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# NBOME

NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

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# Fundamental Osteopathic Medical Competency Domains

Guidelines for Osteopathic  
Medical Licensure  
and the Practice of  
Osteopathic Medicine

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Guidelines for Osteopathic Medical Licensure and the Practice of Osteopathic Medicine

## TABLE OF CONTENTS

OVERVIEW.....	3
INTRODUCTION.....	3
WHAT IS A PHYSICIAN COMPETENCY DOMAIN?.....	6
COMPETENCY DOMAIN 1 Osteopathic Principles & Practice and Osteopathic Manipulative Treatment.....	7
<i>REQUIRED ELEMENT 1.1 Knowledge</i> .....	7
<i>REQUIRED ELEMENT 1.2 Skills</i> .....	8
<i>REQUIRED ELEMENT 1.3 Integration</i> .....	9
COMPETENCY DOMAIN 2 Osteopathic Patient Care.....	10
<i>REQUIRED ELEMENT 2.1 Data Gathering</i> .....	10
<i>REQUIRED ELEMENT 2.2 Differential Diagnosis</i> .....	11
<i>REQUIRED ELEMENT 2.3 Procedures</i> .....	11
<i>REQUIRED ELEMENT 2.4 Management</i> .....	12
<i>REQUIRED ELEMENT 2.5 Osteopathic Principles &amp; Practice and Health Promotion/Disease Prevention</i> .....	13
<i>REQUIRED ELEMENT 2.6 Patient Education</i> .....	13
<i>REQUIRED ELEMENT 2.7 Teamwork/Documentation</i> .....	14
COMPETENCY DOMAIN 3 Application of Knowledge for Osteopathic Medical Practice.....	15
<i>REQUIRED ELEMENT 3.1 Osteopathic Medical Knowledge Base</i> .....	15
<i>REQUIRED ELEMENT 3.2 Physician Interventions</i> .....	16
COMPETENCY DOMAIN 4 Practice-Based Learning and Improvement in Osteopathic Medicine.....	17
<i>REQUIRED ELEMENT 4.1 Fundamental Epidemiologic Concepts</i> .....	17
<i>REQUIRED ELEMENT 4.2 Clinical Decision-Making Tools</i> .....	18
<i>REQUIRED ELEMENT 4.3 Evidence-Based Medicine Principles and Practices</i> .....	18
<i>REQUIRED ELEMENT 4.4 Clinical Significance of Research Evidence</i> .....	19
<i>REQUIRED ELEMENT 4.5 Translating Evidence into Practice</i> .....	19
<i>REQUIRED ELEMENT 4.6 Treating with Best Medical Evidence</i> .....	19
<i>REQUIRED ELEMENT 4.7 Integrating Evidence into Clinical Practice</i> .....	20
<i>REQUIRED ELEMENT 4.8 Continuous Evaluation and Improvement of Osteopathic Clinical Practice</i> .....	20
COMPETENCY DOMAIN 5 Interpersonal and Communication Skills in the Practice of Osteopathic Medicine.....	21
<i>REQUIRED ELEMENT 5.1 Eliciting Information</i> .....	21
<i>REQUIRED ELEMENT 5.2 Rapport Building</i> .....	22
<i>REQUIRED ELEMENT 5.3 Information Giving</i> .....	23
<i>REQUIRED ELEMENT 5.4 Written and Electronic Communication</i> .....	24
<i>REQUIRED ELEMENT 5.5 Interprofessional Team Collaboration</i> .....	24
COMPETENCY DOMAIN 6 Professionalism in the Practice of Osteopathic Medicine.....	26
<i>REQUIRED ELEMENT 6.1 Knowledge</i> .....	26
<i>REQUIRED ELEMENT 6.2 Humanistic Behavior</i> .....	26
<i>REQUIRED ELEMENT 6.3 Primacy of Patient Need</i> .....	27
<i>REQUIRED ELEMENT 6.4 Accountability</i> .....	28
<i>REQUIRED ELEMENT 6.5 Continuous Learning</i> .....	29
<i>REQUIRED ELEMENT 6.6 Ethics</i> .....	29
<i>REQUIRED ELEMENT 6.7 Cultural Competency</i> .....	30
<i>REQUIRED ELEMENT 6.8 Professional and Personal Self-Care</i> .....	30
<i>REQUIRED ELEMENT 6.9 Honest, Transparent Business Practices</i> .....	31
COMPETENCY DOMAIN 7 Systems-Based Practice in Osteopathic Medicine.....	32
<i>REQUIRED ELEMENT 7.1 Health Systems Organizations</i> .....	32
<i>REQUIRED ELEMENT 7.2 Health Care System Interactions</i> .....	32
<i>REQUIRED ELEMENT 7.3 Quality Cost-Effective Care</i> .....	33
<i>REQUIRED ELEMENT 7.4 Patient Advocacy</i> .....	33
<i>REQUIRED ELEMENT 7.5 Health Care System Utilization and Patient Safety</i> .....	33
REFERENCES.....	35

## OVERVIEW

This *Fundamental Osteopathic Medical Competency Domains* (FOMCD) 2011 Document represents expert consensus on the required elements and measurable outcomes for seven core competency domains as related to the practice of osteopathic medicine. It considers these domains predominantly from the assessment perspective, particularly as related to licensure for osteopathic medical practice.

## INTRODUCTION

Over the past 15 years, there has been a growing national and international trend toward developing frameworks for defining, applying, teaching, and measuring the competency of a physician. Many organizations have developed criteria to define and measure competency, stemming from efforts of the Royal College of Physicians and Surgeons of Canada (RCPSC) with their *Skills for the New Millennium* project, which eventually evolved into the *CanMEDS Roles* framework. Following this seminal work, a number of organizations proposed physician competency-based frameworks to guide their own efforts. These include, but are not limited to, the American Association of Colleges of Osteopathic Medicine (AACOM), the Association of American Medical Colleges (AAMC), the American Osteopathic Association (AOA), the Council on Osteopathic Postgraduate Training Institutions (COPTI), the American Board of Medical Specialties (ABMS), the Federation of State Medical Boards (FSMB), the International Association of Medical Regulatory Authorities (IAMRA), the U.S. government ("pay for performance" or P4P), third-party payers, and public interest groups.

In addition to RCPSC efforts, the impetus toward competency-based systems arguably stems from the 2001 report on "Crossing the Quality Chasm," published by the Institutes of Medicine, the health arm of the National Academy of Sciences (<http://www.iom.edu/About-IOM.aspx>). In early 2006, the General Medical Council (GMC) of the United Kingdom also published a landmark document entitled "Good Medical Practice (GMP)." The GMC document describes the principles and values on which good medical practice is founded and lists several duties that are expected of all physicians registered with the GMC (e.g., good clinical care, relationships with patients, and working with colleagues).

