NBOME
NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

Fundamental Osteopathic Medical Competency Domains 2016

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

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INTRODUCTION

OVERVIEW

This *Fundamental Osteopathic Medical Competency Domains 2016 (FOMCD 2016)* document represents expert consensus on the required elements and measurable outcomes for seven core competency domains as related to the practice of osteopathic medicine. Expert consensus was informed by research related to the practice of osteopathic medicine and evidence-based competency domains required for safe and effective osteopathic medical care of patients. The NBOME and *FOMCD 2016* outline these domains predominantly from the assessment perspective, particularly as related to summative high-stakes assessment for licensure for osteopathic medical practice. However, new frameworks for assessment that have potential to broaden the overall development of physicians for practice, including milestones and entrustable professional activities (EPAs), will be introduced, with anticipation of further research aimed at the potential for harmonization and continuous quality improvement for teaching, learning, and practice and, ultimately, to further improve patient care and public health. *FOMCD 2016* serves to inform the enhanced competency-based master blueprint 2018-2019 for the COMLEX-USA examination program, the examination designed and used for licensure for osteopathic physicians and other important secondary purposes.

PHYSICIAN COMPETENCY FRAMEWORKS

Over the past 20 years, there has been a growing national and international trend toward developing frameworks for defining, applying, teaching, and measuring the competence of a physician. Many organizations have developed criteria to define and measure competency, stemming from the initial efforts of the Royal College of Physicians and Surgeons of Canada with their *Skills for the New Millennium* project, which eventually evolved into the *CanMEDS Roles* framework.[1] Competency-based systems were further promoted as a result of the 2001 report on *Crossing the Quality Chasm* published by the Institute of Medicine.[2] Numerous professional organizations followed with initiatives in this area, including the General Medical Council (GMC) of the United Kingdom, which published a landmark document in 2006 entitled *Good Medical Practice*.[3] 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, for

example, providing good clinical care, establishing and maintaining relationships with patients, and working with colleagues. Additional work by a number of organizations proposed physician competency-based frameworks to guide their own efforts. These include, but are not limited to, the Association of American Medical Colleges (AAMC), the American Association of Colleges of Osteopathic Medicine (AACOM), the American Board of Medical Specialties (ABMS), the American Osteopathic Association (AOA), the Council on Osteopathic Postgraduate Training Institutions (COPTI), the Federation of State Medical Boards (FSMB), the International Association of Medical Regulatory Authorities (IAMRA), the United States government ("pay for performance" or P4P), third-party payers, and public interest groups.

From 2004-2008, the FSMB and other organizations, including the AOA, National Board of Osteopathic Medical Examiners (NBOME), and the National Board of Medical Examiners (NBME) collaborated to hold several physician competency-accountability summits in the US. One central theme that prevailed in these summits was that of assessing and maintaining physician competency throughout the practice career of the physician. One outcome was the drafting of a theoretical textbook on *Good Medical Practice–USA*[4] to deliver a competency-based curriculum. The topics in this document included the following:

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

During this same time, the AOA, in its *Report of the Core Competency Task Force*, 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, the NBOME issued its initial detailed report on physician competencies for osteopathic medical practice, *The Seven Osteopathic Medical Competencies: Considerations for Future Testing and the Practice of Osteopathic Medicine* (2006).[5] 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, and an updated version was released in 2011 and published as a supplement to the *Journal of the American Osteopathic Association*.

In its 2006 and 2009 reports, the NBOME sought to more clearly define the osteopathic medical competency domains.[5,6] They also attempted to describe what measurement tools 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 life cycle of the physician. The 2011 update, under the initial guidance of NBOME's Blue Ribbon Panel on Enhancing COMLEX-USA, sought to further refine the competencies document, emphasizing updated terminology and measurement strategies and continuing the transformation of the COMLEX-USA examination program to a competency-based schema and construct.

NEWER DEVELOPMENTS AND ASSESSMENT INNOVATIONS ACROSS THE CONTINUUM SINCE FOMCD 2011

Since the release of the *FOMCD 2011*, efforts to delineate the progression of a physician-in-training toward an expected level of proficiency in his or her competency development, or "milestones," were put forth by the Accreditation Council for Graduate Medical Education (ACGME) and other professional groups. While milestones are designed and currently used for formative assessment of learner development and overview of residency programs, the ACGME has cautioned against the use of milestones for summative purposes, and/or use in residency program accreditation. Another significant

development was the announcement in February 2014 by the ACGME, the AOA, and AACOM to collaborate over the ensuing five years on the development of a single accreditation system for residency and fellowship training programs in the US. The new *Single Accreditation System for GME*[7] adds osteopathic milestones for residency programs that apply for "Osteopathic Recognition" status within the ACGME and embraces osteopathic distinctiveness and competency-based assessment frameworks. In addition, the NBOME's COMLEX-USA is recognized and accepted by the ACGME.

Also since 2011, interest in the description of entrustable professional activities (EPAs), originally conceptualized for nursing education programs and then for graduate medical education by Olle ten Cate, PhD, from the Netherlands, has become more widespread. Dr. ten Cate recognized a disconnect between competency frameworks and actual practice in the clinical workplace.[8] The development of EPAs for graduate medical education recognized the interplay between the individual and the practice setting, the context of patient care. In sum, EPAs attempt to situate competencies and even milestones into the clinical context in which physicians practice.

Since the initial descriptions of EPAs frameworks by ten Cate, the AAMC reported on what they defined as nine Domains of Competence for graduates of MD-granting medical schools in the US. AAMC furthered their work in defining and publishing *Core Entrustable Professional Activities for Entering Residency* (2014),[9] and the AACOM has been working on a similar report designed for the graduates of DO-granting medical schools, expected to be released later in 2016.[10] Where possible, the NBOME has attempted to harmonize the language and descriptions of competency domains, competencies, milestones, and EPAs, both from undergraduate medical education and graduate medical education constructs, and is working on a further document as a cross-walk to demonstrate alignment and to benefit learners and faculty along the continuum.

In 2014, the Coalition for Physician Accountability, representing 12 national organizations in the US responsible for the oversight, education, and assessment of medical students and physicians throughout their medical careers, fully endorsed a framework for physician competence that includes the same six essential domains of competence and a statement that supports efforts to align medical education, training, and assessment with the competency framework to help physicians demonstrate mastery and excellence throughout their careers. The Coalition further recognized that osteopathic physicians employ additional skills and values that both contribute to the six core competency domains and add an additional domain. Coalition members include:

- Accreditation Council for Continuing Medical Education (ACCME)
- Accreditation Council for Graduate Medical Education (ACGME)
- American Association of Colleges of Osteopathic Medicine (AACOM)
- American Board of Medical Specialties (ABMS)
- American Medical Association (AMA)
- American Osteopathic Association (AOA)
- Association of American Medical Colleges (AAMC)
- Council of Medical Specialty Societies (CMSS)
- Educational Commission for Foreign Medical Graduates (ECFMG)
- Federation of State Medical Boards (FSMB)
- Liaison Committee on Medical Education (LCME)
- National Board of Medical Examiners (NBME)
- National Board of Osteopathic Medical Examiners (NBOME)
- The Joint Commission (JC)

FOMCD 2016 OPERATIONAL DEFINITIONS

COMPETENCY DOMAINS

Competency domains are related sets of foundational abilities and represent the required elements and outcomes that define the knowledge, skills, experience, attitudes, values and behaviors of established professional standards. In *FOMCD 2016* they constitute a general descriptive framework for the practice of osteopathic

medicine. While the domains are broad and somewhat interdependent, they should be reviewed and considered in the aggregate. The classification of the elements and outcomes herein provide a framework for the assessment of osteopathic physicians in training and for osteopathic medical licensure. These standards are supported by the best available medical and professional evidence and are in the best interest of the well-being and health of the patient and the community. NBOME's seven fundamental osteopathic competency domains each have a descriptive section called "overview and terminology" and specified "required elements."

REQUIRED ELEMENTS

Required elements in each competency domain have a definition that articulates the essential foundational specifications, including specific, definable knowledge, skills, experiences, attitudes, values, and/or behaviors that make up the standards for the competency domain. Each required element includes one or more outcomes, which are further classified as anticipated to be measured, attested, or not measured in the COMLEX-USA licensure examination program for osteopathic physicians. Measured outcomes will contribute substantially to the enhanced COMLEX-USA examination program targeted for implementation in 2018-2019. Research and testing of workplace and other expanded assessment strategies and modalities are underway to potentially incorporate attested outcomes into a portfolio for the COMLEX-USA examination program in the future.

