruption, and to elicit the full set of patient concerns.
- 4.1.2 use open-ended and closed-ended questions appropriately.
- 4.1.3 actively listen, using appropriate verbal and non-verbal (e.g., eye contact) techniques.

- 4.1.4 explore a patient's beliefs, concerns, expectations, and literacy about health and illness, and provide care appropriate for contextual factors such as a patient's culture, age, literacy, spirituality, and economic background.
- 4.1.5 share information, using language that the patient can understand, checking for patient understanding and encouraging questions.
- 4.1.6 encourage active patient participation in decision-making, and to verify a patient's willingness and ability to follow the plan.
- 4.1.7 provide closure to interviews, summarizing and affirming agreements, asking if the patient has other issues or concerns, and planning follow-up (e.g., next visit, plan for unexpected outcomes).
- 4.1.8 conduct appropriate ethical decision-making as to involvement of the patient's family in the patient's care.
- 4.1.9 communicate with difficult or angry patients, and to deliver bad news and information relative to death and dying or the recognition of serious or life-threatening illness or disease.
- 4.1.10 explore the psychosocial, occupational, and biomechanical environment in which the patient lives and/or health care is administered.
- 4.1.11 take responsibility when an error occurs, to apologize promptly, and to fully explain what occurred and the short- and long-term implications.

**REQUIRED ELEMENT 4.2 (written and electronic communication)**

*The candidate must demonstrate effective written and electronic communication in dealing with patients and other health care professionals.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.2:**

The candidate demonstrates the ability to . . .

- 4.2.1 maintain accurate, comprehensive, timely, and legible medical records.
- 4.2.2 use telephone, e-mail, and other communication modalities appropriately and professionally in communicating with patients and other members of the health care team.

### **REQUIRED ELEMENT 4.3 (health care team)**

The candidate must demonstrate the ability to work effectively with other health professionals as a member or leader of a health care team.

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.3:**

The candidate demonstrates the ability to . . .

- 4.3.1 collaborate with other health care professionals in the care of the patient, through effective personal skills and interpersonal dynamics.
- 4.3.2 communicate a coherent story of illness, diagnosis, and treatment with particular reference to musculoskeletal issues related to the illness.
- 4.3.3 be attentive to relationships and the ability to perform an assigned role or task within the health care team.
- 4.3.4 appropriately communicate with consultants and other health care professionals upon patient referral, providing the required background information and clarity regarding roles to ensure continuity of care.
- 4.3.5 appropriately communicate with referring physicians after patient referral, communicating directly to ensure continuity of care.
- 4.3.6 ensure that a message sent was the message received and understood.
- 4.3.7 communicate appropriately within the authority gradient.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMLEX Level</b>
<b>4.1</b>	Demonstration of patient-centered care	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Global ratings</li> <li>▪ Checklists</li> <li>▪ SP exams</li> <li>▪ 360° instrument</li> <li>▪ Patient surveys</li> <li>▪ Record reviews</li> <li>▪ Computer simulations with video</li> <li>▪ OSCE</li> </ul>	Level 1 Level 2-CE Level 2-PE Level 3
<b>4.2</b>	Demonstration of effective written and electronic communication	<ul style="list-style-type: none"> <li>▪ SOAP notes</li> <li>▪ Global ratings</li> <li>▪ Checklists</li> <li>▪ SP exams</li> <li>▪ 360° instrument</li> <li>▪ Patient surveys</li> <li>▪ Record reviews</li> <li>▪ OSCE</li> <li>▪ Portfolios</li> </ul>	Level 2-PE
<b>4.3</b>	Demonstration of cooperation with other health professionals	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Global ratings</li> <li>▪ Checklists</li> <li>▪ SP exams</li> <li>▪ 360° instrument</li> <li>▪ Patient surveys</li> <li>▪ Record reviews</li> <li>▪ Case simulations</li> <li>▪ OSCE</li> </ul>	Level 1 Level 2-CE Level 3

## #5 – Professionalism in the Practice of Osteopathic Medicine

### **Definition:**

Osteopathic medical professionalism is a duty to consistently demonstrate behaviors that uphold the highest moral and ethical standards of the osteopathic profession. This includes a commitment to continuous learning and the exhibition of personal and social accountability. Osteopathic medical professionalism extends to those normative behaviors ordinarily expected in the conduct of medical education, training, research, and practice.