More recently, the FSMB and other organizations, including the AOA, the National Board of Medical Examiners (NBME), and the National Board of Osteopathic Medical Examiners (NBOME), have sponsored several competency-accountability summits. The central theme that has prevailed in these summits is that of assessing and maintaining physician competency throughout the practice career of the physician. One outcome of the second summit was the drafting of a "theoretical textbook" on *Good Medical Practice – USA* 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

More directly related to osteopathic medicine, in its *Report of the Core Competency Task Force*, the AOA offered a comprehensive list of competencies that encompasses all current published positions on this issue and includes those domains that are uniquely tied to the osteopathic medical profession. Consequently, this AOA report served as the basis for the NBOME's initial report on competencies, *The Seven Osteopathic Medical Competencies: Considerations for Future Testing and the Practice of Osteopathic Medicine* (2006). A subsequent report, *Fundamental Osteopathic Medical Competencies: Guidelines for Osteopathic Medical Licensure and the Practice of Osteopathic Medicine*, was released by the NBOME in 2009.

In its 2006 and 2009 reports, the NBOME sought to more clearly define the osteopathic medical competency domains. The report also attempted to describe what measurable elements were available to assess the competency domains and what outcomes could be anticipated from the assessments. The NBOME recognized that different assessment tools might have to be applied at different times in the lifecycle of the physician.

More recently, the NBOME, under the guidance of its Blue Ribbon Panel on Enhancing COMLEX-USA (BRP), sought to further refine the competencies document, emphasizing updated terminology and measurement strategies and continuing the transformation of COMLEX-USA examinations to a competency-based schema and construct.

The NBOME hopes 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 osteopathic physician competency. The report is offered for use by all those considering methods and means for determining whether or not an osteopathic 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.

An addendum document focusing on measurement tools to consider for various competency domains and related outcomes and elements is currently under preparation and will be available in 2012.

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The following individuals served as the editing team for the FOMCD 2011:

### **Editors-In Chief**

John R. Gimpel, DO, MEd, *NBOME President & CEO*  
André De Champlain, PhD, *NBOME Director for Innovations in Testing*  
Janice Knebl, DO, MBA, *NBOME Blue Ribbon Panel Chair, NBOME Board Vice-Chair, University of North Texas Health Science Center at Fort Worth*

### **Section Editors**

John Bulger, DO, *Geisinger Health System*  
Richard J. LaBaere, II, DO, MPH, *Mount Genesys Regional Medical Center*  
John R. Gimpel, DO, MEd, *The National Board of Osteopathic Medical Examiners*  
John Goudreau, DO, PhD, *Michigan State University-College of Osteopathic Medicine*  
Erik Langenau, DO, *The National Board of Osteopathic Medical Examiners*  
Jim Nemitz, PhD, *West Virginia School of Osteopathic Medicine*  
John R. Potts, III, MD, *University of Texas Medical School at Houston*  
Karen Snider, DO, *A.T. Still University of Health Sciences-Kirksville College of Osteopathic Medicine*

## Fundamental Osteopathic Medical Competency Domains

The NBOME also acknowledges the contributions of the other members of the Blue Ribbon Panel on Enhancing COMLEX-USA:

John Becher, DO, *Atlantic City Medical Center*

John Boulet, PhD, *Foundation for the Advancement of International Medical Education and Research*

Bruce Dubin, DO, JD, *Rocky Vista University College of Osteopathic Medicine*

Paul Evans, DO, *Marian University College of Osteopathic Medicine*

Darin Haug, DO, *Kansas City University of Medicine and Biosciences*

Timothy Kowalski, DO, *Edward Via College of Osteopathic Medicine – Carolinas Campus*

Kathryn C. Lambert, DO, *University of Medicine and Dentistry of New Jersey – School of Osteopathic Medicine*

Richard Ortoski, DO, *Lake Erie College of Osteopathic Medicine*

Donald Sefcik, DO, MBA, MS, *Michigan State University-College of Osteopathic Medicine*

Karen Snider, DO, *A. T. Still University of Health Sciences-Kirksville College of Osteopathic Medicine*

John Thornburg, DO, PhD, *Michigan State University-College of Osteopathic Medicine*

Keith Watson, DO, *Ohio University College of Osteopathic Medicine*

The NBOME also recognizes the valuable contributions from other members of our professional staff:

Shirley Bodett, *Sr. Testing Consultant*

Taunya Cossetti, *Executive Assistant to the President*

David McCarthy, MA, *Item Editor*

Jeanne Sandella, DO, *Associate Director for Case Development & Training*

Linjun Shen, PhD, MPH, *Vice President for Cognitive Testing and Research*

Melissa Turner, MS, *Senior Quality and Patient Safety Officer*

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Robert George, DO

John R. Gimpel, DO, MEd

Charles Henley, DO

Linda Kanzleiter, MPSc, DEd

Erik Langenau, DO

Frederick G. Meoli, DO

Gerald Osborn, DO, MPhil

Linjun Shen, PhD, MPH

Gregg Silberg, DO

## **WHAT IS AN OSTEOPATHIC PHYSICIAN COMPETENCY DOMAIN?**

The NBOME considers a competency domain to be a related set of elements and outcomes that demonstrates knowledge, skill sets, experience, values, and behaviors, each of which meets established professional standards. These standards are supported by the best available medical evidence and are in the best interest of the well-being and health of the patient.

The competent osteopathic 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.

Assuring physician competency is the shared responsibility of the individual physician, the teaching facility, the entity that grants the legal privilege to practice medicine (i.e. the licensing authority), the medical profession, and the public. This assurance begins with establishing medical school admission requirements 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 which provide graduate medical education through a competency-based curriculum. It is maintained through the specialty board certification system, through continuing medical education, maintenance of certification credentials (osteopathic continuous certification), and a personal commitment to life-long learning on the part of the physician.

# COMPETENCY DOMAIN 1

## Osteopathic Principles & Practice and Osteopathic Manipulative Treatment

*Candidates must be able to demonstrate knowledge of osteopathic principles and practice, and they must be able to demonstrate and apply knowledge of somatic dysfunction diagnosis and Osteopathic Manipulative Treatment in the clinical setting.*

### Definitions

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Osteopathic principles and practice: a concept of health care supported by expanding scientific knowledge that embraces the concept of the unity of the living organism's structure (anatomy) and function (physiology). Osteopathic philosophy emphasizes the following principles: (1) The human being is a dynamic unit of function; (2) The body possesses self-regulatory mechanisms that are self-healing in nature; (3) Structure and function are interrelated at all levels; and (4) Rational treatment is based on these principles (*Glossary of Osteopathic Terminology*, 2009).

Osteopathic Manipulative Treatment (OMT): the therapeutic application of manually guided forces by an osteopathic physician to improve physiologic function and/or support homeostasis that has been altered by somatic dysfunction. OMT employs a variety of techniques (*Glossary of Osteopathic Terminology*, 2009).

Somatic dysfunction: impaired or altered function of related components of the somatic (body framework) system: skeletal, arthrodiagonal and myofascial structures, and their related vascular, lymphatic, and neural elements. Somatic dysfunction is treatable using Osteopathic Manipulative Treatment (*Glossary of Osteopathic Terminology*, 2009).

