



2023

Annual Report on the United States Medical Licensing Examination[®] (USMLE)

Prepared for Medical Licensing Authorities in the United States by the Federation of State Medical Boards of the United States and the National Board of Medical Examiners[®]

Table of Contents

Executive Summary	4
Introduction and Program Overview Mission Governance	5
Medical Licensing Authorities and the USMLE USMLE Services to State Medical Boards State Medical Boards' Participation in USMLE Annual USMLE Orientation for State Board Members and Staff State Board Advisory Panel to the USMLE USMLE Policy Exceptions Allowed at the Request of a State Medical Board USMLE Attempt Limit Retaking a Previously Passed Step USMLE and Medical Licensure Requirements USMLE Recommended Time Limit for Completing USMLE State Medical Boards' Time and Attempt Limits for Completing USMLE	7
Strategic Communication and Outreach Medical Licensing Authorities Quarterly FSMB Update on USMLE Examinees USMLE Medical Student and Resident Advisory Panel Program News Social Media General USMLE Brand Refresh Podcasts	11
Eligibility for the USMLE Steps Eligibility Requirements Eligibility Policies Sequencing of Steps Retakes Attempt Limit	13

Retaking a Previously Passed Step Physicians Who are Already Licensed in the United States	
Content and Administration Content Development Step Content and Structure Test Administration Test Accommodations	15
Scores Minimum Passing Scores Score Reporting Score Reports and Transcripts	18
Psychometrics Score Reliability Decision Consistency Score Validity Standard Setting USMLE General Procedures for Standard Setting Mandated Data Sources Informing the Judgment Process Setting the Standard	22
Data and Research Aggregate Performance Data Research Agenda Publications	25
Resources Websites Written Materials Key Contacts	26
Appendices A: USMLE Program News 2022-2023 B: Quarterly FSMB Update on USMLE C: USMLE Aggregate Performance Data 2021-2022 D: Program-related Publications by USMLE Staff in 2019-2022	28

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Executive Summary

The United States Medical Licensing Examination® (USMLE®) is a three-step examination sequence for medical licensure in the United States. The USMLE is composed of three complementary Steps: Step 1, Step 2 Clinical Knowledge (CK) and Step 3. The program administers approximately 100,000 Step examinations annually, with more than 3 million total tests administered since implementation in 1992.

Medical licensing authorities and their representatives continue to be key stakeholders and contributors to the USMLE program. In 2023, 35 individuals from 24 state medical and osteopathic boards across the United States participated in USMLE in some capacity. Since implementation of the USMLE in 1992, 338 members and staff from state medical boards have participated in the USMLE program in some capacity. These individuals represent 65 different U.S. medical and osteopathic boards.

As of 2022, approximately 61% of the 1,044,734 physicians licensed in the United States have taken all or part of the USMLE sequence; 56% have taken all Steps (1, 2 and 3).

This *Annual Report on the United States Medical Licensing Examination (USMLE)* provides state medical boards with an overview of the USMLE, a jointly owned program of the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME). In addition to general information about the examination, the report provides updates on topics of specific interest to the boards and a summary of state medical boards' interactions with the USMLE program. State medical boards participate in USMLE in a variety of capacities, including writing and reviewing test items; serving on governing committees; and participating in standard-setting surveys and on advisory panels. Links to key USMLE resources, articles, research and publications are also provided.

Introduction and Program Overview

The United States Medical Licensing Examination® (USMLE®) was the result of “A Proposal for a Single Examination for Medical Licensure” presented by a Task Force to Study Pathways to Licensure in 1989. A jointly owned program of the Federation of State Medical Boards of the United States, Inc., (FSMB) and the National Board of Medical Examiners® (NBME®), the USMLE instituted a single examination for use by all physicians seeking licensure in the United States.

Before USMLE, multiple examinations (the NBME Parts examination and the Federation Licensing Examination [FLEX]) offered paths to medical licensure. It was desirable to create one examination system accepted in every state, to ensure that all licensed allopathic physicians (MDs) had passed the same assessment standards – no matter in which school or which country they had trained.

Today, all state medical boards utilize a national examination – USMLE for allopathic physicians, COMLEX-USA for osteopathic physicians. Predecessor licensing examinations – the Federation Licensing Examination (FLEX) and the National Board of Medical Examiners (NBME) Parts – were gradually phased out and replaced with the USMLE in 1992-1994.

The USMLE serves only for initial licensure and is a unified examination program comprised of three complementary Steps: Step 1, Step 2 Clinical Knowledge (CK) and Step 3. The USMLE Step 2 Clinical Skills, or Step 2 CS, was implemented in 2004 and officially discontinued in January 2021.

Although the USMLE is typically completed over the course of several years in the career of a prospective physician, it constitutes a unitary examination program. Each of the three Steps complements the others; no Step can stand alone in the assessment of readiness for medical licensure, nor can other assessments be substituted to replace one of the Steps.

The USMLE program administers approximately 100,000 Step examinations annually, with more than three million test administrations since implementation of USMLE began in 1992.

As of 2022, approximately 61% of the 1,044,734 physicians licensed in the United States have taken all or part of the USMLE sequence; 56% have taken all three Steps (1, 2 and 3).

Breakdown of this data by medical degree and medical education show that:

- 64% of licensed M.D.s have taken part or all of the USMLE; 62% have taken all three Steps.
- 35% of licensed D.O.s have taken part or all of the USMLE; 1% have taken all three Steps.
- 58% of licensed domestic medical graduates (i.e., graduates of medical schools accredited by the Liaison Committee on Medical Education or LCME) have taken part or all of the USMLE; 52% have taken Steps 1, 2 and 3.
- 71% of licensed international medical graduates (i.e., graduates of non-LCME accredited medical schools) have taken part or all of the USMLE; 69% have taken Steps 1, 2 and 3.

Mission

The stated mission of the USMLE is to support U.S. medical licensing authorities through its leadership in the development, delivery and continual improvement of high-quality assessments across the continuum of physicians' preparation for practice.

The program's goal are:

- To provide to licensing authorities meaningful information from assessments of physician characteristics—including medical knowledge, skills, values, and attitudes—that are important to the provision of safe and effective patient care.
- To engage medical educators and their institutions, licensing authority members, and practicing clinicians in the design and development of these assessments.
- To assure fairness and equity to physicians through the highest professional testing standards.
- To continue to develop and improve assessments for licensure with the intent of assessing physicians more accurately and comprehensively.

The results of the USMLE are reported to medical licensing authorities for use in the decision to grant a provisional license to practice in a post-graduate training program and the decision to grant an initial license for the independent practice of medicine. The USMLE is recognized and utilized by all state medical boards for licensing allopathic physicians and graduates of international medical schools. Many of the osteopathic licensing boards also recognize USMLE for licensing graduates holding the D.O. degree.