### **COMPETENCY 5.0 (Professionalism in the Practice of Osteopathic Medicine)**

*Candidates must demonstrate knowledge of the behavioral and social sciences that underpin the professionalism competency; humanistic behavior; responsiveness to the needs of patients that supersedes self-interest; accountability to patients, society, and the profession; a commitment to excellence and ongoing professional development; respect for the patient as a person; knowledge and application of ethical principles in practice and research; and awareness and proper attention to the issues within cultural competency.*

### **REQUIRED ELEMENT 5.1 (knowledge)**

*The candidate must demonstrate sufficient knowledge of the behavioral and social sciences that provide the foundation for the professionalism competency, including medical ethics, social accountability, and responsibility.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.1:**

The candidate demonstrates an understanding of . . .

- 5.1.1 methods of effective moral reasoning and deliberation.
- 5.1.2 ethical guidelines for professional behavior.
- 5.1.3 personal values, attitudes, and biases as they influence patient care.
- 5.1.4 social accountability and responsibility.
- 5.1.5 the context of a patient's social and economic situation, capacity for self-care, and ability to participate in shared decision-making.

- 5.1.6 the impact of social inequalities in health care and the social factors that are determinants of health outcomes.

**REQUIRED ELEMENT 5.2 (humanism)**

*The candidate must demonstrate humanistic behavior, including respect, compassion, probity, honesty, and trustworthiness.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.2:**

The candidate demonstrates . . .

- 5.2.1 polite, considerate, and compassionate treatment of every patient.
- 5.2.2 respect for the patient's dignity and privacy, including issues surrounding end-of-life care (e.g., advance directives, DNR orders).
- 5.2.3 a willingness to listen to patients and respect their views by exhibiting elements of altruism and empathy.
- 5.2.4 openness, honesty, and trustworthiness during direct communication with patients and their families, the writing of reports, the signing of forms, and the provision of evidence in litigation or other formal inquiries.
- 5.2.5 provision of relevant information in all reports or other venues wherein information is provided to patients and members of the health care team.
- 5.2.6 respect for colleagues and other health care professionals and their practices (e.g., avoidance of inappropriate remarks).

**REQUIRED ELEMENT 5.3 (primacy of patient need)**

*The candidate must demonstrate responsiveness to the needs of patients and society that supersedes self-interest.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.3:**

The candidate demonstrates the ability to . . .

- 5.3.1 make the care of the patient his or her first concern.
- 5.3.2 be self-effacing (avoiding bias in decision-making) and self-sacrificing (willing to take reasonable risks to health, income, and job security when required to do so) to meet the needs of patients.
- 5.3.3 respect the rights of patients to be fully involved in decisions about care.

- 5.3.4 prevent personal beliefs from prejudicing patient care.
- 5.3.5 work effectively with colleagues in ways that best serve patient interest.
- 5.3.6 be readily accessible to patients and colleagues when on duty, while making suitable arrangements for coverage when off duty.
- 5.3.7 respect the rights of patients to decline taking part in teaching or research endeavors, and to ensure that their refusal does not adversely affect the physician-patient relationship.
- 5.3.8 respect the rights of a patient to a second opinion.
- 5.3.9 respect the rights of patients to personal privacy and dignity during evaluation and treatment, particularly with the utilization of osteopathic manipulative therapy.
- 5.3.10 respect the value of a patient's time.
- 5.3.11 ensure the competency and courteous conduct of the staff toward all patients.
- 5.3.12 provide care for those patients who cannot afford it.
- 5.3.13 work to ensure affordable access to health care services for all patients.
- 5.3.14 work to ensure the fair allocation of available health care resources.

**REQUIRED ELEMENT 5.4 (accountability)**

*The candidate must demonstrate accountability to patients, society, and the profession, including a duty to act on knowledge of professional behavior of others.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.4:**

The candidate demonstrates the ability to . . .

- 5.4.1 take quick action to protect patients from risk if the physician has good reason to believe that he/she, or a colleague may not be fit to practice.
- 5.4.2 properly use the position of physician, avoiding situations where personal and professional interests might be in conflict.
- 5.4.3 effectively communicate to colleagues when transferring medical care.