### REQUIRED ELEMENT 1.1

#### Knowledge

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*The candidate must demonstrate an understanding of osteopathic principles and practice; demonstrate knowledge of the basic science, mechanisms of action, and physical findings of somatic dysfunction; and demonstrate knowledge of the mechanisms of action, indications and contraindications, and basic application of OMT.*

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 1.1

*The candidate demonstrates the ability to:*

- 1.1.1 describe the concept of body unity and recognize its role in whole person healthcare.
- 1.1.2 describe the concept of the interrelatedness of structure and function in the human body and how it guides physical examination for patient presentations.
- 1.1.3 describe how the human body's self-healing and self-regulatory mechanisms affect treatment options.

## Fundamental Osteopathic Medical Competency Domains

- 1.1.4 articulate the scientific knowledge supporting the use of osteopathic principles and practice and OMT, including the basic science of the mechanisms of OMT and of somatic dysfunction, and the current evidence base for the clinical application of OMT.
- 1.1.5 name and define the types of physical examination findings that are consistent with somatic dysfunction.
- 1.1.6 name, define, and describe the types of somatic dysfunction found within the ten body regions, which include the head, cervical, thoracic, rib, lumbar, pelvic, sacral, abdominal, upper extremity, and lower extremity body regions.
- 1.1.7 name and describe the symptoms and physical findings that are consistent with viscerosomatic, somatovisceral, and somatosomatic reflexes.
- 1.1.8 name and describe the indirect and direct types of OMT, including the following techniques: 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, treatment of Chapman reflexes, and treatment of trigger points.
- 1.1.9 identify the indications and contraindications of different techniques of OMT.
- 1.1.10 articulate the relative value, advantages, and disadvantages of different techniques of OMT.

### **REQUIRED ELEMENT 1.2**

#### **Skills**

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*The candidate must be able to apply osteopathic principles, including the application of OMT, into an appropriate patient care plan.*

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

*The candidate demonstrates the ability to:*

- 1.2.1 incorporate osteopathic principles into problem solving in clinical settings.
- 1.2.2 obtain historical information from the patient pertinent to the presenting complaint, with emphasis on assessing potential structure-function and mind-body-spirit relationship influences.
- 1.2.3 perform an appropriate structural examination before and after administration of OMT.
- 1.2.4 diagnose somatic dysfunction within the ten body regions (head, cervical, thoracic, rib, lumbar, pelvic, sacral, abdominal, upper extremity, and lower extremity body regions), prioritize a differential diagnosis, and develop an appropriate care plan.
- 1.2.5 communicate with patients and their families the risks and benefits associated with the use of OMT and available alternatives.
- 1.2.6 perform effective indirect and direct types of OMT, including the following techniques: 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, treatment of Chapman reflexes, and treatment of trigger points.

- 1.2.7 provide for the safety and dignity of the patient while administering OMT.
- 1.2.8 communicate essential clinical information, including patient history, physical findings (including somatic dysfunction), differential diagnoses, and care plans, to other members of the interprofessional collaborative team.
- 1.2.9 document in the medical record patient history, physical findings (including somatic dysfunction), diagnostic impression, and care plans (including any use of OMT).

### **REQUIRED ELEMENT 1.3** **Integration**

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*The candidate must demonstrate sufficient depth of knowledge and skills to integrate osteopathic principles and practice into all aspects of patient care.*

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

*The candidate demonstrates the ability to:*

- 1.3.1 apply osteopathic principles and practice – with particular emphasis on the disruption of homeostasis as an approach to health and disease – to resolve complaints and concerns with which patients commonly present.
- 1.3.2 advocate for the administration of OMT in the appropriate clinical setting.
- 1.3.3 identify viscerosomatic relationships and the role of the musculoskeletal system in a patient presentation by performing a structural examination and by documenting findings reflective of this relationship.
- 1.3.4 listen to and communicate with the patient, family and/or caregiver (who may not be a family member) during the diagnostic assessment and while performing OMT.
- 1.3.5 convey sensitivity to ethnically diverse patients, who may express the symptoms of their somatic and/or visceral dysfunctions in unique or unconventional ways.
- 1.3.6 document diagnostic information to allow for appropriate coding for evaluation and management services and OMT.
- 1.3.7 determine the limits of his/her knowledge and clinical skills and seek an appropriate referral in regard to the use of OMT or the application of osteopathic principles and practice.
- 1.3.8 report and interpret epidemiologic data in patients with musculoskeletal dysfunction.

## COMPETENCY DOMAIN 2

### Osteopathic Patient Care

*Candidates must be able to effectively gather data from patients, family members, and other sources; and be able to establish, maintain, and conclude the therapeutic relationship. They must be able to show effective interpersonal and communication skills, empathy for the patient, and awareness of biopsychosocial issues; and must be able to provide scrupulous protection of patient privacy. Candidates must be able to perform a physical examination, including osteopathic structural components, as well as the basic clinical procedures that are required for generalist practice. They must be able to perform OMT.*

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

*Candidates must be able to incorporate health promotion and disease prevention into the care of patients; to provide effective patient and family education and counseling; and to formulate and implement safe, evidence-based, and cost-effective screening, prevention and patient care plans.*

*Candidates must be able to work effectively with other members of the interprofessional collaborative team to provide patient-focused care, including synthesizing and documenting their clinical findings, diagnostic impression, and care plan in a written format. They must be able to work within an interprofessional collaborative team and use information technology to support their diagnostic and therapeutic decisions, as well as for patient education. Candidates must be able to provide these elements of effective patient care in the outpatient, inpatient, and home care settings, and across the life cycle as appropriate to their scope of practice.*

#### Definition

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Osteopathic patient care is the development, maintenance, and conclusion of a therapeutic physician-patient relationship in a manner that emphasizes the patient's best interest. This involves determining and monitoring the nature of a patient's concern or complaint; appropriately incorporating osteopathic principles and practice and osteopathic manipulative treatment (OMT); and implementing effective, evidence-based, and mutually agreed upon diagnostic and patient care plans, including appropriate patient education and follow-up. In the delivery of the highest quality of patient care, promotion of wellness, and prevention of disease, the osteopathic physician must be able to appropriately lead a health care team and foster effective communication between health care professionals.

#### REQUIRED ELEMENT 2.1

##### Data Gathering

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*The candidate must be able to gather accurate, essential data from all sources, including the patient, secondary sources, medical records, and physical examination (including structural examinations), regardless of patient age or clinical setting.*

## MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.1

*The candidate demonstrates the ability to:*

- 2.1.1 communicate effectively and interview patients, families, and caregivers in various clinical settings.
- 2.1.2 apply an appropriate knowledge base regarding health and disease to medical-history taking and physical examination regarding the biomedical and biomechanical issues that contribute to health, illness, and behavior.
- 2.1.3 apply an appropriate knowledge base to the medical-history taking and physical examination, regarding the psychosocial and cultural issues that contribute to health, illness, and behavior.
- 2.1.4 interpret relevant laboratory, imaging, and other diagnostic studies in the context of patient care.
- 2.1.5 assess a patient's condition while providing for the patient's dignity, comfort, and privacy.
- 2.1.6 elicit a comprehensive history (including symptoms, psychological factors, and social factors) from a patient and other sources as appropriate.
- 2.1.7 determine a patient's living circumstances and the depth and scope of the patient's support network structure.
- 2.1.8 understand a patient's view of the concern, complaint or issue.