OUTCOMES

Outcomes are clear and more explicit description statements of desired abilities, including knowledge, skills, experiences, attitudes, values, and/or behaviors, which provide detail to the required elements. Outcomes may be further subdivided into those that are anticipated to be measured, those that might be able to be attested to, and those that are not-measured in the COMLEX-USA licensure examination program for osteopathic physicians.

MEASURED OUTCOMES: These are the explicit description statements of detailed, well-defined, desired abilities, including knowledge, skills, experiences, attitudes, values, and/or behaviors, that are observable and measurable and can be directly assessed in a reliable manner in the assessments that make up the COMLEX-USA examination program. *FOMCD 2016* measured outcomes contribute substantially to the enhanced COMLEX-USA examination program targeted for implementation in 2018-2019.

ATTESTED OUTCOMES: These are the explicit description statements of detailed, well-defined, desired abilities, including knowledge, skills, experiences, attitudes, values, and/or behaviors, that can be indirectly assessed through verification by trusted agents such as osteopathic medical school deans or residency program directors. These are similar to EPAs in the sense that the clinical context matters significantly and that workplace assessment is likely required for valid assessment. Attested outcomes or EPA-based assessment may indeed be less quantifiable and reliable in the true measurement sense, however, they are important to entrustability and are best if grounded in the trust of multiple sources of clinician feedback and attested to by trusted agents. Trusted agents accept some responsibility for the greater good of patient safety, quality care, entrustment, and the development of the physician learners themselves. Research and testing of workplace and other expanded assessment strategies and modalities are underway to potentially incorporate attested outcomes into a portfolio for the COMLEX-USA examination program in the future.

NOT-MEASURED OUTCOMES: These are the explicit description statements of detailed, well-defined, desired abilities, including knowledge, skills, experiences, attitudes, values, and/or behaviors that are not currently anticipated to be measured directly or indirectly in the COMLEX-USA examination program, at least for the immediate future. These are likewise similar to EPAs and may require evaluation of key attributes for entrustability not typically directly assessed in current medical licensing examination programs. These may include truthfulness, conscientiousness, and discernment (ie, self-awareness of limitations and asking for help when a physician needs it). Further research and development will focus on ways to measure or attest that these not-measured outcomes are met by osteopathic physicians, and measured in a manner that is feasible, user friendly, provides valid and reliable information, positively influences physician's competency development, and enhances high-quality, safe patient care.

WHAT THE NBOME COMPETENCY DOMAINS AND FOMCD 2016 ARE NOT:

THEY ARE NOT ACGME MILESTONES

The ACGME defines milestones as "competency-based developmental outcomes (eg, knowledge, skills, attitudes, and performance) that can be demonstrated progressively by residents/fellows from the beginning of their education through graduation to the unsupervised practice of their specialties."[11] ACGME milestones are a formative assessment framework and a roadmap for the learner, showing a developmental progression. Specific milestones are significant points in development that enable the learner and training program to know a learner's trajectory of competency development, and these skills and knowledge-based developments are expected to occur by a specific stage in training. They can help create shared mental models around outcomes. Although milestones are still a relatively novel concept in early stages of evolution for ACGME-accredited residency programs, there do appear to be similarities between milestones for formative assessment by the ACGME and NBOME's *FOMCD 2016* required elements and outcomes. In particular, the ACGME and AOA's *Osteopathic Recognition Milestone Project* (December 2015),[12] with milestones designed for the use in evaluation of residents and fellows in ACGME programs that achieve Osteopathic Recognition status, may be particularly relevant.

Assessment for milestones is felt to require observations and judgments of performance in the workplace, which is the case with many of NBOME's attested outcomes. Milestones typically have the following levels:[13]

- Level 1 (Novice) an entering resident
- Level 2 (Advanced Beginner) an intermediate resident after completion of a transitional year
- Level 3 (Competent) an advanced resident targeted for graduation
- Level 4 (Proficient) a fellow
- Level 5 (Expert) a professional after several years of practice

It is expected that only a few exceptional trainees will reach Level 5.

Opportunities for harmonization may exist as the use and study of milestones further matures, and it is anticipated that demonstration of certain *FOMCD 2016* competency domains, required elements, and outcomes may have the potential to provide valuable evidence for related formative and summative uses, such as by deans or program directors or clinical competency committees.

THEY ARE NOT ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPAS)

Conceptualized by Dr. Olle ten Cate in the Netherlands, EPAs are "units of professional practice, defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained specific competence. EPAs are independently executable, observable, and measurable in their process and outcome, and therefore, suitable for entrustment decisions."[7] For graduate medical education, these represent samples of the routine professional-life activities of a physician based on his or her specialty or subspecialty, and describe what a particular specialist should be able to do without supervision upon completion of residency and fellowship. The concept of *entrustable* means "a practitioner has demonstrated the necessary knowledge, skills and attitudes to be trusted to perform this activity [unsupervised]."[14] In the US, the ACGME has described how EPAs can help shape mental models around outcomes, often include behaviors and require knowledge, skills and values from more than one competency domain, but that they are NOT required or reportable to the ACGME. Since EPAs assess collective competence and the "Does" portion of Miller's pyramid of clinical competence, they require workplace assessment (eg, clinical observations, multi-source feedback, team assessments, and operative (procedural) skill assessment).

As an extension of the assessment frameworks being developed for graduate medical education, the AAMC delineated core EPAs for entering residency in 2014,[9] and AACOM has embarked on a similar project that includes

specific and distinctive osteopathic components within these EPAs.[10] These distinctive components are important for ensuring high-quality osteopathic medical care for patients. The NBOME has participated in this AACOM initiative, and with the expected publication of *Osteopathic Considerations for Core EPAs for Entering Residency* later in 2016, we anticipate a joint initiative to explore a cross-walk between the NBOME's *FOMCD 2016* competency domains, required elements, and outcomes to further align the initiatives of those working on curriculum development, teaching, learning, and assessment for continuous professional development across the continuum.

COMLEX-USA MASTER BLUEPRINT 2018-2019, FOMCD 2016 AND TWO DECISION POINTS

The NBOME is pleased to offer this document as a reference for those involved in preparing themselves or others to serve the public as osteopathic physicians. In conjunction with the *FOMCD 2016*, the NBOME is implementing a new COMLEX-USA Master Blueprint 2018-2019 that consists of two dimensions, Competency Domains and Clinical Presentations. The new blueprint continues to integrate the basic tenets of osteopathic medicine that are:

- The body is a unit; the person is a unit of body, mind, and spirit.
- The body is capable of self-regulation, self-healing, and health maintenance.
- Structure and function are reciprocally interrelated.
- Rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.

While the *FOMCD 2016* has helped to inform the enhanced COMLEX-USA Master Blueprint, they are not interchangeable. The enhanced COMLEX-USA Master Blueprint 2018-2019 will assess examinees across all seven domains of competencies and the majority of the required elements and measured outcomes, and will introduce attested outcomes as essential qualities and behaviors that should be demonstrated by all osteopathic physicians. *FOMCD 2016* substantially informs the Competency Domains dimension of the enhanced COMLEX-USA Master Blueprint. The Clinical Presentations dimension of the enhanced blueprint is likewise designed in an evidence-based manner to sample from the ways in which patients present to osteopathic physicians in practice. This sampling has been expanded to include patient ages across the lifespan, varied clinical settings, and a broad range of diverse and special populations. Updated information on the enhanced COMLEX-USA Master Blueprint 2018-2019 can be found on the NBOME website.

The enhanced blueprint will expand as possible in an attempt to broaden the information collected at each of two examination decision points. Decision points are collections of individual assessments that align around two specific determinations in physician development for licensure decisions. Decision Point 1 is when examinees qualify for entry into residency training and supervised medical practice as residents, become eligible for graduate medical education training licensure, and are granted the DO degree as determined by their DO-granting medical school. The three examinations within Decision Point 1 are COMLEX-USA Level 1, COMLEX-USA Level 2-CE, and COMLEX-USA Level 2-PE. These examinations are targeted to implement the enhanced blueprint, with clearly defined test specifications, in 2019. All three examinations and other requirements must be successfully completed to qualify to enter Decision Point 2.