- 5.4.4 conduct proactive discussions on substance abuse by the physician or colleagues.
- 5.4.5 promptly report adverse drug reactions to the proper authorities.
- 5.4.6 properly report medical errors and “near misses” that can lead to improvements in the quality of care provided.
- 5.4.7 immediately act if medical care goes wrong, to put matters right if possible, to explain fully and promptly to the patient what has happened including short- and long-term effects, and to offer a sincere apology.
- 5.4.8 commit to caring for the underserved, vulnerable, disadvantaged, disenfranchised, and special populations.
- 5.4.9 promote public confidence in the osteopathic medical profession.
- 5.4.10 promptly notify the medical board or other appropriate authorities if convicted of any criminal offense or of action taken in other jurisdictions that results in removal or suspension of a medical license.

**REQUIRED ELEMENT 5.5 (continuous learning)**

*The candidate must demonstrate milestones that indicate a commitment to excellence with ongoing professional development as evidence of a commitment to continuous learning behaviors.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.5:**

The candidate demonstrates . . .

- 5.5.1 up-to-date professional knowledge and skills.
- 5.5.2 participation in regular educational activities that maintain and develop further his or her competency and performance.
- 5.5.3 a personal commitment to teaching and learning (e.g., portfolio development).
- 5.5.4 recognition of the limits of personal competency in knowledge and skill.
- 5.5.5 a willingness to consult colleagues when necessary.
- 5.5.6 the application of evidence-based medicine.

### **REQUIRED ELEMENT 5.6 (ethics)**

*The candidate must demonstrate knowledge of and ability to apply ethical principles in the practice and research of osteopathic medicine, particularly in the areas of provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices, the conduct of research, and the reporting of research results.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.6:**

The candidate demonstrates . . .

- 5.6.1 respect and protection of confidential information.
- 5.6.2 provision of necessary care to alleviate pain and distress, whether or not curative treatment is possible.
- 5.6.3 the use of ethical principles pertaining to provision or withholding of clinical care.
- 5.6.4 observance of current regulations, laws, and statutes that govern medical practice.
- 5.6.5 appropriate provision and procurement of informed consent.
- 5.6.6 honesty and integrity in all conduct of research.
- 5.6.7 understanding and application of the ethical principles of autonomy, beneficence, non-maleficence, fidelity, justice, and utility.
- 5.6.8 application of ethical principles in business practices as well as in medical practice.
- 5.6.9 the maintenance of patient dignity.
- 5.6.10 appropriate personal relationships with respect to boundaries with all patients.

### **REQUIRED ELEMENT 5.7 (cultural competency)**

*The candidate must demonstrate awareness and proper attention to issues of culture, religion, age, gender, sexual orientation, and mental and physical disabilities.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.7:**

The candidate demonstrates the ability to . . .

- 5.7.1 treat all patients, colleagues, and others fairly, ensuring that some groups are not favored at the expense of others.
- 5.7.2 refrain from imposing personal beliefs and values on patient care.

- 5.7.3 openly discuss cultural issues and to be responsive to culturally-based cues.
- 5.7.4 interpret the implications of symptoms as they are expressed by patients from different cultures.

**REQUIRED ELEMENT 5.8 (professional and personal self-care)**

*The candidate must demonstrate an understanding that he or she is a reflection of the osteopathic profession, and is capable of making valuable contributions as a member of this society. It is important for the candidate to lead by example. The candidate must demonstrate the ability to provide for his or her personal care and well-being by utilizing the principles of wellness and disease prevention in the conduct of his or her professional and personal lives.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.8:**

The candidate demonstrates the ability to . . .

- 5.8.1 only provide medical treatment to himself/herself as a lay person would engage in self-care.
- 5.8.2 ensure that his/her condition does not have a negative impact on the care or welfare of the patient.
- 5.8.3 protect himself/herself, his/her patients, and his/her colleagues by utilizing appropriate measures such as immunization against communicable diseases when such treatments are available and do not pose extraordinary risk to the physician.
- 5.8.4 seek qualified care from a health professional outside the family of the physician.
- 5.8.5 demonstrate evidence of seeking to maintain a healthy lifestyle.
- 5.8.6 avoid the use of alcohol, drugs or agents that may interfere with the judgment exercised by the physician when caring for patients, working with colleagues, or meeting or addressing the public.