Governance

The FSMB and NBME co-own the USMLE. However, much of the governance responsibility for the program resides with the USMLE Composite Committee. The committee consists of representatives from FSMB, NBME, the Educational Commission for Foreign Medical Graduates (ECFMGTM) – a Division of InTealth, and the public. The Composite Committee is responsible for overseeing and directing USMLE policies. Specific functions of the committee include establishing policies for scoring and standard setting; approving Step examination blueprints and test formats; setting policies for test administration, test security and program research. The membership of the Composite Committee routinely includes current or former members of state medical boards. **Members from the Florida-Medical, Hawaii, Iowa, Missouri, North Carolina and Wisconsin boards served on the USMLE Composite Committee in 2022. Members from the Florida-Medical, Hawaii, Missouri, Montana, and North Carolina boards currently serve on the committee in 2023.**

The three USMLE Step examinations are overseen by a Management Committee composed of physicians and scientists from the licensing, practice and medical education communities and members of the public. **Current and former members of the Arizona-Medical, District of Columbia, Iowa, Montana, North Carolina and Vermont-Medical boards served on the USMLE Management Committee in 2022 and currently serve in 2023.**

Medical Licensing Authorities and the USMLE

USMLE Services to State Medical Boards

In 2022, the FSMB registered over 34,000 applicants for the USMLE Step 3, the final examination in the USMLE sequence. Step 1 and Step 2 registration services are provided by NBME for students and graduates of U.S. and Canadian medical and osteopathic schools and by ECFMG for students and graduates of international medical schools.

The FSMB also produced and delivered over 108,000 USMLE transcripts in 2022, including 51,000 transcripts produced as part of the Federation Credentials Verification System (FCVS) profile sent to state medical boards for physicians seeking licensure.

The USMLE makes a wide range of informational materials about the program available to medical licensing authorities. The FSMB provides a quarterly electronic update on USMLE to all state medical boards, and research and informational articles on USMLE have appeared in the FSMB's Journal of Medical Regulation (<https://meridian.allenpress.com/jmr>).

The FSMB also hosts web seminars on USMLE-related topics, such as USMLE attempt, time limit, and retake policies; USMLE scoring (such as the transition to pass/fail reporting for Step 1); and USMLE transcripts and irregular behavior. Copies of these presentations are available upon request from the FSMB.

State Medical Boards' Participation in USMLE

State medical board members and staff have a long history of involvement with the USMLE program. Since implementation of the USMLE in 1992, 338 members and staff from state medical boards have participated in the USMLE program in some capacity. These individuals represent 65 different medical and osteopathic licensing boards throughout the United States.

Annual USMLE Orientation for State Board Members and Staff

Since 2007, the FSMB and NBME have hosted an annual USMLE Orientation workshop for state board members and staff with an interest in learning about and/or participating in the program. The 2023 workshop was held September 20, 2023 at the FSMB offices in Euless, Texas. **A total of eleven individuals – eight board members and three board staff – from nine different boards – Delaware, Georgia, Iowa, Maine-Medical, Missouri, Nevada-Medical, Nevada-Osteopathic, New York-Licensure, and Oklahoma-Medical – attended the Orientation.**

To date, 209 individuals from 60 medical and osteopathic boards have participated in an orientation workshop. Sixty-five (65) past participants (representing 35 boards) have served subsequently with the USMLE program. This includes participation on standard setting panels and advisory panels, as well as

serving on the USMLE Management Committee, the USMLE Composite Committee, and/or item writing and item review committees. Physician and public members of state medical and osteopathic boards interested in attending this workshop should contact the FSMB for more information.

State Board Advisory Panel to the USMLE

In 2011, the USMLE program established an advisory panel composed of members and staff from state medical boards to provide firsthand feedback on timely issues and major initiatives from the primary intended user of USMLE scores – state medical boards. The State Board Advisory Panel to the USMLE panel met in person on November 29, 2023, at the FSMB offices in Euless, Texas. During the meeting, the panel discussed recent and ongoing USMLE program updates and work, provided input to USMLE program staff about how the program can better communicate with state boards, and provided updates about issues occurring in their states. Specific topics discussed included:

- How USMLE staff can better communicate with state boards regarding unusual circumstances, such as invalidation of a USMLE score following release and reporting of the score to a medical board, and individuals barred from USMLE as a result of engaging in irregular behavior who contact a board for sponsorship to regain access to USMLE.
- ECFMG Certification and the 2024 implementation of the InTealth/ECFMG Recognized Accreditation Policy.
- USMLE research, including the body of USMLE research demonstrating higher USMLE performance is associated with positive outcomes and how the USMLE program can better disseminate this important research validating the exam’s appropriateness as part of the medical licensing decision to state medical and osteopathic boards.
- Recent legislative activity that creates alternate licensure pathways by modifying traditional elements of the licensure model—specifically, softening requirements around post-graduate training in an Accreditation Council for Graduate Medical Education (ACGME)-accredited program in the U.S. and requiring only a portion of the USMLE sequence.
- The impending change in accreditation of Canadian medical schools, which will become effective in late June 2025. With this change, Canadian medical schools will no longer be accredited by the U.S. accreditor for MD degree programs, the Liaison Committee on Medical Education (LCME). This change means USMLE will categorize Canadian medical students and graduates as international candidates required to obtain ECFMG Certification for purposes of USMLE eligibility.

Current panel members include staff and board members from the Alabama-Medical Licensure Commission, Idaho, Illinois, Michigan-Medical, New York-Licensure, Pennsylvania-Medical, Texas, Vermont-Medical and West Virginia-Medical boards.

USMLE Policy Exceptions Allowed at the Request of a State Medical Board

There are two USMLE eligibility policies that a state medical board may request an exception to on behalf of an individual examinee - 1) the 4-attempt limit and 2) retake of a previously passed Step. How and why a state medical board may want or need to sponsor an individual for either is detailed below.

USMLE Attempt Limit

The USMLE program imposes a limit of no more than four attempts to pass each of Step. Examinees who have attempted any USMLE Step four or more times (including the discontinued USMLE Step 2 Clinical Skills, or Step 2 CS) and have not passed are ineligible to apply for any USMLE Steps.

The only exception to this policy identified by the USMLE Composite Committee (the governing body of the USMLE program) involves state medical boards. The policy includes a provision to allow examinees who have four or more attempts at a Step to have a single additional attempt if requested by a state medical board that is fully informed of the individual's prior examination history.

This policy exception recognizes that USMLE is intended to support state medical boards' licensing decisions. Therefore, the program will accept a request from a medical licensing authority to allow one additional attempt for an individual who would be eligible to become licensed in that jurisdiction if they passed that Step after more than four attempts and go on to meet all other licensure requirements. As part of this process, the examinee must request that the FSMB send an official USMLE transcript to the medical board.

Examinees are required to pass the state board sponsored attempt at the exam to maintain eligibility to continue with the USMLE exam sequence (i.e., to apply for and take additional Steps).

An official petition form - Petition for Exception to USMLE 4 Attempt Limit Policy - for use by state medical boards to request an exception to the USMLE attempt limit policy was provided to all state medical boards via email. If you need the form resent to your board, please contact FSMB staff (see Contacts toward the end of this report) or email the Office of the USMLE Secretariat (usmlesec@nbme.org).

Retaking a Previously Passed Step

Once an individual passes a USMLE Step, it may not be retaken, except to comply with a time limit imposed by a state medical board for completion of all Steps for licensure purposes or by another authority recognized by the USMLE program. The physician may apply to retake the necessary Step only after the applicable time limit has expired. Individuals who have not yet passed Step 3 and need to retake a previously passed Step 1 or Step 2 CK examination are informed that, that if they fail a retake, they will no longer be eligible to take Step 3.

Both the physician (examinee) and the sponsoring state medical board must fill out a form in order for a retake to be considered and granted by the USMLE program. The sponsorship form that state medical boards must complete - the USMLE Retake Sponsorship Form - was distributed to all state medical boards via email. If you need the form resent to your board, please contact FSMB staff (see Contacts toward the end of this report) or email the Office of the USMLE Secretariat (usmlesec@nbme.org).

A new sponsorship form is required for each retake and must be emailed directly from the medical board to the physician's USMLE registration entity.