Decision Point 2 will consist of a two-day COMLEX-USA Level 3 examination. This enhanced two-day Level 3 examination, along with state-specific requirements, including those pertaining to graduate medical education, qualifies DOs for eligibility for unrestricted medical licensure (often referred to as licensure for unsupervised medical practice) in all 50 United States.

Further information about each specific examination in the COMLEX-USA series, with test specifications and other requirements, are available on NBOME's website.

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We hope that you find *FOMCD 2016* to be a valuable resource, and we look forward to your feedback and further input as we continue the process of continuous quality improvement for physician development and for protecting the public with the best quality care possible.

National Board of Osteopathic Medical Examiners. *Fundamental Osteopathic Medical Competency Domains 2016: Guidelines for Assessment for Osteopathic Medical Licensure and the Practice of Osteopathic Medicine*. Chicago, IL, 2016.

Information herein is provided only as a resource for interested stakeholders. For the most updated information pertaining to the content or test specifications for the COMLEX-USA examination program, or any other NBOME assessment or service, please refer to that provided on NBOME's website **www.nbome.org**.

COMPETENCY DOMAIN 1

OSTEOPATHIC PRINCIPLES, PRACTICE, AND MANIPULATIVE TREATMENT

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must demonstrate knowledge of osteopathic principles and practice such that care of patients is approached from the distinct behavioral, philosophical, and procedural aspects of osteopathic medical practice related to the four tenets of osteopathic medicine: 1) the body is a unit; the person is a unit of body, mind, and spirit; 2) the body is capable of self-regulation, self-healing, and health maintenance; 3) structure and function are reciprocally interrelated; and 4) rational treatment is based on an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function. Osteopathic physicians must recognize, diagnose, and treat patients with somatic dysfunction using osteopathic manipulative treatment (OMT) in the clinical setting. While osteopathic tenets are considered foundational to the other competency domains herein, this classification emphasizes the distinctive osteopathic foundation and approach to patient care, including osteopathic principles, the treatment of somatic dysfunction, and the use of OMT. The AACOM 2011 *Glossary of Osteopathic Terminology* defines osteopathic manipulative treatment and somatic dysfunction as follows:

"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...."

"somatic dysfunction: Impaired or altered function of related components of the somatic (body framework) system: skeletal, arthrodial and myofascial structures, and their related vascular, lymphatic, and neural elements. Somatic dysfunction is treatable using osteopathic manipulative treatment."

REQUIRED ELEMENT 1.1
Knowledge of Osteopathic Principles, Practice, and OMT

DEFINITION: The osteopathic physician must demonstrate an understanding of osteopathic principles and practice, including knowledge of the basic science, mechanisms of action, and physical findings of somatic dysfunction and basic application of OMT.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 1.1

The osteopathic physician must:

M1.1.1	describe the concept of body unity and recognize its role in whole-person health care.
M1.1.2	describe the concept of interrelatedness of structure and function in the human body and how it guides physical examination for patient presentations, including biomechanical, respiratory-circulatory, neurologic, biopsychosocial, and metabolic structure-function relationships and their effect on the body's self-regulating and self-healing capabilities.
M1.1.3	describe the reciprocal effects of dysfunction within the musculoskeletal system and dysfunction within the vascular, lymphatic, neurologic, and organ systems.
M1.1.4	describe how the human body's self-healing and self-regulatory mechanisms affect treatment options.
M1.1.5	describe the scientific knowledge supporting the use of osteopathic principles, 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 and the role of the osteopathic physician to facilitate health.
M1.1.6	name and define the types of physical examination findings that are consistent with somatic dysfunction.
M1.1.7	name, define, and describe the types of somatic dysfunction found within the 10 body regions, which are the head, cervical, thoracic, lumbar, sacral, pelvic, lower extremity, upper extremity, rib, and abdominal/visceral regions.
M1.1.8	describe the underlying mechanisms, signs, symptoms, and physical findings that are associated with viscerosomatic, somatovisceral, viscerovisceral, and somatosomatic reflexes.
M1.1.9	name and describe the diagnostic examination, initial positioning, monitoring, motion barriers, activating forces, therapeutic timing, repetition, and reassessments used in indirect and direct technique types of OMT, including the following: counterstrain; muscle energy; myofascial release; high velocity, low amplitude; soft tissue; lymphatic; osteopathic cranial manipulative medicine;

articulatory; balanced ligamentous tension; ligamentous articular strain; facilitated positional release; Still; visceral; treatment of Chapman reflexes; and treatment of trigger points.

M1.1.10 identify the indications and contraindications of different OMT techniques.

M1.1.11 compare and contrast the relative value, advantages, and disadvantages of different OMT techniques.

REQUIRED ELEMENT 1.2
Skills in Osteopathic Principles, Practice, and OMT

DEFINITION: The osteopathic physician must be able to apply osteopathic principles, including the use of OMT, to an appropriate patient care plan.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 1.2

The osteopathic physician must:

M1.2.1 incorporate osteopathic principles into problem solving in clinical settings.

M1.2.2 obtain medical, family, social, and cultural histories from or about the patient pertinent to the presenting complaint, with emphasis on assessing potential structure-function and mind-body-spirit relationship influences.

M1.2.3 perform an appropriate osteopathic structural examination before and reassessment after administration of OMT.

M1.2.4 diagnose somatic dysfunction within the 10 body regions (head, cervical, thoracic, lumbar, sacral, pelvic, lower extremity, upper extremity, rib, and abdominal/visceral), prioritize a differential diagnosis, and develop an appropriate care plan.

M1.2.5 perform effective indirect and direct technique types of OMT and associated elements, including diagnostic examination, initial positioning, monitoring, motion barriers, activating forces, therapeutic timing, repetition, and reassessment. The technique types of OMT include: counterstrain; muscle energy; myofascial release; high velocity, low amplitude thrust; soft tissue; lymphatic; osteopathic cranial manipulative medicine; articulatory; balanced ligamentous tension; ligamentous articular strain; facilitated positional release; Still; visceral; treatment of Chapman reflexes; and treatment of trigger points.

M1.2.6 provide for the safety and dignity of the patient while diagnosing somatic dysfunction and administering OMT.

M1.2.7 communicate principles of and demonstrate use of appropriate therapeutic and rehabilitative exercises, activity modification, and supportive and adaptive devices in the management of neuromusculoskeletal dysfunction and facilitation of health.

REQUIRED ELEMENT 1.3
Integration of Osteopathic Principles, Practice, and OMT into Care

DEFINITION: The osteopathic physician must demonstrate sufficient depth of knowledge and skills to recognize, diagnose, and treat patients who have somatic dysfunctions using OMT in the clinical setting.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 1.3

The osteopathic physician must:

M1.3.1 apply osteopathic principles and practice in health and disease, with particular emphasis on optimizing homeostasis and maximizing the patient's comfort and health, to resolve complaints and concerns with which patients commonly present.

M1.3.2 advocate for the administration of OMT in appropriate clinical settings.

M1.3.3 identify viscerosomatic relationships and the role of the musculoskeletal system in the patient presentation by performing an osteopathic structural examination.

M1.3.4 demonstrate respect to patients of heterogeneous and diverse populations, including but not limited to diversity in ethnicity, culture, gender identity, and/or sexual orientation, and religious beliefs, who may express the symptoms of their somatic and/or visceral dysfunctions in unique or unconventional ways.

M1.3.5 document diagnostic information to allow for appropriate coding for evaluation and management services and OMT.

M1.3.6 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.

M1.3.7 report and interpret epidemiologic data in patients with musculoskeletal dysfunction.

M1.3.8 integrate scientific knowledge supporting the use of osteopathic principles, practice, and OMT into the clinical evaluation and management of the patient.

COMPETENCY DOMAIN 2

OSTEOPATHIC PATIENT CARE AND PROCEDURAL SKILLS

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must provide osteopathic medical care that is patient centered, compassionate, safe, effective, evidence based, timely, efficient, and equitable in order to promote health and the body's self-regulatory and self-healing nature, in both the care of the patient and the care of communities and populations.

Osteopathic physicians must provide these elements of effective osteopathic patient care, as appropriate to their scope of practice, to patients in a broad range of diverse and special populations in varied clinical settings, including outpatient, inpatient and home care settings, across the lifecycle.