**REQUIRED ELEMENT 5.9 (honest, transparent business practices)**

*The candidate must demonstrate the provision of factual evidence-based information whenever communicating publicly about the services provided and conduct himself or herself in a manner that ensures the welfare of his or her patients.*

## **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.9:**

The candidate demonstrates the ability to ensure that the information he/she publishes does not . . .

5.9.1 make unjustifiable claims about the quality or outcomes of services provided.

5.9.2 offer guarantees of cures.

5.9.3 exploit patients' vulnerability or lack of medical knowledge.

The candidate demonstrates honesty in any financial arrangements with patients, particularly . . .

5.9.4 providing information about fees and charges whenever possible.

5.9.5 clarifying his/her personal interest to patients when selling goods from his/her own office.

5.9.6 not exploiting patients' vulnerability when making charges for treatment or services.

5.9.7 not encouraging patients to give, lend, or bequeath money or gifts that will benefit him/her.

5.9.8 not pressuring patients or their families to make donations to other people or organizations.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMLEX Level</b>
<b>5.1</b>	Demonstration of core knowledge	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ 360° instrument</li> </ul>	Level 1 Level 2-CE
<b>5.2</b>	Demonstration of humanistic behavior	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ 360° instrument</li> </ul>	Level 2-PE
<b>5.3</b>	Demonstration of responsiveness to patient need	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ 360° instrument</li> </ul>	Level 2-PE
<b>5.4</b>	Demonstration of accountability to patients, society, and the profession	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ 360° instrument</li> </ul>	Level 2-PE
<b>5.5</b>	Demonstration of commitment to excellence and ongoing professional development	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ 360° instrument</li> </ul>	Level 3
<b>5.6</b>	Demonstration of knowledge and application of ethical principles	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ 360° instrument</li> </ul>	Level 3
<b>5.7</b>	Demonstration of awareness and attention to cultural issues	<ul style="list-style-type: none"> <li>▪ SP exams</li> <li>▪ 360° instrument</li> </ul>	Level 2-PE
<b>5.8</b>	Demonstration of attention to professional and personal self-care	<ul style="list-style-type: none"> <li>▪</li> </ul>	
<b>5.9</b>	Demonstration of public communication of factual information regarding services provided	<ul style="list-style-type: none"> <li>▪</li> </ul>	

## #6 - Systems-Based Practice in Osteopathic Medicine

### **Definition:**

Systems-based practice is an awareness of and responsiveness to the larger context and systems of health care, and it is the ability to effectively identify and integrate system resources to provide osteopathic medical care that is of optimal value to individuals and society at large.

### **COMPETENCY 6.0 (Systems-Based Practice in Osteopathic Medicine)**

*Candidates must demonstrate awareness of and responsiveness to the larger context and systems of health care, and effectively identify systems' resources to maximize the health of the individual and the community at large.*

### **REQUIRED ELEMENT 6.1 (health care system interactions)**

*The candidate must demonstrate an understanding of how patient care and professional practices affect other health care professionals, health care organizations, and the larger society.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.1:**

The candidate demonstrates . . .

- 6.1.1 knowledge of interactions of practicing physicians and other health care professionals within the health care team, medical organizations, managed health care systems, and the community.
- 6.1.2 an understanding of how health policy is developed and of strategies for influencing health policy on a local, regional, state, and national basis.
- 6.1.3 awareness of the global issues affecting health.

**REQUIRED ELEMENT 6.2 (health systems organizations)**

*The candidate must demonstrate an understanding of health delivery systems that affect the practice of an osteopathic physician.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.2:**

The candidate demonstrates the ability to . . .

- 6.2.1 compare and contrast common practice and health care delivery systems, including methods of payment.
- 6.2.2 make appropriate decisions relative to the characteristics of different health care systems.
- 6.2.3 properly utilize coding procedures.

**REQUIRED ELEMENT 6.3 (cost-effective care)**

*The candidate must demonstrate an understanding of the methods of controlling costs and allocating resources in the health care delivery system.*

**MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.3:**

The candidate demonstrates the ability to . . .

- 6.3.1 recognize common methods and available resources in health care systems to ensure quality of care.
- 6.3.2 describe and evaluate methods for allocating resources and controlling medical costs.
- 6.3.3 provide osteopathic medical care efficiently and effectively while avoiding unnecessary costs.
- 6.3.4 utilize common strategies to optimize patient safety.
- 6.3.5 make cost-effective decisions involving methods of cost control and the just allocation of scarce resources.