USMLE and Medical Licensure Requirements

USMLE Recommended Time Limit for Completing USMLE

The USMLE recommends that state medical boards require the dates of passing Step 1, Step 2, and Step 3 to occur within a seven-year period. However, the program recognizes that the recommended seven-year time limit may pose problems for medical licensure for some candidates with a combined degree (i.e., MD/PhD, DO/PhD). For this reason, the USMLE program recommends to licensing jurisdictions that they consider allowing exceptions to the seven-year limit for MD/PhD candidates who meet the following requirements:

1. The candidate has obtained both degrees from an institution or program accredited by the LCME and a regional university accrediting body.
2. The PhD should reflect an area of study which ensures the candidate a continuous involvement with medicine and/or issues related, or applicable to, medicine.
3. A candidate seeking an exception to the seven-year rule should be required to present a verifiable and rational explanation for the fact that he or she was unable to meet the seven-year limit. These explanations will vary and each licensing jurisdiction will need to decide on its own which explanation justifies an exception. Students who pursue both degrees should understand that while many states' regulations provide specific exceptions to the seven-year rule for dual-degree candidates, others do not. Students pursuing a dual degree are advised to check the state-specific requirements for licensure listed by the FSMB.

These recommendations are provided on the USMLE website at: <https://www.usmle.org/common-questions/general>.

State Medical Boards' Time and Attempt Limits for Completing USMLE

Most state medical boards impose both time and attempt limits on the USMLE as part of their requirements for obtaining an initial medical license. Currently, 42 state boards impose some limit on the number of attempts at the USMLE, while 47 state boards impose a time limitation for the completion of the USMLE sequence.

A snapshot of the Individual state medical boards' time and attempt limits are available on the FSMB website at: <http://www.fsmb.org/step-3/state-licensure/>. Board staff are encouraged to review this information and to provide updates to FSMB staff as needed.

Data about each board's composition, governance structure, funding basis, and other procedural and operational details are also available on the FSMB website at:

<https://www.fsmb.org/u.s.-medical-regulatory-trends-and-actions/state-medical-board-data/>

Strategic Communication and Outreach

Below is a summary of communication work undertaken by the USMLE program in 2023, including directly to and with examinees, medical regulators and medical educators and, indirectly, to the public.

Medical Licensing Authorities

Quarterly FSMB Update on USMLE

In March 2020, the FSMB launched the Quarterly FSMB Update on USMLE[®], which is emailed quarterly to the executive directors of all state medical and osteopathic boards. The update has been well-received as a concise report on key USMLE developments, ideal for inclusion in the report of executive directors to their boards. Copies of the 2023 updates are provided as **Appendix B**.

Examinees

USMLE Medical Student and Resident Advisory Panel

The USMLE program implemented a Medical Student & Resident Advisory Panel in 2018 to provide a consultative role to the USMLE program. The panel is charged to 1) assist staff in working through operational issues directly impacting the examinee experience of the exam, 2) serve as an additional voice and resource to inform more substantive policy questions from or before the USMLE Management and Composite Committees and (3) serve as informal ambassadors of the USMLE program. The panel consists of 15 members: 14 medical students (MD, DO, MD/PhD and IMG) and residents drawn from all regions of the country, and 1 public member.

A public member from the Minnesota board serves as the public representative on the panel.

The panel met in-person at NBME offices in Philadelphia on April 18, 2023, and virtually on October 18, 2023. Topics discussed by the panel included new USMLE item formats to assess clinical reasoning and communication skills, the impact of recent shift to pass/fail only reporting for Step 1, artificial intelligence and news reports of AI "passing" USMLE, work by the USMLE program to review how patients are characterized in test items, principles for implementing and maintaining national medical licensing examinations, USMLE rebranding and communications, USMLE policies and procedures for examination retakes following technical issues during administration, and USMLE policies and procedures regarding test accommodations.

Program News

The USMLE website (www.usmle.org) serves as the official communication channel for the USMLE program, providing regular updates and news to examinees and other interested parties. News items and announcements posted on the USMLE website (www.usmle.org/announcements/) from 2022-2023 are provided in **Appendix A**.

Social Media

USMLE also uses Facebook, LinkedIn, and X (formerly known as Twitter) to more directly, efficiently and quickly communicate with applicants and examinees.

USMLE Facebook: <https://www.facebook.com/usmle/>

USMLE LinkedIn: <https://www.linkedin.com/company/usmle/>

USMLE X (formerly known as Twitter): <https://twitter.com/TheUSMLE>

General

USMLE Brand Refresh

In 2023, USMLE refreshed its branding with a new, modernized look and feel that better reflects its relevance to the practice of medicine today, including implementation of a new logo, as seen on the USMLE website (www.usmle.org)

The new logo features three distinct segments that represent the Step exams that medical school students and graduates take on their journey to medical licensure. It also references a common symbol for health care and medicine – the cross – which represents protection and help at hand.

Podcasts

Podcasts about USMLE and significant program changes are available on the USMLE website at: <https://www.usmle.org/podcasts>

Eligibility for the USMLE Steps

Eligibility Requirements

USMLE is intended to be taken by students and graduates of medical school programs leading to the MD, DO, or equivalent degree (e.g., MBBS degree held by many IMGs).

To be eligible for Step 1 and Step 2 CK, the examinee must be in one of the following categories at the time of application and on test day:

- a medical student officially enrolled in, or a graduate of, a U.S. or Canadian medical school program leading to the MD degree that is accredited by the Liaison Committee on Medical Education (LCME), **OR**
- a medical student officially enrolled in, or a graduate of, a U.S. medical school leading to the DO degree that is accredited by the Commission on Osteopathic College Accreditation (COCA), **OR**
- a medical student officially enrolled in, or a graduate of, a medical school that is outside the U.S. and Canada, listed in the World Directory of Medical Schools as meeting ECFMG eligibility requirements, and that meets other eligibility criteria of the ECFMG.

Step 3 applicants must meet the following eligibility requirements at the time of application:

- Passing scores on Step 1 and Step 2 Clinical Knowledge; **AND**
- An MD degree or DO degree from an LCME- or COCA-accredited U.S. or Canadian medical school, **OR** the equivalent of the MD degree from a medical school outside the U.S. and Canada that is listed in the World Directory of Medical Schools as meeting ECFMG eligibility requirements, and obtain ECFMG Certification; **AND**
- Meets all other eligibility criteria as listed in the USMLE *Bulletin of Information*.

The USMLE program recommends (but does not require) that, for Step 3 eligibility, applicants should have completed, or be near completion of, at least one postgraduate training (PGT) year in an accredited U.S. graduate medical education (GME) program that meets state board licensing requirements.

Eligibility Policies

In addition to the requirements outlined above, all USMLE examinees must meet the following USMLE eligibility policies.

Sequencing of Steps

Step 1 and Step 2 CK can be taken in any sequence. Step 3 can be taken only after passing Step 1 and Step 2 CK.

Retakes

Examinees may not take the same Step more than three times within a 12-month period. A fourth attempt on any Step must be at least 12 months after the first attempt at that Step and at least six months after the most recent attempt at that Step. This includes incomplete attempts.