This patient care involves determining and monitoring the nature of the patient's concern or complaint; appropriately incorporating osteopathic principles, practice, and OMT; and implementing effective, equitable, timely, evidence-based, and mutually agreed-upon diagnostic and patient care plans, including appropriate patient education and follow-up. This includes performing all other diagnostic and therapeutic clinical procedures essential for the area of practice. In the delivery of the highest-quality patient care, promotion of wellness, and prevention of disease, osteopathic physicians must be able to serve appropriately as members or leaders of interprofessional health care teams and foster effective communication with and between other professionals. Interprofessional team outcomes will be mapped primarily to the systems-based practice domain (Domain 7).

REQUIRED ELEMENT 2.1
Data Gathering

DEFINITION: The osteopathic physician must effectively gather accurate, essential data from all sources, including the patient, secondary sources, medical records, and physical examination (including osteopathic structural examination), regardless of patient age or clinical setting.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 2.1

The osteopathic physician must:

M2.1.1	elicit the patient's view of the concern, complaint, or issue.
M2.1.2	elicit the essential information regarding medication and allergy histories, social history, family history, sexual history, developmental milestones, and psychosocial issues that contribute to the patient's behaviors or condition.

M2.1.3	elicit a comprehensive patient-focused history, including symptoms, psychological factors, cultural considerations, need for interpretive or adaptive services, and community/social factors, from the patient and other sources as appropriate and in a timely manner.
M2.1.4	elicit the essential information regarding past medical history of diseases, disorders, and surgical procedures.
M2.1.5	elicit the essential information regarding mechanism of injury and disease presentations and/or biomechanical influences that contribute to the patient's condition.
M2.1.6	adapt the gathering of information effectively to the situation and interview patients, families, and caregivers in various clinical settings.
M2.1.7	gather information regarding health promotion and disease prevention through medical-history taking and physical examination regarding the biomedical, biomechanical, and biopsychosocial issues that contribute to health and disease.
M2.1.8	apply an appropriate knowledge base to medical-history taking and physical examination, regarding the psychosocial and cultural issues that contribute to health, disease, and behavior.
M2.1.9	determine the patient's living circumstances and the depth and scope of the patient's support network.
M2.1.10	explore the patient's beliefs, concerns, expectations, and literacy about health and disease while considering contextual factors such as the patient's age, gender, culture, literacy, sexual orientation, spirituality, and economic background.
M2.1.11	interpret the results of relevant laboratory, imaging, and other diagnostic studies in the context of patient care.

REQUIRED ELEMENT 2.2
Differential Diagnosis

DEFINITION: The osteopathic physician must formulate a differential diagnosis based on the patient evaluation and epidemiologic data, prioritize diagnoses appropriately, and determine the nature of the concern or complaint in the context of the patient's life cycle and in a variety of health care settings.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 2.2
The osteopathic physician must:

M2.2.1	generate, assess, and test appropriate hypotheses during the medical interview and physical examination.
M2.2.2	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
Essential Clinical Procedures

DEFINITION: The osteopathic physician must perform basic clinical procedures essential for the generalist practice of osteopathic medicine. (OMT techniques are classified in 1.1.9 and 1.2.5.)

MEASURED OUTCOMES FROM REQUIRED ELEMENT 2.3
The osteopathic physician must:

M2.3.1	perform a clinically appropriate physical examination including evaluation of each of the body areas (head, neck, chest, abdomen, genitalia/groin/buttocks, back/spine, and upper and lower extremities) and organ and body systems (constitutional; cardiovascular; ears, nose, mouth, and throat; eyes; genitourinary – female and male; hematologic/lymphatic/immunologic; musculoskeletal; neurologic; psychiatric; respiratory; and skin).
M2.3.2	perform an osteopathic structural examination and OMT.
M2.3.3	employ hand hygiene practices, universal precautions, and medical aseptic technique to minimize nosocomial infections.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 2.3
The osteopathic physician should safely and effectively:

A2.3.1	perform phlebotomy (drawing a venous blood sample as a diagnostic measure).
A2.3.2	administer intradermal, subcutaneous, and intramuscular injections.
A2.3.3	perform injection of trigger points or muscles, tendon sheaths, or aponeuroses.

A2.3.4	employ the skills taught in basic cardiac life support (BCLS) and advanced cardiac life support (ACLS) (eg, cardiopulmonary resuscitation (CPR), obtaining peripheral intravenous access, performing endotracheal intubation).
A2.3.5	apply simple wound dressings.
A2.3.6	employ noncircumferential immobilization devices/splints for common musculoskeletal conditions of the extremities.
A2.3.7	perform suturing for simple repair of superficial wounds.
A2.3.8	perform incision and drainage of simple superficial skin abscesses.
A2.3.9	insert a urinary (Foley) catheter in uncomplicated situations for both male and female patients.
A2.3.10	perform an uncomplicated, spontaneous vaginal delivery.
A2.3.11	perform arthrocentesis, aspiration, and/or injection of a major joint or bursa (eg, shoulder, hip, or knee joint; subacromial bursa).

REQUIRED ELEMENT 2.4
Patient Care Management

DEFINITION: The osteopathic physician must provide diagnostic information; develop a safe, evidence-based, cost-effective, equitable, patient-centered care plan; and use all ethical and appropriate options for the goal of relieving the patient's physical and psychological distress. Within the context of evidence-based and cost-effective care, the osteopathic physician must assess the patient's motivation, willingness, and ability to cooperate with the diagnostic and therapeutic plan.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 2.4

The osteopathic physician must:

M2.4.1	elicit and consider the patient's perspective in developing and planning the diagnostic and care plan with patients and their families, including orders and prescriptions, using a nonjudgmental approach to elicit health beliefs and values that may influence the patient's comfort and compliance with the treatment plan.
M2.4.2	identify, ethically address, and appropriately relieve the patient's suffering and distress while maintaining patient dignity.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 2.4
The osteopathic physician should:

A2.4.1 monitor and manage the course of the patient's condition over time.

A2.4.2 notify patients of the results and information important to their medical care, including diagnostic studies and prognoses, in a timely and appropriate manner.

REQUIRED ELEMENT 2.5
Patient Education

DEFINITION: The osteopathic physician must assess patients' health literacy and understanding and must counsel and educate patients accordingly.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 2.5
The osteopathic physician must:

M2.5.1 explain the nature of the patient's concern or complaint at a level commensurate with the patient's health literacy.

M2.5.2 describe diagnostic procedures, therapeutic options, and care plans at a level commensurate with the patient's health literacy.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 2.5
The osteopathic physician should:

A2.5.1 obtain and document informed consent, communicating appropriately based on the patient's health literacy.

COMPETENCY DOMAIN 3

APPLICATION OF KNOWLEDGE FOR OSTEOPATHIC MEDICAL PRACTICE

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must demonstrate the understanding and application of established and evolving principles of foundational biomedical and clinical sciences integral to the practice of patient-centered osteopathic medical care.

As with the other competency domains, application of knowledge is about ability (ie, knowledge put into action). Cognitive and other learning science theorists explain that the acquisition of declarative knowledge in biomedical and clinical sciences, the conscious knowledge that something is the case, progressively transforms into procedural knowledge (knowing how to do something). This gradual transformation leads the osteopathic physician to develop a problem- and task-specific knowledge base that is integrated across individual disciplines. It is this knowledge base that provides a foundation for competent patient-centered osteopathic medical care. An osteopathic physician with a fluent knowledge base in foundational biomedical and clinical sciences, for example, would be able to explain principles of health, disease, and diagnostic and treatment options to patients. Included in this knowledge base is the articulation of core scientific and clinical practice principles relevant to osteopathic medical practice (eg, health and the body's innate capacity to heal, differential diagnoses, disease etiologies, indications and contraindications, assessment of the risks and benefits of diagnostic and therapeutic interventions).

Knowledge fluency is fundamental to a generalist osteopathic physician's competency to practice osteopathic medicine. Knowledge fluency is demonstrated by the ability to efficiently interpret, process, and skillfully apply principles of foundational biomedical and clinical sciences in a timely manner. Also important to an osteopathic physician's knowledge competency is the ability to formulate appropriate clinical questions, retrieve evidence to inform patient care, acquire additional and evolving knowledge for lifelong learning, and apply this knowledge for continuous practice improvement. Demonstration of the understanding and application of core knowledge is fundamental to the incorporation of new knowledge. Continuous quality improvement, however, is primarily addressed in the practice-based learning and improvement domain (Domain 4).