## REQUIRED ELEMENT 2.2

### Differential Diagnosis

---

*The candidate must be able 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 complaint in the context of the life cycle and in a variety of health care settings.*

## MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.2

*The candidate demonstrates the ability to...*

- 2.2.1 generate, assess, and test appropriate hypotheses during the medical interview and physical examination.
- 2.2.2 generate and prioritize an appropriate list of potential diagnoses given the medical history, physical examination findings, and other available data, recognizing the effect of biomedical, biomechanical, psychosocial, and cultural factors.

## REQUIRED ELEMENT 2.3

### Procedures

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*The candidate must be able to perform basic clinical procedures essential for a general osteopathic medical practice, as appropriate.*

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.3

*The candidate demonstrates the ability to:*

- 2.3.1 perform a clinically appropriate standard physical examination including evaluation of each of the body areas (head, neck, chest, abdomen, genitalia/groin/buttocks, back/spine, upper and lower extremities) and organ systems (constitutional; cardiovascular; ears, nose, mouth and throat; eyes; genitourinary – female and male; hematologic/lymphatic/immunologic; musculoskeletal; neurological; psychiatric; respiratory; skin).
- 2.3.2 perform an osteopathic structural examination and OMT.
- 2.3.3 perform a phlebotomy and administer intradermal, subcutaneous, and intramuscular injections.
- 2.3.4 obtain peripheral intravenous access.
- 2.3.5 perform endotracheal intubation.
- 2.3.6 perform an abdominal thrust (Heimlich maneuver).
- 2.3.7 insert a nasogastric tube.
- 2.3.8 administer basic cardiac life support (BCLS) and advanced cardiac life support (ACLS).
- 2.3.9 control external blood loss by application of pressure and/or the appropriate use of a tourniquet.
- 2.3.10 perform a simple closed-needle thoracostomy in a life-saving setting.
- 2.3.11 apply simple wound dressings and splints.
- 2.3.12 perform suturing for closure of an uncomplicated laceration.
- 2.3.13 perform an incision and drainage of a simple abscess and collect fluid from an abscess.
- 2.3.14 obtain appropriate specimens for common laboratory tests.
- 2.3.15 perform a lumbar puncture.
- 2.3.16 perform basic needle aspiration of a hip, knee, shoulder, and elbow joint.
- 2.3.17 insert a Foley catheter in both male and female patients.
- 2.3.18 perform an uncomplicated, spontaneous vaginal delivery.

### REQUIRED ELEMENT 2.4 Management

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*The candidate must be able to provide diagnostic information; to develop a safe, evidence-based, cost-effective, patient-centered care plan; and to use all ethical and appropriate options toward the goal of relieving 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 2.4

*The candidate demonstrates the ability to:*

- 2.4.1 elicit a patient's perspective and consider it when developing and negotiating the diagnostic and care plan.
- 2.4.2 identify and strive to ethically and appropriately relieve a patient's suffering and distress while maintaining patient dignity.
- 2.4.3 incorporate best evidence into the diagnostic and treatment plans.
- 2.4.4 determine the cost-benefit ratio of various diagnostic and treatment options.
- 2.4.5 monitor and manage the course of a patient's condition over time.
- 2.4.6 notify patients of the results and information important to their medical care in a timely and appropriate manner, including diagnostic studies and prognosis.

### REQUIRED ELEMENT 2.5

#### Osteopathic Principles & Practice and Health Promotion/Disease Prevention

---

*The candidate must be able to provide health care services that are consistent with osteopathic principles and practice, including an emphasis on preventive medicine and health promotion based on best medical evidence.*

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.5

*The candidate demonstrates the ability to:*

- 2.5.1 incorporate osteopathic principles and practice into history taking and physical examination.
- 2.5.2 integrate the principles of preventive medicine and health promotion in all interactions with patients, including lifestyle change recommendations when appropriate.
- 2.5.3 use best evidence to determine appropriate screening, health promotion, and/or disease prevention options in encounters with patients and for communities and populations.

### REQUIRED ELEMENT 2.6

#### Patient Education

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*The candidate must be able to assess the patient's health literacy and to counsel and educate patients accordingly.*

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 2.6

*The candidate demonstrates the ability to:*

- 2.6.1 explain the nature of the patient's concern or complaint at a level commensurate with the patient's health literacy.

- 2.6.2 describe diagnostic procedures, therapeutic options, and care plans at a level commensurate with the patient's health literacy.
- 2.6.3 obtain informed consent, communicating appropriately based on the patient's health literacy.
- 2.6.4 exhibit interest, respect, support, and empathy during interactions and counseling.
- 2.6.5 demonstrate cultural awareness and sensitivity when communicating with the patient, family, and caregivers.

### **REQUIRED ELEMENT 2.7** **Teamwork/Documentation**

---

*The candidate must be able to work effectively with other members of the interprofessional collaborative 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 2.7**

*The candidate demonstrates the ability to:*

- 2.7.1 communicate verbally and in writing with other members of the interprofessional collaborative team, including those from other health professions, in order to provide effective and comprehensive patient-centered care.
- 2.7.2 communicate the expectation that other team members provide appropriate information back to the interprofessional collaborative team.
- 2.7.3 assess team performance and implement strategies for improvement.
- 2.7.4 recognize and respect the unique cultures, roles, training and expertise of other health care professionals.

## COMPETENCY DOMAIN 3

### Application of Knowledge for Osteopathic Medical Practice

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

#### Definition

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The application of knowledge for osteopathic medical practice is the understanding and application of osteopathic, biomedical, clinical, epidemiologic, biomechanical, social, and behavioral sciences in the context of patient-centered care. This also includes critical-thinking skills required for safe and effective osteopathic medical practice, including the cognitive skills of understanding, comprehension, application, analysis, synthesis, and evaluation.

#### REQUIRED ELEMENT 3.1

##### Osteopathic-Medical-Knowledge Base

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*The candidate must demonstrate an understanding and application of the concepts and principles of the osteopathic practice and biomedical, clinical, epidemiologic, biomechanical, social, and behavioral sciences by recognizing the key elements of the patient presentations in all of the following domains across the lifespan:*

- *Population health concepts and patients with presentations related to health promotion, chronic disease management, and human development*
- *Patients with presentations related to digestion and metabolism*
- *Patients with presentations related to cognition, behavior, sensory & central nervous systems, substance abuse, and visceral and sensory pain*
- *Patients with presentations related to the musculoskeletal system, including somatic pain*
- *Patients with presentations related to the genitourinary system and human sexuality*
- *Patients with presentations related to circulation and the respiratory system*
- *Patients with presentations related to thermoregulation*
- *Patients with presentations related to trauma, masses, edema, discharge, and the skin, hair and nails*
- *Patients with presentations related to pregnancy, the peripartum, and the neonatal period*

#### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 3.1

*The candidate demonstrates the ability to:*

- 3.1.1 incorporate new developments in osteopathic medical knowledge and concepts.
- 3.1.2 retain applicable foundational medical science knowledge appropriate for osteopathic patient care.
- 3.1.3 use medical informatics to attain and enhance knowledge and skills.
- 3.1.4 identify and apply medical evidence contained in medical literature.