Attempt Limit

The total number of attempts allowed per Step is four (4). Examinees who have attempted any USMLE Step four or more times and have not passed are ineligible to apply for any USMLE Steps. Attempts at the formerly administered Step 2 CS count toward the limit. All attempts at a Step are counted toward the limit, regardless of when the examinations were taken. The only exception to this policy identified by the USMLE Composite Committee (the governing body of the USMLE program) involves state medical boards. The policy includes a provision to allow examinees who have four or more attempts at a Step to have a single additional attempt if requested by a state medical board that is fully informed of the individual's prior examination history. Examinees are required to pass the state board sponsored attempt at the exam to maintain eligibility to continue with the USMLE exam sequence.

Retaking a Previously Passed Step

Once an individual passes a USMLE Step, it may not be retaken, except to comply with a time limit imposed by a U.S. physician licensing authority for completion of all Steps or by another authority recognized by the USMLE program. Individuals who have not yet passed Step 3 and need to retake a previously passed Step 1 or Step 2 CK examination are informed that, that if they fail a retake, they will no longer be eligible to take Step 3. To meet the examination requirements for Step 3 eligibility, individuals must have achieved a passing performance on the most recent administration of Step 1 and Step 2 CK.

Physicians Who are Already Licensed in the United States

Individuals who have already been granted a physician license by a US medical licensing authority based on other licensure examinations, such as the Federation Licensing Examination (FLEX), the Medical Council of Canada Qualifying Examination (MCCQE), NBME certifying examinations (NBME Parts), National Board of Osteopathic Medical Examiners (NBOME) Parts or Comprehensive Osteopathic Medical Licensing Examination of the United States (COMLEX-USA), may not be eligible to take the USMLE.

Content and Administration

Content Development

Content for the USMLE is prepared by examination committees broadly representing the medical profession. Members of USMLE test committees include biomedical scientists, educators, and clinicians from every region of the United States. Virtually all LCME-accredited medical schools in the United States have been represented on USMLE test committees. USMLE test committee members represent a “national faculty of medicine” drawn from medical schools, state medical boards, and clinical practice settings across the United States. A directory of USMLE test committees and task forces is available at: <https://www.usmle.org/about-usmle>.

At least two of these committees critically appraise each test item or case before it is used as live (i.e., scored) material on the USMLE. These committees may revise or discard materials for any of several reasons, e.g., inadequate clinical relevance, outdated content, failure to meet acceptable statistical performance criteria, etc.

For a more detailed explanation of content development, contact FSMB for a copy of the 2009 Journal of Medical Licensure and Discipline article, “Developing Test Content for the USMLE”. State board members and staff are also invited to attend an annual USMLE Orientation session to learn more about how USMLE is developed.

Step Content and Structure

Step 1 assesses whether a candidate understands and can apply important concepts of the sciences basic to the practice of medicine, with special emphasis on principles and mechanisms underlying health, disease and modes of therapy. It ensures mastery of not only the sciences that provide a foundation for the safe and competent practice of medicine in the present, but also the scientific principles required for maintenance of competence through lifelong learning. Step 1 is constructed according to an integrated content outline that organizes basic science material along two dimensions: system and process.

Step 2 CK assesses an examinee’s ability to apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision and includes emphasis on health promotion and disease prevention. Step 2 CK ensures that due attention is devoted to principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and competent practice of medicine under supervision.

Step 3 assesses whether the candidate can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine, with emphasis on patient management in ambulatory settings. Step 3 content reflects a data-based model of generalist medical practice in the United States. The test items and cases reflect the clinical situations that a general, as-yet undifferentiated, physician might encounter within the context of a specific setting. It is the final examination in the USMLE sequence leading to a license to practice medicine without supervision. As

such, it provides a final assessment of physicians assuming independent responsibility for delivering general medical care.

Table 1 details the structure and exam day(s) for each USMLE Step.

Table 1: Exam Structure by Step

Exam	Number of Exam Days	Item Format	Total Testing Time	Testing Blocks	Maximum Number of Total Items
Step 1	1	Multiple-choice questions (MCQs)	8 hours	Seven 60-minute blocks	280
Step 2 CK	1	MCQs, including patient scenario format and abstract format	9 hours	Eight 60-minute blocks	318
Step 3	2	Day One: MCQs, including patient scenario format, abstract format, and pharmaceutical advertisement (drug ad) format	Day One: 7 hours	Day One: Six 60-min. blocks	Day One: MCQs: 232
	Day One: Foundations of Independent Practice (FIP)				
	Day Two: Advanced Clinical Medicine (ACM)	Day Two: MCQs & Computer-based Case Simulations (CCS)	Day Two: 9 hours	Day Two: MCQs: Six 45-min. blocks CCS: Max. 10 or 20 min. of real time (each)	Day Two: MCQs: 180 CCS: 13

Test Administration

Steps 1, 2 CK and 3 are administered by computer at Prometric Test Centers (PTCs). Step 1 and Step 2 CK are given at PTCs around the world. Step 3 is only given at PTCs in the United States and its territories.

All USMLE examinations are proctored and videotaped. Strict guidelines are followed for proper identification of examinees. Efforts are made to reduce the overlap of test content from examinee to examinee and from test administration to test administration when examinees need to retake a Step.

Any significant breaches in security can result in the cancellation of scores/results, suspension of an individual from USMLE, and/or annotation of score reports and official USMLE transcripts.

All Step exams include an optional survey at the end of the final exam day, which can be completed if time allows.

Test Accommodations

Reasonable and appropriate accommodations are provided in accordance with the Americans with Disabilities Act (ADA) for individuals with documented disabilities. The purpose of test accommodations is to provide access to the examination program. While presumably the use of accommodations will enable the individual to better demonstrate his/her knowledge or skill, accommodations are not a guarantee of improved performance, test completion, or a particular outcome. Examinees are informed of the availability of test accommodations via the USMLE *Bulletin of Information*, the USMLE website, and the individual Step applications.

The ADA defines disability as a physical or mental impairment that substantially limits one or more major life activities as compared to most people in the general population. Examples of major life activities include, but are not limited to, walking, seeing, hearing, and learning. Determination of whether an individual is substantially limited in functioning as compared to most people is based on an individualized assessment of the current impact of the identified impairment. Requests for test accommodations are reviewed by NBME staff trained in clinical and school psychology at the doctoral level or medical professionals, depending on the basis of the request. Further review of the request and supporting documentation may be provided by external experts in the respective fields of disability with whom NBME consults regarding the presence of a disability and appropriate accommodations. NBME makes decisions regarding appropriate test accommodations for all USMLE Steps.

Examinees with disabilities may be provided with a variety of accommodations, including but not limited to assistance with keyboard tasks, audio rendition, extended testing time and additional break time. Efforts are made to match accommodations to the individual's functional limitations. For example, audio-recorded versions of the computer-based Step examinations are available for candidates with visual or visual processing disabilities. Special tactile versions of visual material for a Step examination may be provided for examinees with severely impaired vision. Items with an audio component may include a visual representation of the sound for hearing impaired examinees.

Scores

Minimum Passing Scores

The USMLE Management Committee establishes a recommended passing standard for all Step examinations (an overview of standard setting process USMLE uses is provided in the Psychometrics section of this report). Recommended performance standards for the USMLE are based on a specified level of proficiency. As a result, no predetermined percentage of examinees will pass or fail the examination.

In alignment with best practices for licensing and certification exams, a comprehensive review and analysis of the passing standard for each Step exam typically occurs every three to four years but can occur at any time. Periodic review ensures that the passing score is consistent with expectations of the level of content mastery of the knowledge and skills needed to support effective medical practice and licensure. Notice of such review and any adjustments are posted on the USMLE website. More information about the passing score process is provided in the “Standard Setting” section of this report.