As osteopathic medical knowledge provides the foundation for many physician competency domains, considerable overlap exists between this competency domain and the other six. Testing concepts are mapped here when the primary component being assessed is application of knowledge (eg, the knowledge of

the scientific understanding of mechanisms of action; molecular and macro systems including biomolecules, molecules, cells, and organs; origins of disease processes; why certain diagnostic tests and treatments are used).

The principles that underlie the human condition, including its biologic complexity, genetic diversity, homeostatic mechanisms, structure-function interrelationships, development, and interactions of systems and environmental influences, guide the osteopathic physician in the understanding of health and the diagnosis and treatment of disease. While these foundational principles often cross biomedical science and clinical disciplines in the practice of osteopathic medicine, they are mapped here for primary characterization.

REQUIRED ELEMENT 3.1
Foundational Biomedical Sciences Knowledge Base

DEFINITION: Given the various clinical presentations common and important to osteopathic medical practice and described herein, the osteopathic physician must be able to demonstrate the application of knowledge of clinically applicable foundational biomedical science concepts related to patient care and health, homeostasis, structure-function relationships, prevention, and disease, and do so in an integrated, patient-centered, osteopathic manner.

These clinical presentations include those outlined in Dimension 2 of the COMLEX-USA Master Blueprint:

- Community Health and Presentations related to Wellness
- Patient Presentations related to Human Development, Reproduction, and Sexuality
- Patient Presentations related to the Endocrine System and Metabolism
- Patient Presentations related to the Nervous System and Mental Health
- Patient Presentations related to the Musculoskeletal System
- Patient Presentations related to the Genitourinary System
- Patient Presentations related to the Gastrointestinal System and Nutritional Health
- Patient Presentations related to the Circulatory and Hematologic Systems
- Patient Presentations related to the Respiratory System
- Patient Presentations related to the Integumentary System

MEASURED OUTCOMES FROM REQUIRED ELEMENT 3.1

The osteopathic physician must effectively apply clinically relevant foundational biomedical science knowledge related to:

M3.1.1	the molecular, biochemical, tissue, and cellular bases of health and disease.
M3.1.2	medical genetics.
M3.1.3	the anatomic and structural bases of health and disease.
M3.1.4	the physiologic and pathologic bases of health and disease.

M3.1.5 the microbiologic and immunologic bases of health and disease.

M3.1.6 pharmacologic principles and pharmacotherapeutics in health and disease.

M3.1.7 neurosciences.

M3.1.8 biopsychosocial sciences.

M3.1.9 epidemiology and population sciences.

M3.1.10 medicolegal and governing regulatory principles in medical practice.

REQUIRED ELEMENT 3.2
Clinical Sciences Knowledge Base

DEFINITION: Given the various clinical presentations common and important to osteopathic medical practice and described herein, the osteopathic physician must be able to demonstrate the application of knowledge of established and evolving clinical science concepts related to patient care and health, homeostasis, structure-function relationships, prevention, and disease and do so in an integrated, person-centered, osteopathic manner.

These clinical presentations include those outlined in Dimension 2 of the COMLEX-USA Master Blueprint:

- Community Health and Presentations related to Wellness
- Patient Presentations related to Human Development, Reproduction, and Sexuality
- Patient Presentations related to the Endocrine System and Metabolism
- Patient Presentations related to the Nervous System and Mental Health
- Patient Presentations related to the Musculoskeletal System
- Patient Presentations related to the Genitourinary System
- Patient Presentations related to the Gastrointestinal System and Nutritional Health
- Patient Presentations related to the Circulatory and Hematologic Systems
- Patient Presentations related to the Respiratory System
- Patient Presentations related to the Integumentary System

MEASURED OUTCOMES FROM REQUIRED ELEMENT 3.2

The osteopathic physician must effectively apply clinical science knowledge related to disciplines pertaining to the primary-care-oriented focus of osteopathic medical practice, including generalist concepts from the following specialties:

M3.2.1 emergency and acute care medicine.

M3.2.2 family medicine.

M3.2.3	general internal medicine and its subspecialties (eg, allergy/immunology, cardiology, endocrinology, gastroenterology, hematology, infectious diseases, nephrology, oncology, pulmonary medicine, rheumatology).
M3.2.4	preventive and occupational medicine.
M3.2.5	neurology.
M3.2.6	obstetrics and gynecology.
M3.2.7	osteopathic neuromusculoskeletal medicine.
M3.2.8	pain medicine, hospice, and palliative care.
M3.2.9	physical medicine and rehabilitation.
M3.2.10	pediatrics and adolescent medicine.
M3.2.11	geriatrics.
M3.2.12	psychiatry and behavioral medicine.
M3.2.13	general surgery and its subspecialties (eg, colon and rectal, neurologic, pediatric, plastic, thoracic, urologic, and vascular).
M3.2.14	orthopedics and sports medicine.
M3.2.15	anesthesiology.
M3.2.16	otorhinolaryngology and ophthalmology.
M3.2.17	radiology.
M3.2.18	pathology.
M3.2.19	dermatology.
M3.2.20	other clinical discipline areas relevant to primary care in osteopathic medicine.

REQUIRED ELEMENT 3.3
Continuous Knowledge-Base Development and Lifelong Learning

DEFINITION: The osteopathic physician must demonstrate that he/she acquires and sustains knowledge of applicable foundational biomedical and clinical science concepts appropriate for clinical practice for lifelong learning, including, as applicable, at the point of care.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 3.3

The osteopathic physician must demonstrate that he/she:

M3.3.1 incorporates new developments in foundational biomedical and clinical science knowledge relevant to the practice of osteopathic medicine into his/her practice.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 3.3

The osteopathic physician should demonstrate that he/she:

A3.3.1 continuously acquires knowledge of applicable foundational biomedical or clinical science concepts for patient care, including advances in prevention, diagnosis, patient management, patient education, and palliative care.

COMPETENCY DOMAIN 4

PRACTICE-BASED LEARNING AND IMPROVEMENT IN OSTEOPATHIC MEDICAL PRACTICE

OVERVIEW AND TERMINOLOGY

Practice-based learning and improvement is the continuous self-evaluation of osteopathic medical practice, utilizing evidence-based medicine approaches to develop best practices that will continuously improve patient experiences of care, reduce inefficiencies and redundancies, and result in optimal and equitable patient care outcomes.

Osteopathic physicians must assimilate and apply evidence-based medicine principles and practices, fundamental biostatistical and epidemiologic concepts, clinical decision-making skills, and methods to evaluate relevance and validity of established and evolving scientific evidence. Osteopathic physicians must also appraise the clinical significance of research evidence.

Osteopathic physicians must demonstrate the use of best medical evidence, practical strategies for integrating evidence-based principles and practices into patient care, and systematic methods relating to continuous self-evaluation of clinical practice patterns and practice-based improvements, including those that reduce medical errors and promote health. Osteopathic physicians must set learning and quality improvement goals and must incorporate feedback and reflection into daily practice.

REQUIRED ELEMENT 4.1
Fundamental Epidemiologic Concepts

DEFINITION: The osteopathic physician must articulate and apply fundamental epidemiologic concepts to practice-based learning and improvement.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.1

The osteopathic physician must:

M4.1.1	interpret features and meanings of different types of data, including quantitative and qualitative, and different types of scales (eg, nominal, dichotomous, ordinal, continuous, ratio, proportion).
M4.1.2	interpret measures of central tendency, including mode, median, and mean, and measures of variability, including variance and standard deviation.
M4.1.3	explain and interpret measures of frequency of disease, injury, and death in forms of rate, ratio, and proportion, including incidence and prevalence.

REQUIRED ELEMENT 4.2
Clinical Decision-Making Tools

DEFINITION: The osteopathic physician must interpret literature regarding research and clinical topics for use in understanding disease-oriented and patient-oriented evidence.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.2
The osteopathic physician must:

M4.2.1	conduct, interpret, and apply systematic reviews (eg, meta-analysis) of literature regarding specific research and clinical topics with an understanding of limitations, such as design bias and sources of scientific uncertainty.
M4.2.2	compare and contrast disease-oriented evidence and patient-oriented evidence in the interpretation of literature.
M4.2.3	identify and apply population health data to address health care disparities.