## **REQUIRED ELEMENT 3.2 Physician Interventions**

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*The candidate must demonstrate an understanding of the physician interventions required to evaluate and care for patients by properly applying the following competency domains and physician tasks, while incorporating applied foundational medical sciences, osteopathic principles, and best-available medical evidence:*

- *osteopathic principles and practice and OMT*
- *osteopathic patient care*
- *application of knowledge for osteopathic medical practice*
- *practice-based learning and improvement*
- *interpersonal and communication skills*
- *professionalism*
- *systems-based practice*

*Application of knowledge would also include, but not be limited to:*

- *health promotion and disease prevention*
- *history and physical examination*
- *diagnostic technologies*
- *management*
- *scientific understanding of health and disease mechanisms*
- *health care delivery*

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

*The candidate demonstrates the ability to:*

- 3.2.1 use scientific concepts to evaluate, diagnose, and manage patients and to promote population health.
- 3.2.2 recognize the limits of his/her medical knowledge and utilize appropriate resources.
- 3.2.3 apply evidence-based guidelines as a component of decision making.
- 3.2.4 assess the quality of the information introduced by the patient during a clinical encounter.
- 3.2.5 create and maintain accurate patient records.
- 3.2.6 engage mindfully in communication with patients with cultural differences, disabilities, and language barriers.
- 3.2.7 apply and integrate ethical and legal principles as related to osteopathic patient care.



## COMPETENCY DOMAIN 4

### Practice-Based Learning and Improvement in Osteopathic Medicine

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

*Candidates must be able to demonstrate the use of best medical evidence, a practical strategy for integrating evidence-based principles and practice into patient care, and systematic methods relating to continuous evaluation of clinical practice patterns and practice-based improvements, including the reduction of medical errors and the promotion of improved health.*

#### Definition

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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.

#### REQUIRED ELEMENT 4.1 Fundamental Epidemiologic Concepts

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*The candidate must be able to articulate and apply fundamental epidemiologic concepts to practice-based learning and improvement.*

#### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.1

*The candidate demonstrates the ability to:*

- 4.1.1 interpret features and meanings of different types of data, including quantitative and qualitative; and different types of variables, including nominal, dichotomous, ordinal, continuous, ratio, and proportion.
- 4.1.2 interpret measures of central tendency, including mode, median, and mean; and measures of variability, including variance and standard deviation.
- 4.1.3 articulate and interpret measures of frequency of disease, injury, or death in forms of rate, ratio, and proportion, including incidence and prevalence, and common health rates.
- 4.1.4 assess accuracy and usefulness of screening and diagnostic tests by using indices of sensitivity, specificity, positive and negative predictive values, likelihood ratio, and odds ratio.
- 4.1.5 interpret common statistical analytical methods, including independent and dependent *t*-tests, chi-square test, analysis of variance, correlation, and linear regression.
- 4.1.6 differentiate observational and experimental studies; interpret common research designs, including cohort studies, case-control, nested case-control, randomized controlled clinical trials,

and randomized controlled field trials; and perform critical review of research designs and findings, including sample size, power, decision errors, and intentional and unintentional bias.

### **REQUIRED ELEMENT 4.2** **Clinical Decision-Making Tools**

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*The candidate must be able to identify, describe, and apply clinical decision-making tools.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.2**

*The candidate demonstrates the ability to:*

- 4.2.1 identify and apply decision-making tools and clinical decision rules.
- 4.2.2 conduct a systematic review of literature on specific research or clinical topics.
- 4.2.3 describe the sources of design bias and limitations and the sources of scientific uncertainty.
- 4.2.4 interpret results and judge the limitations of meta-analysis.
- 4.2.5 understand, compare and contrast disease-oriented evidence and patient-oriented evidence.

### **REQUIRED ELEMENT 4.3** **Evidence-Based Medicine Principles and Practices**

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*The candidate must be able to describe and apply evidence-based osteopathic medicine principles and practices.*

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

*The candidate demonstrates application of the five steps of the osteopathic evidence-based medicine approach to a clinical question, specifically by exhibiting the ability to:*

- 4.3.1 convert the need for information (e.g., prevention, diagnosis, therapy, prognosis, causation) into an answerable clinical question.
- 4.3.2 obtain the best-available evidence, including the application of the levels of evidence utilized, with which to answer a clinical question with maximum efficiency.
- 4.3.3 critically appraise the available evidence and its validity, impact, and applicability.
- 4.3.4 integrate the critical appraisal of the medical literature with clinical expertise and the patient's unique biology, values, ethnicity, and circumstances.
- 4.3.5 evaluate the efficacy in executing the previous four measurable outcomes and seek ways to improve patient care in the future.

### **REQUIRED ELEMENT 4.4** **Clinical Significance of Research Evidence**

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*The candidate must be able to understand and apply biostatistical and epidemiologic concepts to determine the clinical significance of research evidence.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.4**

*The candidate demonstrates the ability to:*

- 4.4.1 judge and interpret aspects of statistical inference and hypothesis testing, including decision errors, sample size, power, alpha level, confidence intervals (CI), one-tailed and two-tailed tests, degree of freedom, blinding, and external and internal validity.
- 4.4.2 interpret the results of a randomized control trial (RCT), including concepts of relative risk reduction (RRR) and absolute risk reduction (ARR), and understand number needed to treat (NNT), *P* values, CI, risk/benefit analysis, number needed to harm (NNH), decision errors, and sample size as applied to osteopathic clinical practice.
- 4.4.3 interpret pretest/posttest probabilities in diagnostic and screening tests, as applied to osteopathic clinical practice.

### **REQUIRED ELEMENT 4.5** **Translating Evidence into Practice**

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

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.5**

*The candidate demonstrates the ability to:*

- 4.5.1 articulate and apply the hierarchical approach to levels of evidence.
- 4.5.2 identify the features of design that impact studies related to diagnosis, prognosis, and therapy.
- 4.5.3 interpret and apply systematic research reviews.

### **REQUIRED ELEMENT 4.6** **Treating with Best Medical Evidence**

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

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.6**

*The candidate demonstrates the ability to:*

- 4.6.1 apply principles of evidence-based medicine in osteopathic patient care.

- 4.6.2 articulate how and when to monitor and evaluate patient-care outcomes and to implement interventions based on principles of evidence-based medicine on an ongoing basis, and then perform quality assurance activities with the goal of evaluating practice protocols on a regular basis.