A statistical procedure ensures that the performance required to pass each test form is equivalent to that needed to pass other forms; this process also places scores from different forms on a common scale (the three-digit score scale).

Although 2-digit scores are not reported, test results reported as passing would represent an exam score of 75 or higher if a two-digit score were reported.

Current minimum passing scores for each Step are provided in **Table 2** below.

Score Reporting

When examinees take Step 1, Step 2 CK, or Step 3, the computer records their responses, which are then transmitted to NBME for scoring.

Results for Step 1 taken on or after January 26, 2022, are reported as pass/fail only. Results for Step 1 exams taken prior to January 26, 2022, and for all Step 2 CK and Step 3 exams, are reported on a 3-digit scale; reported scores range from 1 to 300.

Table 2 presents performance data for first-time examinees from LCME-accredited medical schools in the United States and Canada who tested in calendar year 2022. Additional performance data is provided in **Appendix C**.

Table 2. USMLE 2022 Calendar Year Performance for First Time Examinees from LCME-accredited Medical Schools

Exam	Most Scores Fall Between	Minimum Passing Score	Mean and (Standard Deviation)	Pass Rate
Step 1*	N/A <i>(reported as pass/fail only)</i>	194: For exams taken on or before January 25, 2022 196: For exams taken on or after January 26, 2022	Reported as pass/fail only	93%
Step 2 CK	190 - 270	209: For exams taken on or before June 30, 2022 214: For exams taken on or after July 1, 2022	247 (15)	98%
Step 3	160 - 260	198 <i>(to be reviewed in December 2023)</i>	228 (15)	98%

*Because of the transition to reporting only a pass/fail outcome, future reviews of the Step 1 passing standard will not be reported in terms of a three-digit score.

Under most circumstances, to receive a score on Step 1, Step 2 CK, and Step 3, an examinee must begin every block of the test. If an examinee does not begin every block and no results are reported, an “incomplete” annotation may appear on the USMLE transcript. If an examinee registers for but does not begin an examination, no record of the test will appear on the examinee’s transcript.

Some unscored items and cases may also be included in the Step examinations for research purposes.

Annual performance data for all Step examinations, as well as Score Interpretation Guidelines, are available on the USMLE website at <https://www.usmle.org/usmle-updates-research>

Important Notes about the 2022 Step 1 Summary Performance

Results indicate a higher fail rate on the Step 1 exam for the 2022 examinees relative to recent years. It is important to note that factors not present in previous years introduce complexities when comparing the 2022 examinee group to previous years. These differences should be considered when interpreting reported data. The factors include:

- Increased passing standard for Step 1
 - The Step 1 pass/fail transition beginning on January 26, 2022, coincided with an increase in the exam’s minimum passing standard from 194 to 196. The increase in passing standard accounts for some increases observed in the fail rates.
- Shift in examinee scheduling patterns
 - The USMLE program has observed shifts in the timing of when examinees tested, particularly around the pass/fail transition date. These changes in test timing patterns suggest that those who tested during this period may not be representative of the

typical group that tested during these times in the past. These potential differences complicate comparisons to past performance data.

Conversely, the following factors did not change and should also be considered when interpreting the data:

- Consistency in the construction of USMLE Step examinations
 - Within each Step examination, USMLE creates various forms that are similar in difficulty and content. Each USMLE Step examination includes multiple forms that are similar in difficulty and content for the respective Step. Scores on individual examination forms are made comparable through equating, a psychometric process that adjusts scores based on the difficulty of the questions. This process ensures examinees who take different forms are held to the same passing standard.
- No change to exam specifications for Step 1 in 2022
 - All USMLE examinations are constructed from an integrated content outline, which organizes content according to general principles and individual organ systems. While not all topics listed in the content outline are included in each Step exam, overall content coverage is comparable among the various examination forms that different examinees of each Step will take. The test specifications used to construct USMLE Step 1 examinations did not change when the exam transitioned to pass/fail reporting.
- Consistent style and difficulty for Step 1 exam questions
 - No changes were made to the style and targeted difficulty of the Step 1 2022 exam. USMLE collaborates with a network of medical school faculty and clinicians that come from a variety of educational backgrounds and specialties and throughout the United States to create test items, or questions and cases, that make up the USMLE Step exams. Each year, this network draws on their own experience and expertise to develop high-quality test items with NBME staff that address the topics and challenges that they encounter in their own classrooms and practice based on years of lessons and learned best practices. Participating physicians maintained the standard USMLE item writing approach for the Step 1 2022 exam.

Score Reports and Transcripts

USMLE score reports and transcripts show scores (for Step 1 exams taken prior to January 26, 2022, Step 2 CK, and Step 3) and an indication of whether an examinee passed or failed (for all examinations, including the previously administered Step 2 CS).

If an examinee is found to have engaged in irregular behavior, an annotation to that effect is recorded on the score report on transcript, as well as a copy of the letter to the examinee regarding the finding of irregular behavior. Upon examinee authorization for release of an official USMLE transcript, the same information (i.e., annotation on the transcript, determination letter regarding a finding of irregular behavior, and a report from the FSMB Physician Data Center if applicable) is sent to medical licensing authorities for use in making licensure decisions.

Official USMLE transcripts are only provided to individual state medical boards from the FSMB and only upon request of the physician (examinee).

Official USMLE transcripts include the following information/fields:

- All USMLE Steps taken by the physician/examinee, including:
 - Test date
 - Indication of whether an examinee passed or failed (for all examinations, including the previously administered Step 2 CS).
 - Score (only applies to Step 1 exams taken prior to January 26, 2022; Step 2 CK; and Step 3)
 - Minimum passing score in effect on the test date (only applies to Step 1 exams taken prior to January 26, 2022; Step 2 CK; and Step 3)
- Comments
 - If an examinee is found to have engaged in irregular behavior, an annotation to that effect is recorded under Comments on the transcript. A short description of the irregular behavior is included (e.g., security violation) as part of the comment. Additionally, a copy of the determination letter to the examinee regarding the finding of irregular behavior is provided with the transcript. If the irregular behavior finding was reported to the FSMB Physician Data Center (PDC), a report from the FSMB Physician Data Center is also provided.
- Notes
 - All transcripts include a Note regarding the results of the search of the FSMB's Physician Data Center at the time of transcript was requested. If the search reveals that information has been reported to the PDC, the note will state that information was found and a report from the PDC will be provided with the transcript. If no information has been reported to the PDC, the Note will state no reported information has been found for the examinee.
 - Irregular Behavior annotations may also appear under Notes - either alone or in conjunction with an Irregular Behavior annotation under Comments as described above. A short description of the irregular behavior is included (e.g., security violation) as part of the note. Additionally, a copy of the determination letter to the examinee regarding the finding of irregular behavior is provided with the transcript. If the irregular behavior finding was reported to the FSMB Physician Data Center (PDC), a report from the FSMB Physician Data Center is also provided.

Psychometrics

Score Reliability

All standardized examinations include some degree of measurement imprecision. Like all high-quality assessments, USMLE utilizes several psychometric measures to monitor and minimize such imprecision. Reliability refers to a score's expected consistency. Candidates' test scores are reliable to the extent that an administration of a different random sample of items from the same content domain would result in little or no change in each candidate's rank order among a group of candidates. In general, long examinations of very similar items administered to a diverse group of examinees yield high reliabilities.