REQUIRED ELEMENT 4.3
Evidence-Based Medicine Principles and Practices

DEFINITION: The osteopathic physician must learn and apply evidence-based osteopathic medical principles and practices.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.3
The osteopathic physician must:

M4.3.1	access the best-available/highest level of evidence, in order to answer a clinical question with accuracy and maximum efficiency.
M4.3.2	critically appraise the available evidence and its validity, impact, and applicability.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 4.3
The osteopathic physician should:

A4.3.1	integrate the critical appraisal of the medical literature with clinical expertise and the patient's unique biology, values, ethnicity, and circumstances.

REQUIRED ELEMENT 4.4
Clinical Significance of Research Evidence and Statistical Inferences

DEFINITION: The osteopathic physician must determine the clinical significance of research evidence.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.4
The osteopathic physician must:

M4.4.1	judge and interpret aspects of statistical inference and hypothesis testing (eg, decision errors, sample size, power, confidence intervals, degree of freedom, blinding, external and internal validity, number needed to treat, number needed to harm, sample size) as applied to osteopathic medical practice.

M4.4.2 interpret pretest/posttest probabilities in diagnostic and screening tests, as applied to osteopathic medical practice.

REQUIRED ELEMENT 4.5
Translating Evidence into Practice and Continuous Learning

DEFINITION: The osteopathic physician must apply evidence to clinical practice.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.5
The osteopathic physician must:

M4.5.1 use information technology, including the Internet, to optimize learning and to access and manage medical information online.

M4.5.2 communicate best clinical evidence, including osteopathic principles and practice, to patients and colleagues.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 4.5
The osteopathic physician should:

A4.5.1 convert the need for information (eg, prevention, diagnosis, therapy, prognosis, causation) into an answerable clinical question.

REQUIRED ELEMENT 4.6
Continuous Evaluation, Feedback, and Reflection for the Improvement of Osteopathic Clinical Practice

DEFINITION: The osteopathic physician must identify, describe, and apply systematic methods relating to continuous evaluation of personal osteopathic clinical practice patterns, practice-based improvements, and the reduction of medical errors. The osteopathic physician must do so using information about individual patients, populations of patients, or communities to improve care. The osteopathic physician must incorporate regular feedback and reflection into practice, as well as set learning and improvement goals.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.6
The osteopathic physician must:

M4.6.1 describe the nature, function, and utilization of strategies in quality improvement (eg, PDCA cycle, Six Sigma, lean principles, root cause analysis) and health failure modes and effects analysis.

M4.6.2 consult physician colleagues and engage other health care professionals in the care of patients as appropriate.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 4.6
The osteopathic physician should:

A4.6.1 set learning and improvement goals and incorporate feedback and reflection into daily practice.

A4.6.2 apply the outcomes of audits, appraisals, and performance reviews to practice.

A4.6.3	recognize the limits of personal competency in knowledge, skill, and/or experience.
A4.6.4	perform regular self-assessment and select educational activities best designed to address identified deficits in competency and performance, in alignment with standards set by the profession.
A4.6.5	describe and demonstrate the use of tools employed in quality improvement.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 4.6
The osteopathic physician should:

NM4.6.1	develop and implement evaluation strategies for improving practice patterns based on patient outcomes relative to external benchmarks and self-reflection (eg, clinical assessment programs, performance improvement modules, Healthcare Effectiveness Data and Information Set [HEDIS] criteria).

COMPETENCY DOMAIN 5

INTERPERSONAL AND COMMUNICATION SKILLS IN THE PRACTICE OF OSTEOPATHIC MEDICINE

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must demonstrate the knowledge, skills, experience, attitudes, values, and behaviors that facilitate accurate and efficient information gathering, empathetic rapport building, and effective information giving in interactions with the patient and surrogates, the patient's family members and caregivers, and other members of the interprofessional collaborative team.

Osteopathic physicians must also demonstrate the ability to effectively document and synthesize clinical findings, diagnostic impressions, and diagnostic and treatment instructions in verbal, written, and electronic format. Communication in the English language is essential, as is communication with other members of the health care team, patients, and others when language barriers or other challenges to effective communication are encountered.

Interpersonal and communication skills for osteopathic medical practice are based on the incorporation of appropriate knowledge, experience, attitudes, values, and behaviors to determine the nature of the patient's concern or complaint; to develop, maintain, and conclude the therapeutic relationship; and to facilitate patient education, shared decision making, and implementation of diagnostic and care plans. These skills include active listening involving verbal and nonverbal behaviors, as well as effective documentation and synthesis of clinical findings and impressions. This set of knowledge, skills, experience, attitudes, values, and behaviors extends to the medical interview and to communication with the patient, family members, caregivers, and other members of the interprofessional collaborative team. It is essential for osteopathic medical practice that the approach be patient centered, holistic, comprehensive, compassionate, and respectful, contributing to an understanding of the patient, family, and caregiver perspectives and facilitating trust and therapeutic patient-physician relationships.

REQUIRED ELEMENT 5.1
Eliciting Information

DEFINITION: The osteopathic physician must communicate effectively with the patient, the patient's family, and other caregivers in order to establish a diagnostic impression and to help ascertain the nature of the concern or complaint. The osteopathic physician must open patient interviews by encouraging the patient to fully express concerns and must further gather information in a manner that results in effective exchange of information and collaboration with patients, their families, and other health care professionals.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.1

The osteopathic physician must:

M5.1.1 allow patients (or other persons being interviewed) to complete their opening statements without interruption in order to elicit the full set of patient concerns.

M5.1.2 use open-ended and closed-ended questions effectively.

M5.1.3 listen actively, using appropriate verbal and nonverbal techniques, including appropriate eye contact and touch.

M5.1.4 use interpretation services effectively as necessary to communicate with patients and to minimize potential barriers to effective information exchange with patients and family members; these services include language-interpreting services and hearing-impaired services.

REQUIRED ELEMENT 5.2
Rapport Building

DEFINITION: The osteopathic physician must develop, maintain, and conclude the therapeutic relationship and demonstrate competence in the rapport-building functions of the medical interview.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.2

The osteopathic physician must:

M5.2.1 communicate interest in, respect for, support of, and empathy for the patient.

M5.2.2 understand the patient, family, and caregiver's perspectives, concerns, complaints, and issues.

M5.2.3 provide closure to interviews by summarizing and affirming agreements, asking whether the patient has other issues or concerns, and planning follow-up (eg, next visit and plan for unexpected outcomes).

M5.2.4 communicate effectively with patients who are exhibiting anger or who present other challenges in order to resolve relational barriers between the physician, other health care professionals, and the patient.

M5.2.5 communicate effectively and encourage open communication with the patient, as appropriate, during clinical procedures, including OMT.

M5.2.6 clarify his/her role in the patient's care and/or on the health care team with the patient.

M5.2.7 understand and appreciate the role of other health care professionals in the care of patients and work in cooperation with them when applicable to provide high-quality patient-centered care.

REQUIRED ELEMENT 5.3
Information Giving

DEFINITION: The osteopathic physician must effectively provide patient education and information, ensuring that the patient (or caregiver) understands his/her condition and the diagnostic and/or treatment options and recommendations. This includes achieving consensus between the patient (or caregiver) and the physician. It also includes facilitating the informed consent process and recommending mutually agreed-upon diagnostic and/or therapeutic steps, or health promotion and disease prevention strategies. Additionally, it includes enhancing patient coping mechanisms and encouraging appropriate lifestyle changes to avoid illness and to promote and maintain health.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.3

The osteopathic physician must:

M5.3.1 share information using appropriate terminology and concepts that the patient, patient's family, and/or legal decision maker can understand and, as indicated, use language-interpreting services, hearing-impaired services, or other services to minimize potential barriers to effective information exchange.

M5.3.2 summarize discussions, check for understanding, and conclude conversations by ensuring all questions and concerns have been thoroughly addressed.

M5.3.3 encourage active patient participation in decision making while verifying the patient's willingness and ability to follow the care plan as part of informed consent.

M5.3.4 communicate to the patient the philosophy of osteopathic principles and practice and of OMT.

M5.3.5 communicate with compassion any news that may evoke in the patient and the patient's family or caregiver distress, sorrow, anger, or other emotion, such as any applicable information relative to terminal illness, disability, death, and dying.

M5.3.6 enhance the patient's coping ability by actively exploring and utilizing biopsychosocial concepts and addressing the social and psychological consequences of the condition and the treatment.