### **REQUIRED ELEMENT 4.7** **Integrating Evidence into Clinical Practice**

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*The candidate must be able to describe and apply strategies for integrating evidence into osteopathic clinical practice.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 4.7**

*The candidate demonstrates the ability to:*

- 4.7.1 use information technology, including the Internet, to manage and access online medical information.
- 4.7.2 communicate best clinical evidence (including osteopathic principles and practice) to patients and colleagues.
- 4.7.3 judge the statistical and clinical significance of findings in literature.

### **REQUIRED ELEMENT 4.8** **Continuous Evaluation and Improvement of Osteopathic Clinical Practice**

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*The candidate must be able to identify, 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 4.8**

*The candidate demonstrates the ability to:*

- 4.8.1 apply the outcome of audits, appraisals, and performance reviews to practice.
- 4.8.2 develop and implement evaluation strategies for changing and improving practice patterns based on patient outcomes relative to external benchmarks and self-reflection (e.g., clinical assessment programs, performance improvement modules, and Healthcare Effectiveness Data and Information Set [HEDIS] criteria).
- 4.8.3 implement practice-based improvements by tracking, recording and measuring outcomes, and reducing medical errors.

## COMPETENCY DOMAIN 5

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

*Candidates must be able to demonstrate the knowledge, behaviors, and attitudes that facilitate accurate and efficient information gathering, empathetic rapport building, and effective information giving in interactions with the patient, the patient's family members and caregivers, physician colleagues, and other members of the interprofessional collaborative team. Candidates must also demonstrate the ability to effectively document and synthesize clinical findings and diagnostic impressions in written, verbal, and electronic format.*

#### Definition

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Interpersonal and communication skills for osteopathic medical practice consist of incorporating knowledge, behaviors, and attitudes required to determine the nature of a patient's concern or complaint; to develop, maintain, and conclude the therapeutic relationship; and to facilitate patient education and implementation of negotiated diagnostic and care plans. These skills include active listening involving verbal and nonverbal behaviors, and effective documentation and synthesis of clinical findings and impressions in written and electronic format. This set of knowledge, skills, and attitudes extends to the medical interview and to communication with the patient, family members, or caregivers, physician colleagues, and other members of the interprofessional collaborative team. Essential for osteopathic medical practice is that the approach be holistic, comprehensive, and patient-centered, contributing to an understanding of the patient's perspective and facilitating trust and a therapeutic physician-patient relationship.

#### REQUIRED ELEMENT 5.1

##### Eliciting Information

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*The candidate must be able to communicate effectively with the patient, the patient's family or other caregivers, physician colleagues, and other members of the interprofessional collaborative team in order to establish a diagnostic impression and to help to ascertain the nature of the concern or complaint. The candidate must demonstrate patient-centered care, including the ability to 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 diagnostic and care plans, and provide appropriate closure.*

#### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.1

*The candidate demonstrates the ability to:*

- 5.1.1 elicit the essential information regarding patient complaints, concerns, and risk factors, including a comprehensive review of systems for an accurate history of the patient.
- 5.1.2 elicit the essential information regarding past medical history of diseases, disorders, and surgical procedures.
- 5.1.3 elicit the essential information regarding medication and allergy history, social history, sexual history, and psychosocial issues that contribute to the patient's behaviors or condition.

- 5.1.4 elicit the essential information regarding mechanism of injury or biomechanical influences that contribute to the patient's condition.
- 5.1.5 explore a patient's beliefs, concerns, expectations, and literacy about health and illness while considering contextual factors, such as a patient's age, gender, culture, literacy, sexual orientation, spirituality, and economic background.
- 5.1.6 generate and test numerous reasonable hypotheses during the course of interviewing patients.
- 5.1.7 facilitate discussion and interaction with other members of the interprofessional collaborative team in order to gather appropriate information for making patient care decisions.

### **REQUIRED ELEMENT 5.2** **Rapport Building**

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*The candidate must be able to develop, maintain, and conclude the therapeutic relationship and demonstrate competence in the rapport-building functions of the medical interview including, where applicable, in interactions with colleagues and other members of the interprofessional collaborative team.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.2**

*The candidate demonstrates the ability to:*

- 5.2.1 allow the patient (or other person being interviewed) to complete his/her opening statement without interruption in order to elicit the full set of patient concerns.
- 5.2.2 use open-ended and closed-ended questions appropriately.
- 5.2.3 listen actively, using appropriate verbal and nonverbal (e.g., eye contact) techniques.
- 5.2.4 direct the agenda for the interview and confer with the patient on the diagnostic and/or care plan.
- 5.2.5 communicate interest in, respect for, support of, and empathy for the patient.
- 5.2.6 elicit the patient's perspective.
- 5.2.7 confirm understanding of the patient's responses.
- 5.2.8 provide closure to interviews by 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).
- 5.2.9 conduct ethical decision making as to the involvement of the patient's family in the patient's care.
- 5.2.10 communicate effectively with patients who are exhibiting anger or other emotions that can create barriers between the physician and the patient.
- 5.2.11 recognize and resolve various relational barriers to communication with the patient, other physicians, and other health care professionals.
- 5.2.12 explore the psychosocial, occupational, and biomechanical environments in which the patient lives and/or health care is administered.

- 5.2.13 take responsibility when an error occurs in a patient's care, apologize promptly, explain what occurred and the short- and long-term implications.
- 5.2.14 communicate effectively and encourage open communication with the patient, as appropriate, during clinical procedures, including OMT.
- 5.2.15 maintain privacy of patient personal health information in accordance with the law as described in, but not limited to, the Health Insurance Portability and Accountability Act (HIPAA).
- 5.2.16 clarify his/her role in the patient's care with the patient.
- 5.2.17 terminate the physician-patient relationship when necessary (e.g., physician relocation), and recognize, understand, and effectively manage the transition in an empathetic manner.
- 5.2.18 demonstrate an understanding and appreciation for the role of other health care professionals in the care of patients, and work in cooperation with them where applicable to provide quality patient-centered care.

### **REQUIRED ELEMENT 5.3** **Information Giving**

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*The candidate must be able to effectively provide patient education and information, ensuring the patient's understanding of his/her condition and the diagnostic and/or treatment options and recommendations. This includes achieving consensus between the patient (or caregiver) and the physician as well as facilitating informed consent; recommending mutually agreed-upon diagnostic and/or therapeutic steps or health promotion/disease prevention strategies; it also includes enhancement of patient coping mechanisms and encouragement of appropriate lifestyle change in both avoiding illness and promoting health.*

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.3**

*The candidate demonstrates the ability to:*

- 5.3.1 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.
- 5.3.2 encourage active patient participation in decision making, while verifying a patient's willingness and ability to follow the care plan as part of informed consent.
- 5.3.3 communicate to the patient the philosophy of osteopathic principles and practice, and OMT.
- 5.3.4 communicate with compassion any news that may invoke in the patient and the patient's family or caregiver distress, sorrow, anger, etc., such as any applicable information relative to death and dying.
- 5.3.5 enhance a patient's coping ability by actively exploring and utilizing biopsychosocial concepts, and addressing the social and psychological consequences of the condition and the treatment.
- 5.3.6 recommend appropriate prevention and health promotion strategies, including lifestyle changes.