One of the ways that reliability is measured is through the standard error of measurement (SEM). The SEM provides a general indication of how much a score might vary across repeated testing using different sets of items covering similar content. As a general rule of thumb, chances are about two out of three that the reported score is within one SEM, plus or minus, of the score that truly reflects the examinee's ability (i.e., of the score that would be obtained if the examination were perfectly reliable). Currently, the SEM is approximately 6 points Step 2 CK and 5 points for Step 3.

The standard error of difference (SED) in scores is an index used to assess whether the difference between two scores is statistically meaningful. If the scores received by two examinees differ by two or more SEDs, it is likely that the examinees are different in their proficiency. Currently, the SED is approximately 8 points for Step 2 CK and Step 3.

The standard error of the estimate (SEE) is an additional index of the amount of uncertainty in the scores used to gauge the likelihood of performing similarly on a repeat attempt. If an examinee tested repeatedly on a different set of items covering the same content, without learning or forgetting, their score would fall within one SEE of their current score two-thirds of the time. Currently, the SEE is approximately 8 points for Step 2 CK and Step 7 points for Step 3.

Decision Consistency

Decision consistency reflects the probability an examinee would be classified in the same category (e.g., pass or fail) on a repeat administration without change in their underlying knowledge. In the context of USMLE, the index quantifies how consistently the respective Step examination categorizes examinees as passing or failing. The index ranges from 0 to 1, where higher values indicate the assessment yields more stable classifications. Decision consistency is generally higher with longer exams – because of the increased reliability – and when most students score far from the passing standard. The most recent decision consistency value is .98 for Step 1, .99 for Step 2 CK, and .97 for Step 3. The high values indicate examinees would almost assuredly receive the same outcome if taking an administration of a different random sample of items from the same content domain without a change in content knowledge.

Table 3. Current USMLE Score Reliability and Decision Consistency

Exam	Standard error of measurement (SEM)	Standard error of difference (SED)	Standard error of the estimate (SEE)	Decision Consistency
Step 1	Not reported	Not reported	Not reported	.98
Step 2 CK	6 points	8 points	8 points	.99
Step 3	5 points	8 points	7 points	.97

Score Validity

Score validity refers to the extent to which existing evidence supports the appropriateness of the interpretation of test outcomes. The public and state medical boards can reliably conclude that an individual who has passed all examinations in the USMLE sequence has demonstrated the fundamental knowledge and skills for safe and effective patient care.

The best way to support a proposed score interpretation is through accumulation of developmental documentation and research on all components of the test design, delivery, and scoring processes, and through tracking the relationship of examination outcomes with later measures of the individual’s ability. The USMLE program has a fairly extensive history of such activity.

A searchable list of NBME and USMLE research published after 2017 can be found at:

<https://www.nbme.org/research-library>.

A list of research citations for studies published from 2009 to 2017, as well as descriptions of many of the USMLE processes, is available on the USMLE website at:

<https://www.usmle.org/usmle-updates-research>.

A recent USMLE-related article published in [Academic Medicine - The Associations Between United States Medical Licensing Examination Performance and Outcomes of Patient Care](#) - co-authored by USMLE Vice President Dr. Alex Mechaber that shows higher performance on the USMLE exam series was associated with lower in-hospital mortality and shorter length of stay for patients in the Pennsylvania hospital system. In demonstrating higher USMLE performance correlates with improved patient outcomes, this article study further strengthens the evidence that USMLE assesses competencies essential to safe and effective patient care.

Standard Setting

USMLE General Procedures for Standard Setting

The USMLE system for setting standards is established by the USMLE Composite Committee, which includes representatives of the ECFMG, FSMB, NBME and the public. The system specifies the kinds of data to be gathered and how the data are to be gathered, the frequency of reviewing the standards and adjusting them, and assigns the judgment task to the Management Committee. The Management Committee, jointly appointed by the FSMB and NBME, must use the procedures defined by the

Composite Committee, but is free to set the standard and revise the standard as it deems necessary. The decision of the Management Committee is final; no superior governing committee is authorized to alter its decision. The Management Committee includes those with educational, licensing, and clinical practice perspectives, as well as a representative from the public.

Current policy requires that the Management Committee review the effectiveness of Step standards at least annually. A comprehensive review and possible adjustment of the standard must be undertaken approximately every four years. In addition, when there are any major changes to the design or format of the Step examination, the Management Committee is asked to establish new passing requirements for the redesigned components. USMLE believes that there must be an opportunity for review and adjustment of standards in order to reflect the realities of change in the content of medicine, the nature of the test, the characteristics of examinees, and the expectations of stakeholders. Such review of the standard is essential to assure that the judgment inherent in defining the standard reflects current conditions, not those that were pertinent in the past.

Mandated Data Sources Informing the Judgment Process

USMLE policy mandates the use of four categories of data in making judgments about standards. These are:

- Content-referenced judgments of experts. Content experts provide their opinions, based upon review of content and examinee performance, on the appropriate requirements for passing the examination.
- Survey of stakeholders. Expectations of stakeholders for the percent of examinees that should pass the examination.
- Cohort performance trends. Trends in examinee performance over a long period of time and the effect of repeated attempts at the examinations on the failure rate in a defined cohort of examinees.
- Score precision in the region of the cut-score. Estimates of numbers of misclassified examinees based on historical distributions of examinee performance and the measurement error in the scale area under consideration for the cut-score.

Setting the Standard

The Management Committee meets to consider the collected data. As part of this process the committee reviews all of the data collection processes and considers the combined data. Typically, the question posed of the committee is whether the externally collected data, performance trends, and score reliability data suggest that the current standard for a particular Step exam needs to be changed. The committee can allow the standard to remain the same or can vote to make a change. If the latter occurs, the committee identifies the new performance requirements.

Information regarding the timing of the standard setting process and final decisions are posted on the USMLE website.

Data and Research

Aggregate Performance Data

The USMLE program publishes aggregate performance data for all Steps on the USMLE website at www.usmle.org/performance-data.

These data include examinee volume and passing percentages categorized by:

- first-taker and repeater examinees,
- U.S./Canadian and international students/graduates, and
- allopathic and osteopathic examinees.

Passing rates and examinee counts for 2021-2022 for each Step are provided in **Appendix C**.

Research Agenda

Each year, the USMLE program coordinates an operational research agenda to strengthen the evidence supporting USMLE as a tool for medical licensure and guide future program enhancements. Key themes for the 2023 research agenda included:

- Exploring the association of scores and pass/fail outcomes with patient outcomes;
- Developing and researching innovative items to enhance clinical skills coverage;
- Investigating the pass/fail transition's effect on examinee performance, preparation, and scheduling behaviors;
- Understanding how artificial intelligence can be leveraged to improve USMLE through automated scoring of complex item types and item development support; and
- Enhancing USMLE security procedures.

Publications

A listing of recent (2019-2023) USMLE-related publications is available as **Appendix D**.

A list of research citations for studies published from 2009 to 2017, as well as descriptions of many of the USMLE processes, is available on the USMLE website at: <https://www.usmle.org/usmle-updates-research>.

A searchable list of NBME and USMLE research published after 2017 can be found at: <https://www.nbme.org/research-library>.

Resources

Websites

- USMLE website (www.usmle.org) provides the most current information on the program.
- FSMB website (www.fsmb.org) contains information specific to USMLE Step 3.
- NBME website (www.nbme.org) contains information specific to registering for USMLE Step 1 and Step 2 CK for students and graduates of U.S. and Canadian medical schools.
- ECFMG website (www.ecfm.org) provides information on ECFMG certification and registering for USMLE Step 1 and Step 2 CK for students and graduates of international medical schools seeking information.