M5.3.7 recommend and explain appropriate disease prevention and health promotion strategies, including lifestyle changes and available community support services.

REQUIRED ELEMENT 5.4
Written and/or Electronic Documentation and Communication

DEFINITION: The osteopathic physician must demonstrate effective written and electronic communication in patient care and in working as a member of the interprofessional collaborative team.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.4
The osteopathic physician must:

M5.4.1 document subjective elements (eg, information provided by the patient or a secondary source) of the medical, surgical, family, medication, allergy, social, cultural, and sexual histories and review of systems, as appropriate.

M5.4.2 document objective patient information (eg, physical examination findings, laboratory/diagnostic test results, imaging results) as appropriate.

M5.4.3 document a reasonable diagnostic assessment or differential diagnosis as supported by diagnostic hypotheses as well as subjective and objective findings and data as appropriate.

M5.4.4 document elements of the patient care and follow-up or disposition plan as appropriate.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 5.4
The osteopathic physician should:

A5.4.1 develop and maintain accurate, comprehensive, legible/understandable, and timely medical records.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.4
The osteopathic physician should:

NM5.4.1 use digital and electronic communication modalities appropriately and professionally in a manner that protects privacy and confidentiality of patients as well as maintains a standard of professionalism.

REQUIRED ELEMENT 5.5
Interprofessional Team Communication

DEFINITION: The osteopathic physician must communicate effectively with other health care professionals as a member or leader of an interprofessional collaborative team.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 5.5
The osteopathic physician should:

A5.5.1 effectively communicate critical information that requires immediate attention and action concerning the patient's condition.

A5.5.2 employ check-backs and callouts that facilitate closed-loop communication to ensure that information conveyed by the sender is understood by the receiver as intended.

A5.5.3 effectively communicate in hand-off situations to enhance information exchanges during transitions in care (eg, shift changes, patient transfers, physicians transferring complete responsibility).

A5.5.4 communicate appropriately with consultants and other health care professionals when referring patients, providing the required background information and clarity regarding roles to ensure continuity of care.

A5.5.5 communicate verbally and in writing, using electronic health record platforms, with other members of the interprofessional collaborative team in order to provide effective and comprehensive patient-centered care.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 5.5
The osteopathic physician should:

NM5.5.1 communicate to the interprofessional collaborative team the philosophy of osteopathic principles and practice.

NM5.5.2 communicate appropriately within the authority hierarchy of a health care or other professional organization.

COMPETENCY DOMAIN 6

PROFESSIONALISM IN THE PRACTICE OF OSTEOPATHIC MEDICINE

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must understand and adhere to the ethical, behavioral, and social science principles that underpin medical professionalism competency, demonstrating accountability to patients, society, and the profession. Osteopathic physicians must consistently display high moral and ethical standards in the conduct of medical education, training, research, and practice. This conduct includes properly establishing, maintaining, and concluding the physician-patient relationship in a manner that is altruistic, compassionate, and conscientious. Osteopathic physicians must exemplify integrity, humanistic behavior, and a responsiveness to the needs of patients that supersedes self-interest. They must show respect for the patient as a person and demonstrate cultural sensitivity and responsiveness to a diverse patient population. While professionalism also includes a commitment to excellence and continuous professional development, these attributes are classified in the practice-based learning and improvement domain (Domain 4).

REQUIRED ELEMENT 6.1
Knowledge of Ethics and Professionalism

DEFINITION: The osteopathic physician 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.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.1

The osteopathic physician must:

M6.1.1	articulate moral, legal, and ethical guidelines for professional behavior.
M6.1.2	explain and apply the ethical principles of autonomy, beneficence, nonmaleficence, fidelity, justice, and utility.
M6.1.3	identify the patient's social and economic situation, capacity for self-care, and ability to participate in shared decision making.
M6.1.4	identify and describe the impact of social inequalities in health care and the social factors that are determinants of health outcomes.
M6.1.5	comprehend and apply the concepts of social accountability and responsibility.

REQUIRED ELEMENT 6.2
Humanistic Behavior

DEFINITION: The osteopathic physician must demonstrate respect, altruism, compassion, integrity, honesty, and trustworthiness.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.2
The osteopathic physician must:

M6.2.1	exhibit respect and compassion for the patient's autonomy, dignity, and privacy.
M6.2.2	exhibit openness, honesty, and trustworthiness with patients and their families in the completion of all reports and during the provision of evidence in any formal inquiries, including those related to litigation.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.2
The osteopathic physician should:

NM6.2.1	exhibit behaviors that promote public confidence in the osteopathic medical profession and related health care professions.

REQUIRED ELEMENT 6.3
Primacy of Patient Need

DEFINITION: The osteopathic physician must demonstrate responsiveness to the needs of patients and society that supersedes self-interest.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.3
The osteopathic physician must:

M6.3.1	use reason and appropriate judgment, and incorporate the patient's perspective when taking into consideration risks to the patient's health, income, and job security.
M6.3.2	respect patient autonomy and the right of the patient to be fully involved in decisions about care.
M6.3.3	respect the right of the patient to personal privacy and dignity during evaluation and management.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 6.3
The osteopathic physician should:

A6.3.1	make the care of the patient his/her foremost concern.
A6.3.2	be readily accessible to patients and colleagues when on duty, making suitable arrangements for coverage when off duty.
A6.3.3	provide care or secure appropriate referral for those patients who cannot afford care or have difficulty accessing care for other reasons.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.3
The osteopathic physician should:

NM6.3.1 ensure that personal beliefs, values, attitudes, and biases do not hinder the provision of equitable patient care to all patients, respecting patient decisions that may conflict with his/her own personal beliefs.

NM6.3.2 respect the right of the patient to decline taking part in teaching or research endeavors, ensuring that a patient's refusal does not adversely affect his/her care or the physician-patient relationship.

NM6.3.3 respect the right of the patient to obtain second opinions.

NM6.3.4 respect the value of the patient's time.

REQUIRED ELEMENT 6.4
Accountability and Duty in the Physician-Patient Relationship

DEFINITION: The osteopathic physician must properly establish, maintain, and conclude the physician-patient relationship in accordance with proper ethical and legal standards. The osteopathic physician must demonstrate accountability to patients, society, and the profession.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.4
The osteopathic physician must:

M6.4.1 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 or when unprofessional behavior compromises patient care or represents a threat to patients or others (eg, impairment, substance abuse, incompetence, unethical conduct, inappropriate relationships).

M6.4.2 properly establish the physician-patient relationship by examining, diagnosing, and treating, in a consensual manner and conscientiously maintaining the relationship consistent with proper ethical and legal standards.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.4
The osteopathic physician should:

NM6.4.1 properly terminate the physician-patient relationship when necessary (eg, physician relocation) and recognize, understand, and effectively manage the transition in an empathetic manner, consistent with proper ethical and legal standards.

NM6.4.2 use his/her influence as a physician properly, avoiding situations where personal and professional interests might be in conflict.

NM6.4.3 properly report adverse events (eg, drug reactions and near misses) so that this information can lead to improvements in the quality of care provided.

NM6.4.4 disclose any adverse event when it occurs; apologize promptly if appropriate; fully explain what occurred, including the short- and long-term implications; work to alleviate any harm; and contribute to the system/solution that prevents recurrence.

NM6.4.5 promptly notify the state medical/osteopathic licensing board or other appropriate authorities if convicted of any criminal offense or if action is taken in other jurisdictions that results in removal or suspension of a medical license.

NM6.4.6 use digital and electronic communication media and the Internet respectfully at all times, in a manner that is professional and positively influences trust in the osteopathic medical profession and related health care professions.

REQUIRED ELEMENT 6.5
Cultural Competency

DEFINITION: The osteopathic physician must demonstrate sensitivity, respect, and responsiveness to a diverse and heterogeneous patient population, including but not limited to diversity in culture, religion, age, gender, sexual orientation, socioeconomic circumstances, mental and physical disabilities, and military personnel and their families.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.5

The osteopathic physician must:

M6.5.1 demonstrate cultural awareness, respect, and responsiveness when communicating with the patient, family, caregivers, and other members of the health care team.

M6.5.2 discuss cultural issues openly and be responsive to culturally based cues, interpreting the implications of symptoms as they are expressed by patients from diverse cultures and circumstances.