- 5.3.7 determine areas of conflict between the patient and physician, negotiating to resolve these differences.
- 5.3.8 explain important elements of disease and health promotion to the patient.

### **REQUIRED ELEMENT 5.4** **Written and Electronic Communication**

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*The candidate must demonstrate effective written and electronic communication in the care of patients and in working as a member of the interprofessional collaborative team with other physicians and health care professionals.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.4**

*The candidate demonstrates the ability to:*

- 5.4.1 develop and maintain accurate, comprehensive, timely, and legible medical records.
- 5.4.2 document subjective (e.g., information provided by the patient or a secondary source) elements of the medical, surgical, medication, allergy, social, and sexual histories and review of systems, as appropriate.
- 5.4.3 document objective (e.g., physical examination and lab/diagnostic test/imaging) patient information, as appropriate.
- 5.4.4 document reasonable and supported diagnostic hypotheses, as appropriate.
- 5.4.5 document elements of the care and follow-up or disposition plan, as appropriate.
- 5.4.6 use telephone, email, and other communication modalities appropriately and professionally in communicating with patients and other members of the interprofessional collaborative team.
- 5.4.7 maintain patient privacy with respect to documented written and electronic personal health information in accordance with the law as described in, but not limited to, HIPAA.

### **REQUIRED ELEMENT 5.5** **Interprofessional Team Collaboration**

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*The candidate must be able to collaborate with other health care professionals as a member or leader of an interprofessional collaborative team.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 5.5**

*The candidate demonstrates the ability to:*

- 5.5.1 communicate a coherent history of a patient's condition and care plan to other health care team members.
- 5.5.2 perform an assigned role or task within an interprofessional collaborative team.



## Fundamental Osteopathic Medical Competency Domains

- 5.5.3 use effective communication strategies in the urgent/acute setting and, as appropriate, confirm that the message sent was the message received and that if necessary, it will be followed up on (i.e., closed-loop communication).
- 5.5.4 communicate appropriately with consultants and other health care professionals when referring a patient, providing the required background information and clarity regarding roles to ensure continuity of care.
- 5.5.5 communicate appropriately with referring physicians and/or practitioners after patient referral or change of venue (e.g., discharge from an acute care hospital to home or to another facility), to ensure continuity of care.
- 5.5.6 communicate to the interprofessional collaborative team the philosophy of osteopathic principles and practice.
- 5.5.7 communicate effectively within the interprofessional collaborative team to ensure the understanding of instructions, such as those given over the telephone and during the transfer of patient care.
- 5.5.8 communicate appropriately within the authority hierarchy.

## COMPETENCY DOMAIN 6

### Professionalism in the Practice of Osteopathic Medicine

*Candidates must be able to 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 issues surrounding cultural diversity.*

#### Definition

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Osteopathic medical professionalism is a duty to consistently demonstrate behaviors that uphold the highest moral and ethical standards in the conduct of medical education, training, research, and practice. This includes a commitment to continuous learning, and demonstration of personal and social accountability.

#### REQUIRED ELEMENT 6.1

##### Knowledge

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*The candidate must be able to 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 6.1

*The candidate demonstrates the ability to:*

- 6.1.1 articulate moral and ethical guidelines for professional behavior.
- 6.1.2 identify personal values, attitudes, and biases that influence patient care.
- 6.1.3 articulate the concept of social accountability and responsibility.
- 6.1.4 identify and be mindful of a patient's social and economic situation, capacity for self-care, and ability to participate in shared decision making.
- 6.1.5 identify and describe the impact of social inequalities in health care and the social factors that are determinants of health outcomes.

#### REQUIRED ELEMENT 6.2

##### Humanistic Behavior

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

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.2

*The candidate demonstrates the ability to:*

- 6.2.1 provide polite, considerate, and compassionate treatment of every patient.
- 6.2.2 exhibit respect for the patient's dignity and privacy, including issues surrounding end-of-life care (e.g., advance directives, DNR orders).
- 6.2.3 listen to patients and respect their views while exhibiting altruism and empathy.
- 6.2.4 exhibit openness, honesty, and trustworthiness with patients and their families in the writing of reports and during the provision of evidence in litigation or other formal inquiries.
- 6.2.5 be forthcoming in disclosing relevant information in all reports or other venues in which information is provided to patients and members of the interprofessional collaborative team.
- 6.2.6 respect colleagues and other health care professionals and their practices (e.g., avoidance of inappropriate criticism).
- 6.2.7 provide empathy and support for other members of the interprofessional collaborative team.

### REQUIRED ELEMENT 6.3

#### Primacy of Patient Need

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

### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.3

*The candidate demonstrates the ability to:*

- 6.3.1 make the care of patients his or her foremost concern.
- 6.3.2 avoid bias in decision making.
- 6.3.3 use reason and appropriate judgment when taking into consideration risks to patients' health, income, and job security.
- 6.3.4 respect the rights of patients to be fully involved in decisions about care.
- 6.3.5 prevent personal beliefs from providing suboptimal patient care.
- 6.3.6 work with colleagues and other professionals in ways that best serve patients' interests.
- 6.3.7 be readily accessible to patients and colleagues when on duty, making suitable arrangements for coverage when off duty.
- 6.3.8 respect the rights of patients to decline taking part in teaching or research endeavors, ensuring that their refusal does not adversely affect the physician-patient relationship.
- 6.3.9 respect the rights of patients to obtain second opinions.

- 6.3.10 respect the rights of patients to personal privacy and dignity during evaluation and management.
- 6.3.11 respect the value of a patient's time.
- 6.3.12 ensure the competency and courteous conduct of the interprofessional collaborative team toward all patients.
- 6.3.13 provide care or secure appropriate referral for those patients who cannot afford care or have difficulty accessing care for other reasons.

### **REQUIRED ELEMENT 6.4** **Accountability**

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

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

*The candidate demonstrates the ability to:*

- 6.4.1 take appropriate 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.
- 6.4.2 use his/her influence as a physician properly, avoiding situations where personal and professional interests might be in conflict.
- 6.4.3 communicate effectively to colleagues when transferring care of a patient.
- 6.4.4 conduct proactive discussions with colleagues suspected of substance abuse and seek proactive resources if personal substance abuse is present.
- 6.4.5 report adverse drug reactions promptly to the proper authorities.
- 6.4.6 properly report adverse events and near-misses, which can lead to improvements in the quality of care provided.
- 6.4.7 disclose any adverse event when it occurs, apologize promptly if appropriate, and fully explain what occurred, including the short- and long-term implications.
- 6.4.8 willingly provide care for underserved, vulnerable, disadvantaged, disenfranchised, and special-needs populations.
- 6.4.9 promote public confidence in the osteopathic medical profession.
- 6.4.10 promptly notify the state medical and osteopathic 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.
- 6.4.11 appropriately honor boundaries, including professionalism, in the area of social media and internet activities.