Written Materials

- USMLE *Bulletin of Information* – provides USMLE policies and procedures and can be accessed from the main page of the USMLE website (www.usmle.org).
- *Journal of Medical Regulation* (previously the *Journal of Medical Licensure and Discipline*) – published by the FSMB, the Journal occasionally provides informational articles summarizing major aspects of the USMLE program. Topics covered include Step 2 Clinical Skills, the development of multiple-choice questions for test content, research, and processes for maintaining program security (see citations below). Past issues are available on the JMR website at <https://meridian.allenpress.com/jmr> or upon request from the FSMB:
 - “Characteristics and Outcomes of Individuals Engaging in USMLE Irregular Behavior, 2006–2015.” *Journal of Medical Regulation*. Vol. 106, No. 4, 2020.
 - “Implementing Strategic Changes to the USMLE.” *Journal of Medical Regulation*. Vol. 100, No. 3, 2014.
 - “An Assessment of USMLE Examinees Found to Have Engaged in Irregular Behavior, 1992-2006.” *Journal of Medical Regulation*. Vol. 95, No. 4, 2010.
 - “Developing Content for the United States Medical Licensing Examination.” *Journal of Medical Licensure and Discipline*. Vol. 95, No. 2, 2009.
 - “Maintaining the Integrity of the United States Medical Licensing Examination.” *Journal of Medical Licensure and Discipline*. Vol. 92, No. 3, 2006.
 - “The Introduction of Clinical Skills Assessment into the United States Medical Licensing Examination (USMLE): A Description of the USMLE Step 2 Clinical Skills (CS).” *Journal of Medical Licensure and Discipline*. Vol. 91, No. 3, 2005.
 - “The United States Licensing Examination.” *The Journal of Medical Licensure and Discipline*. Vol. 91, No. 1, 2005.

Key Contacts

The following individuals are key contacts for state medical boards on matters involving the USMLE.

FSMB

David Johnson, MA
Chief Assessment Officer
817-868-4081
djohnson@fsmb.org

Frances Cain, MPA
Director, Assessment Services
817-868-4022
fcain@fsmb.org
usmle@fsmb.org

NBME

Alex Mechaber, MD, FACP
Vice President, USMLE
215-590-9858
amechaber@nbme.org

Amy Buono
Director, Program Management &
Office of the USMLE Secretariat
215-590-9877
abuono@nbme.org
USMLESec@nbme.org

APPENDIX A

USMLE Program News 2022 – 2023

Below are excerpts from key USMLE announcements in 2022 - 2023. The full archive of announcements is available on the USMLE website (<https://www.usmle.org/announcements>).

Scheduled Review of USMLE Step 2 CK Passing Standard (posted January 2022)

The USMLE Management Committee is scheduled to conduct a review of the passing standard for USMLE Step 2 Clinical Knowledge (CK) at its April 2022 meeting.

As part of the USMLE program’s operational procedures and in alignment with best practices for licensing and certification exams, a comprehensive review and analysis of the passing standard for each Step exam typically occurs every three to four years. This ensures that the passing standard is consistent with expectations of the level of content mastery of the knowledge and skills needed to support effective medical practice and licensure.

For the 2022 Step 2 CK review, information from multiple sources will be considered, including:

- Recommendations from independent groups of physicians unaffiliated with the USMLE participating in content-based standard-setting panels in February 2022;
- Results of surveys of various groups (e.g., state licensing representatives, residency program directors, medical school faculty, examinees) concerning the appropriateness of current passing standards for the Step 2 CK examination;
- Data on trends in examinee performance; and
- Score precision and its effect on the pass/fail outcome.

The USMLE program provides advanced notice of Step exam reviews and any adjustments on the USMLE website. The review process also appears in the *USMLE Bulletin of Information*.

If the Committee determines that a change to the passing standard is appropriate, the new recommended passing standard will become effective for all examinees who take the Step 2 CK examination on or after July 1, 2022.

As more information becomes available, updates and the final decision will appear on the USMLE website.

Change to Step 2 CK Passing Standard Begins July 1, 2022 (posted April 2022)

At its April 2022 meeting, the USMLE Management Committee conducted a review of the USMLE Step 2 Clinical Knowledge (CK) passing standard and decided that a five-point increase in the passing

standard – used to determine a Pass or Fail outcome – will apply to Step 2 CK examinees testing on or after July 1, 2022. On the three-digit score scale, the passing standard will change from 209 to 214.

As part of the USMLE program’s operational procedures and in alignment with best practices for licensing and certification exams, a scheduled comprehensive review and analysis of the passing standard for each Step exam typically occurs every three to four years. This ensures that the passing score reflects current expectations concerning knowledge and skills needed to support effective medical practice and patient care. The current passing standard has remained unchanged since 2014.

This adjustment to the passing standard was determined through the thorough and careful consideration of information from multiple sources, including:

- Recommendations from independent groups of physicians unaffiliated with the USMLE who participated in content-based standard-setting panels in February 2022;
- Results of surveys of various groups (e.g., residency program directors, medical school faculty, state licensing representatives, examinees) concerning the appropriateness of the current passing standard for the Step 2 CK examination;
- Data on trends in examinee performance; and
- Score precision and its effect on the pass/fail outcome.

The USMLE program provides advanced notice of Step exam passing standard reviews and any adjustments on the USMLE website. Details about the review process also appear in the USMLE *Bulletin of Information*.

USMLE Step 1 and Step 2 CK – Scheduled Score Delays in 2023 (posted September 2022)

Most Step 1 and Step 2 Clinical Knowledge (CK) scores are reported within 3-4 weeks of testing. However, because of necessary annual modifications to the test item pools, delays occur for examinees who test at certain times of the year. Please be aware that examinees testing during the following dates may experience delays in score reporting:

Step 1 examinees testing mid-April through mid-June 2023 - more specific information will be posted January 2023.

Step 2 CK examinees testing early June through late July 2023 - more specific information will be posted February 2023.

Why is this important to know?

If you need to receive a score before a certain date, plan to take that exam before the testing dates with projected score delay windows to avoid missing deadlines.

Early Release of USMLE Step 1 2022 Summary Performance (posted February 2023)

In response to requests from LCME schools following the recent policy transition of Step 1 to pass/fail reporting only, USMLE has released Step 1 summary performance data to provide score users with important outcome data earlier than scheduled. The data provides information regarding the performance of all examinees and examinees from LCME-accredited schools.

More information is available at:

<https://www.usmle.org/early-release-usmle-step-1-2022-summary-performance>

USMLE Program Discusses ChatGPT (posted February 2023)

With the advent of ChatGPT, a large language model developed by OpenAI, there have been growing conversations about the advancements of artificial intelligence (AI) programs and their intersectionality with medicine and medical education. Several studies have been conducted on the use of AI to answer multiple-choice test questions on medical knowledge. Some conversations about these studies seem to suggest that AI tools are correctly answering USMLE test questions and we wanted to provide some additional context.

A review of the MedQA-USMLE database revealed that the study used test preparation materials from a third party unaffiliated with USMLE. Another study examined the results of ChatGPT using practice questions available at USMLE.org. It's not surprising that ChatGPT was successful in answering these questions, as the input material is largely representative of medical knowledge available from online sources.

However, it's important to note that the practice questions used by ChatGPT are not representative of the entire depth and breadth of USMLE exam content as experienced by examinees. For example, certain question types were not included in the studies, such as those using pictures, heart sounds, and computer-based clinical skill simulations. This means that other critical test constructs are not being represented in their entirety in the studies.