REQUIRED ELEMENT 6.6
Professional and Personal Self-Care

DEFINITION: The osteopathic physician must provide for his/her personal care and well-being by applying the principles of wellness, disease prevention, and coping mechanisms to the conduct of his/her professional and personal life.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 6.6

The osteopathic physician should:

A6.6.1 protect himself/herself and his/her patients and colleagues by using appropriate measures, such as universal precautions and immunization against communicable diseases, when such treatments are available and do not pose extraordinary risk to the physician.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.6
The osteopathic physician should:

NM6.6.1 only provide medical treatment to himself/herself as a layperson would engage in self-care.

NM6.6.2 ensure that his/her personal condition or circumstance (eg, illness, impairment, disability) does not impair or endanger the care or welfare of patients.

NM6.6.3 seek qualified care for himself/herself from a health care professional who is not a member of his/her immediate family.

NM6.6.4 avoid the use of alcohol, drugs, and agents that may interfere with judgment or skill when caring for patients, working with colleagues, and meeting or addressing the public.

NM6.6.5 demonstrate healthy coping mechanisms to respond to stress and practice flexibility and maturity in adjusting to change and uncertainty.

REQUIRED ELEMENT 6.7
Ethical Professional and Business Practices and Compliance with Relevant Laws, Policies, and Regulations

DEFINITION: The osteopathic physician must demonstrate a commitment to honest and transparent business practices and to compliance with relevant laws, policies, and regulations. He/she must provide factual, evidence-based information whenever communicating about the quality or outcomes of services offered, credentials, and qualifications.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.7
The osteopathic physician should:

NM6.7.1 observe current regulations, laws, and statutes that govern medical practice, including those regarding reportable diseases.

NM6.7.2 make justifiable claims about the quality or outcomes of services and expectations provided and about physician and staff credentials, qualifications, and training.

NM6.7.3 refrain from exploiting patients' vulnerability or lack of medical knowledge.

NM6.7.4 exhibit honesty in any financial arrangements with patients by proactively providing information about fees and charges to assist patients in their decision making whenever possible.

NM6.7.5 clarify his/her personal interest to patients when providing or selling goods or services directly from his/her own practice.

NM6.7.6 apply ethical principles in business practices, as well as in medical practice, including recognizing and managing conflicts of interest.

REQUIRED ELEMENT 6.8
Ethical Principles in Practice and Research

DEFINITION: The osteopathic physician must demonstrate knowledge of, and the ability to apply, ethical principles in the practice and research of osteopathic medicine, particularly in the areas of confidentiality of patient information, access to care, regulation of care, provision or withholding of care, and the conduct of research.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.8
The osteopathic physician must:

M6.8.1	provide appropriate care to address physical, emotional, and spiritual pain and minimize needless helplessness or suffering.
M6.8.2	use ethical principles pertaining to provision or withholding of clinical care, including diagnostic and treatment modalities that are considered futile.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 6.8
The osteopathic physician should:

A6.8.1	respect and keep secure confidential information, including protected health information (PHI), in accordance with the laws described in, but not limited to, the Health Insurance Portability and Accountability Act (HIPAA).
A6.8.2	develop and maintain appropriate personal relationships with respect to boundaries with all patients.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 6.8
The osteopathic physician should:

NM6.8.1	conduct all research with honesty and integrity.
NM6.8.2	ensure the information he/she reports on or publishes is factual and evidence based.

COMPETENCY DOMAIN 7

SYSTEMS-BASED PRACTICE IN OSTEOPATHIC MEDICINE

OVERVIEW AND TERMINOLOGY

Osteopathic physicians must understand the larger context and systems of health care and a broader system of linked goals. They will effectively identify and utilize system resources to maximize the health of the individual and the community or population at large. This facilitates improving the individual experience of care, improving the health of populations, and reducing the per capita costs of care. Osteopathic physicians must work well as members and leaders of an interprofessional health care team, identifying areas for improvement to promote care and a culture that enhances quality and patient safety, as well as reduce medical errors, inequities, needless pain and suffering, helplessness, and waste and other inefficiencies.

REQUIRED ELEMENT 7.1
Health Systems Awareness

DEFINITION: The osteopathic physician must understand health care delivery systems and their associated health care coverage and access, including but not limited to Medicare, Medicaid, managed care, the Veterans Health Administration, formularies, accountable care organizations, and patient-centered medical homes, all of which affect the practice of an osteopathic physician and the care of his/her patients and the community.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.1
The osteopathic physician must:

M7.1.1	know the various types of medical practices and national health care delivery systems, including types of third-party coverage and methods of payment.
M7.1.2	understand the impact of health care delivery systems on patient care at the national level.
M7.1.3	identify global issues affecting the health of patients and communities.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 7.1
The osteopathic physician should:

A7.1.1	know the various types of medical practices and local or area health care delivery systems, including types of third-party coverage and methods of payment.
A7.1.2	demonstrate understanding of the impact of health policy on patient care at a local, regional, state, and national level.

REQUIRED ELEMENT 7.2
Engage in an Interprofessional Health Care Team for Optimal Patient- and Population-Centered Care

DEFINITION: The osteopathic physician must understand the function of the interprofessional health care team and his/her role in the team and also optimize team performance across the health care system for safe, quality patient- and population-centered care.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.2
The osteopathic physician must:

M7.2.1 identify and define the roles of trainees (ie, medical students and residents) and other health care professionals as members of the interprofessional collaborative team.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 7.2
The osteopathic physician should:

A7.2.1 demonstrate respect for other health care professionals and avoid inappropriately criticizing their practices.

A7.2.2 perform his/her assigned role or task appropriately when functioning as part of an interprofessional collaborative team.

A7.2.3 effectively assume a team leadership role, when indicated, by coordinating the activities of team members and ensuring that team members have the necessary resources.

A7.2.4 effectively deliver specific, timely, respectful, considerate feedback for the purpose of improving team performance.

A7.2.5 anticipate and support other team members' needs through accurate knowledge about their responsibilities and workload, and provide empathy and support for other members of the interprofessional collaborative team.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.2
The osteopathic physician should:

NM7.2.1 recognize and respect the unique cultures, roles, training, and expertise of other health care professionals.

REQUIRED ELEMENT 7.3
Incorporate Considerations of Cost Awareness and Risk-Benefit Analysis in Care

DEFINITION: The osteopathic physician must consider how to allocate resources (eg, evaluating value, quality, cost, risk-benefit analysis, potential wastes) in the health care delivery system and incorporate them into the care of patients.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.3
The osteopathic physician must:

M7.3.1 incorporate considerations of cost awareness and risk-benefit analysis in patient- and/or population-based care.

M7.3.2 make cost-effective decisions in the provision of optimal patient care (eg, request consults effectively, use diagnostic tests judiciously, participate in effective transitions of care) involving health care and resource allocation.

REQUIRED ELEMENT 7.4
Advocate for All Patients within the Health Care System

DEFINITION: The osteopathic physician must be an advocate for all patients within the health care system.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.4
The osteopathic physician must:

M7.4.1 recognize and work to reduce logistical and systems-based barriers to patient care.

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 7.4
The osteopathic physician should:

A7.4.1 assist patients in dealing with health care system complexities.

A7.4.2 make appropriate patient care decisions relative to the characteristics and requirements of different health care delivery and/or payment systems.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.4
The osteopathic physician should:

NM7.4.1 advocate for quality patient care and optimal patient care systems.

REQUIRED ELEMENT 7.5
Improve Health Systems and Patient Safety

DEFINITION: The osteopathic physician must understand, advocate for, and apply methods for the evaluation and improvement of patient care systems, with the goal of improving patient safety and quality of care.

MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.5
The osteopathic physician must:

M7.5.1 identify and use known effective methods for recognizing health system errors, implementing potential system solutions, and improving patient safety and systems of care (eg, error reporting, root cause analysis, training to improve effective transitions of care, best practices for safe prescribing, infection control, disease reporting, disaster management).

ATTESTED OUTCOMES FROM REQUIRED ELEMENT 7.5
The osteopathic physician should:

A7.5.1 utilize patient satisfaction data to improve medical practice and the health care system.

A7.5.2 intervene in a timely, effective manner when patient safety may be compromised or endangered.

NOT-MEASURED OUTCOMES FROM REQUIRED ELEMENT 7.5
The osteopathic physician should:

NM7.5.1 utilize data regarding the performance of the health care team and system to implement strategies for improvement.

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