### **REQUIRED ELEMENT 6.5** **Continuous Learning**

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*The candidate must demonstrate a commitment to excellence and to continuous learning behaviors by achieving personal-development milestones.*

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

*The candidate demonstrates the ability to:*

- 6.5.1 continually update professional knowledge and skills.
- 6.5.2 participate in mandated educational activities that maintain and further develop his/her competency and performance.
- 6.5.3 commit to teaching and learning (e.g., portfolio development).
- 6.5.4 recognize the limits of personal competency in knowledge and skill.
- 6.5.5 consult physician colleagues and engage other health professionals in the care of patients as appropriate.
- 6.5.6 apply evidence-based medicine in daily practice.
- 6.5.7 perform regular self-assessment and select educational activities best designed to address identified deficits in competency and performance.

### **REQUIRED ELEMENT 6.6** **Ethics**

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*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 6.6**

*The candidate demonstrates the ability to:*

- 6.6.1 respect and protect confidential information.
- 6.6.2 strive to alleviate pain and distress in patient care, whether or not curative treatment is possible.
- 6.6.3 use ethical principles pertaining to provision or withholding of clinical care.
- 6.6.4 observe current regulations, laws, and statutes that govern medical practice.
- 6.6.5 provide and procure informed consent appropriately.
- 6.6.6 conduct all research with honesty and integrity.

- 6.6.7 articulate and apply the ethical principles of autonomy, beneficence, non-maleficence, fidelity, justice, and utility.
- 6.6.8 apply ethical principles in business practices as well as in medical practice (i.e., recognize and avoid conflicts of interest).
- 6.6.9 provide care that preserves patient dignity.
- 6.6.10 develop and maintain appropriate personal relationships, with respect to boundaries, with all patients.
- 6.6.11 acknowledge personal strengths, weaknesses, and errors.

### **REQUIRED ELEMENT 6.7** **Cultural Competency**

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

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.7**

*The candidate demonstrates the ability to...*

- 6.7.1 treat all patients, physician colleagues, other health professionals, and others equitably.
- 6.7.2 refrain from imposing personal biases and belief systems on patient care.
- 6.7.3 discuss cultural issues openly and be responsive to culturally-based cues.
- 6.7.4 interpret the implications of symptoms as they are expressed by patients from different cultures.

### **REQUIRED ELEMENT 6.8** **Professional and Personal Self-Care**

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*The candidate must demonstrate an understanding that he/she is a reflection of the osteopathic profession and is capable of making valuable contributions as a member of this society. The candidate must be able to provide for his/her personal care and well-being by applying the principles of wellness and disease prevention to the conduct of his/her professional and personal life.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.8**

*The candidate demonstrates the ability to:*

- 6.8.1 only provide medical treatment to himself/herself as a lay person would engage in self-care.
- 6.8.2 ensure that his/her condition does not impair or endanger the care or welfare of patients.
- 6.8.3 protect himself/herself, his/her patients, and his/her colleagues by using appropriate measures, such as immunization against communicable diseases, when such treatments are available and do not pose extraordinary risk to the physician.

- 6.8.4 seek qualified care from a health professional outside the family of the physician.
- 6.8.5 seek to maintain a healthy lifestyle.
- 6.8.6 avoid the use of alcohol, drugs, or agents that may interfere with judgment when caring for patients, working with colleagues, or meeting or addressing the public.

### **REQUIRED ELEMENT 6.9** **Honest, Transparent Business Practices**

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

### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 6.9**

*The candidate demonstrates the ability to:*

- 6.9.1 ensure the information he/she publishes is factual and evidence-based.
- 6.9.2 make justifiable claims about the quality or outcomes of services provided, and about physician and staff credentials and training.
- 6.9.3 refrain from offering guarantees of cures.
- 6.9.4 respect patients' vulnerability or lack of medical knowledge, rather than exploiting it.
- 6.9.5 exhibit honesty in any financial arrangements with patients by providing information about fees and charges whenever possible.
- 6.9.6 clarify his/her personal interest to patients when selling goods or services from his/her own office.
- 6.9.7 refrain from encouraging patients or their families to give, lend, or bequeath money or gifts that directly benefit the physician.

## COMPETENCY DOMAIN 7

### Systems-Based Practice in Osteopathic Medicine

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

#### Definition

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

#### REQUIRED ELEMENT 7.1 Health Systems Organizations

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

#### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 7.1

*The candidate demonstrates the ability to:*

- 7.1.1 compare and contrast common practice systems (e.g., Medicare, Medicaid, managed care organizations) and health care delivery systems, including methods of payment.
- 7.1.2 make appropriate patient care decisions relative to the characteristics and requirements of different health care and payment systems.
- 7.1.3 apply proper documentation for coding/billing procedures.

#### REQUIRED ELEMENT 7.2 Health Care System Interactions

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

#### MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 7.2

*The candidate demonstrates the ability to:*

- 7.2.1 interact effectively with physicians and other health care professionals within the interprofessional collaborative team, medical organizations, managed health care systems, and the community.
- 7.2.2 describe the development process of health policy and the strategies for influencing health policy on a local, regional, state, and national basis.



- 7.2.3 identify global issues affecting health.
- 7.2.4 identify and define the role of trainees (medical students, residents, and other health professionals) as members of the interprofessional collaborative team.
- 7.2.5 describe the process of team development, including the roles and practices of effective teams and team members.

### **REQUIRED ELEMENT 7.3** **Quality Cost-Effective Care**

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*The candidate must demonstrate an understanding of the value, quality, and methods of allocating resources in the health care delivery system.*

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 7.3**

*The candidate demonstrates the ability to:*

- 7.3.1 identify common models and available resources in health care systems to ensure quality of care.
- 7.3.2 describe and evaluate methods for allocating resources.
- 7.3.3 make cost-effective decisions involving methods of cost control and the just allocation of resources.

### **REQUIRED ELEMENT 7.4** **Patient Advocacy**

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

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 7.4**

*The candidate demonstrates the ability to:*

- 7.4.1 understand and work to reduce logistical and systems-based barriers to patient care.
- 7.4.2 provide patients with access to appropriate community resources.

### **REQUIRED ELEMENT 7.5** **Health Care System Utilization and Patient Safety**

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

#### **MEASURABLE OUTCOMES FROM REQUIRED ELEMENT 7.5**

*The candidate demonstrates the ability to:*

## Fundamental Osteopathic Medical Competency Domains

- 7.5.1 identify and use known effective methods for improving patient safety.
- 7.5.2 use guidelines and other standards of care appropriately in osteopathic medical practice.
- 7.5.3 evaluate patients as appropriate in a timely, efficient, safe, and effective manner.
- 7.5.4 intervene in a timely, effective manner when patient safety may be compromised or endangered.
- 7.5.5 properly accept and transfer patient care to ensure continuity of medical care and patient safety.
- 7.5.6 evaluate patient satisfaction and its impact in the health care system.
- 7.5.7 forge interdependent relationships with other healthcare professionals to improve patient safety and quality of care.

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Executive Offices – Suite 230  
National Center for Clinical Skills Testing – Suite 150  
101 West Elm Street  
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Chicago, IL 60631  
Phone: 773.714.0622

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