#### **REQUIRED ELEMENT 6.4 (patient advocacy)**

*The candidate must demonstrate the ability to identify effective strategies for being an advocate for patients within the health care system.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.4:**

The candidate demonstrates the ability to identify and utilize effective strategies for assisting patients in . . .

- 6.4.1 receiving care in the health care systems.
- 6.4.2 overcoming barriers to care.
- 6.4.3 accessing appropriate community resources.
- 6.4.4 creating a safe and healthy environment.

#### **REQUIRED ELEMENT 6.5 (health care system utilization and patient safety)**

*The candidate must demonstrate knowledge of and ability to implement safe, effective, efficient, timely, patient-centered, and equitable systems of care, recognizing the need to reduce medical errors and improve patient safety while practicing osteopathic medicine.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.5:**

The candidate demonstrates the ability to . . .

- 6.5.1 recognize, properly report, and utilize methods known to be effective in the reduction of medical errors.
- 6.5.2 appropriately use guidelines and other standards of care in osteopathic medical practice.
- 6.5.3 evaluate patients as appropriate in a timely, efficient, safe, and effective manner.
- 6.5.4 effectively intervene in a timely manner when patient safety becomes an issue.

<b>Element</b>	<b>Outcome</b>	<b>Measure</b>	<b>COMLEX Level</b>
<b>6.1</b>	Demonstration of an understanding of how patient care and professional practices affect others	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ 360° instrument</li> <li>▪ OSCE</li> <li>▪ Portfolios</li> <li>▪ Chart audits (QA)</li> </ul>	Level 2-CE Level 2-PE Level 3
<b>6.2</b>	Demonstration of an understanding of health delivery systems' effect on a physician's practice	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Chart stimulated recall (IPPR)</li> <li>▪ OSCE</li> </ul>	Level 2-CE Level 2-PE Level 3
<b>6.3</b>	Demonstration of an understanding of the methods of controlling costs and allocating resources	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Checklists</li> <li>▪ 360° instrument</li> <li>▪ Global ratings</li> <li>▪ Record reviews</li> <li>▪ Computer simulations</li> </ul>	Level 2-CE Level 3
<b>6.4</b>	Demonstration of the ability to identify effective strategies for patient advocacy	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Patient surveys</li> <li>▪ Portfolios</li> <li>▪ OSCE</li> <li>▪ Checklists</li> <li>▪ Computer simulations</li> </ul>	Level 2-CE Level 2-PE
<b>6.5</b>	Demonstration of the knowledge of and ability to implement systems of care that reduce medical errors and improve patient safety	<ul style="list-style-type: none"> <li>▪ MCQs</li> <li>▪ Checklists</li> <li>▪ 360° instrument</li> <li>▪ Global ratings</li> <li>▪ Record reviews</li> <li>▪ Computer simulations</li> <li>▪ OSCE</li> </ul>	Level 2-CE Level 3

## References

The references utilized in the creation of this document include, but are not limited to, the following:

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Medical Professionalism in the New Millennium: A Physician Charter 15 Months Later (Blank, Kimball, McDonald et al. Ann Intern Med. 2003;138:839-841)

The Moral Foundation of Medical Leadership: The Professional Virtues of the Physician as Fiduciary of the Patient. (Chervenak, McCullough. Am J Ob Gyn. 2001;184(5):875-880)

Recommended Curriculum Guidelines for Family Medicine Residents: Medical Ethics (AAFP Reprint No. 279; rev. 6/03)

Other suggested references that may be of some value regarding the Fundamental Osteopathic Medical Competencies are listed below:

- The Osteopathic Oath
- *Clinical Epidemiology*; Fletcher, 2005
- *Clinical Epidemiology*; Sackett, 1991
- *EBM Key Concepts*; Donald, 2002
- *How to Practice and Teach EBM, 1<sup>st</sup>*; Sackett et al, 2000
- *EB Healthcare Workbook*; Greenhalgh, 2000
- *How to Practice and Teach EBM, 2<sup>nd</sup> ed*; Sackett et al, 2003
- Improving Medical Education
- Project Professionalism (NBME/AAMC)
- AOA Core Competencies