Although there is insufficient evidence to support the current claims that AI can pass the USMLE Step exams, we would not be surprised to see AI models improve their performance dramatically as the technology evolves. If utilized correctly, these tools can have a positive impact on how assessments are built and how students learn.

The USMLE co-sponsors (NBME and Federation of State Medical Boards) recognize the importance of these studies and their findings. In the future, we would be very interested in examining the questions that ChatGPT answered incorrectly and the implications of these results. As the technology advances, we will continue to look for ways to enhance the assessment of skills and behavior so that we may evolve in tandem with medical education and potential changes to the practice of medicine. While we are optimistic, we remain mindful of the risks that large language models bring in terms of potential for misinformation and perpetuating harmful biases.

2022 USMLE Performance Data Available Now (posted March 2023)

The USMLE program has released the 2022 examinee performance data for each of its three Step exams. The performance tables show the passing rates for each Step by various examinee groups and are available at: <https://www.usmle.org/performance-data>.

USMLE Brand Refresh (posted April 2023)



USMLE has refreshed its branding with a new, modernized look and feel that better reflects its relevance to the practice of medicine today.

The new logo features three distinct segments that represent the Step exams that medical school students and graduates take on their journey to medical licensure. It also references a common symbol for health care and medicine – the cross – which represents protection and help at hand.

[Updated practice and informational materials for the Step 2 CK examination are available \(posted July 2023\)](#)

Updated practice and informational materials for the Step 2 CK examination have been posted to the USMLE website. The Step 2 CK content outline and test specifications have not changed; however, sample practice items have been refreshed with new materials.

Examinees planning to take a Step 2 CK examination should read the following materials and practice with the updated sample items:

Review the Step 2 CK content outline, as well as specifications for the systems, physician tasks/competencies, and disciplines covered on the exam.

Access sample test questions and practice for the exam within the interactive testing experience. More than 100 sample Step 2 Clinical Knowledge (CK) test questions are available in both PDF format and as an interactive testing experience.

[Special Invitation to Take a Free Step 3 Practice Examination at a Prometric Test Center \(posted August 2023\)](#)

The USMLE® program is updating the software that runs the computer-based case simulations (CCS) in the Step 3 examination. We are currently conducting a pilot study to test the beta version of this new software and are looking for individuals currently preparing for USMLE Step 3 to take a free Step 3 Practice Session at a Prometric test center of their choice.

After taking the practice session, participants will be asked to complete a brief survey about their experience. As a thank you for their feedback, participants will be emailed a \$50 online gift card and will also receive a voucher for a free NBME® Comprehensive Clinical Medicine Self-Assessment which helps to evaluate readiness for USMLE Step 3.

Examinees who are registered to take Step 3 who would like to assist in this effort should register for the Step 3 practice session on the USMLE website.

This special invitation will be in effect until the number of participants needed for pilot testing has been reached. We will update this announcement once this offer is no longer in effect.

Scheduled Review of USMLE Step 3 Passing Standard (posted September 2023)

The USMLE Management Committee is scheduled to conduct a review of the passing standard for USMLE Step 3 at its December 2023 meeting.

As part of the USMLE program's operational procedures and in alignment with best practices for licensing and certification exams, a comprehensive review and analysis of the passing standard for each Step exam typically occurs every three to four years. This ensures that the passing standard is consistent with expectations of the level of content mastery of the knowledge and skills needed to support effective medical practice and licensure.

For the 2023 Step 3 review, information from multiple sources will be considered, including:

- Recommendations from independent groups of physicians unaffiliated with the USMLE participating in content-based standard-setting panels in September and October 2023;
- Results of surveys of various groups (e.g., state licensing representatives, residency program directors, medical school faculty, examinees) concerning the appropriateness of current passing standards for the Step 3 examination;
- Data on trends in examinee performance; and
- Score precision and its effect on the pass/fail outcome.

The USMLE program provides advanced notice of Step exam reviews and any adjustments on the USMLE website. The review process also appears in the USMLE Bulletin of Information.

If the Committee determines that a change to the passing standard is appropriate, the new recommended passing standard will become effective for all examinees who take the Step 3 examination on or after January 1, 2024. As more information becomes available, updates and the final decision will appear on the USMLE website.

APPENDIX B

2023 Quarterly FSMB Updates on USMLE

Quarterly FSMB Update on USMLE

March 2023, Vol. 4, No. 1



FEDERATION OF STATE MEDICAL BOARDS

Did Chat GPT Really Pass the USMLE?

News headlines recently mentioned include eye-catching statements that Chat GPT passed the USMLE. You probably wondered about the truth in a brief moment, but then someone considered.

Let's start with the basics. What is Chat GPT? It's a type of generative pre-trained transformer (GPT) language model. It's a significant potential possibility that it will advance in natural language processing (NLP).

One of the headlines making claims is that Chat GPT passed the USMLE's program simulation and publicly available sample questions (with answers) on the USMLE. "Chat GPT in the USMLE content. The applications performance is impressive to those who may have feared. First, Chat GPT did not take a complete USMLE test form. Indeed, it did not attempt USMLE sample questions with visible answers or sound; rather, it attempted computer-based simulations on Sp. A closer look at Chat GPT performance shows that the definition of "passing" is a placeholder for answers classified as indeterminate or counted as wrong with correct responses. [See the USMLE statement online.](#)

Still, the technology is impressive and fascinating. Indeed, the biomedical regulatory is not Chat GPT's performance on USMLE but how the technology will factor into the daily practice of clinicians and administrators or medical regulation in that area. [Check out FSMB's recent webinar, *Artificial Intelligence and the Future of Medical Regulation*.](#)

USMLE Volunteer Spotlight

Ruth Horowitz, Ph.D.
Public Board Member
(Delaware, New York)



I have been a Professor of Sociology at New York University for the last 27 years after serving in the same capacity at University of Delaware for 20 years. I received my PhD from University of Chicago in 1975. My fifth book, currently titled *Choreographing a Career* (subject change student dancer career follow-up book) *and the Public Interest: The Medical Licensing and Discipline Process*

I served on the Delaware Medical Board before joining the New York Board of Professional Medical Conduct, the ACCME, the Committee on Continuing Certification for the ABIM, and the Board of the NEWH. I also served on the Public Stakeholders Committee of the Stem Cell Committee. With the FSMB, I joined the committee developing the fitness standards for handling physicians who were impaired due to the now-accused violation of sexual boundaries, and I was nominated as committee member and editor of the *Journal of Medical Regulation*. It has become an editor.

Medical licensing exams, I learned early in my first board membership, and originally developed by the history of medical boards, described by Derbyshire in 1911. I did not realize that the NEWH board was not designed in 1915. I wrote the state statute on the license of physician. I learned through the NEWH board members that the medical profession's own research with statisticians working along with the most direct research studies are the words of the medical students and doctors in the exam.

I currently serve on the Committee for Individualized Review [CIR] which evaluates irregular behavior among USMLE

Resources

Website: www.usmle.org

Bulletin of Information: <https://www.usmle.org/bulletin/>

FAQs: <https://www.usmle.org/frequently-asked-questions/>

Social Media



facebook.com/usmle/



twitter.com/TheUSMLE



linkedin.com/company/usmle

to grant the authority to prohibit test-takers from retaking the exam or a specified number of years and, sometimes, not to hold the sponsor responsible for a state licensing or licensure violation. "Irregular behavior" is established only after a very thorough investigation by NBM staff and a ruling by a committee of physicians, a state board executive, and a public member.

Both state boards and NBM market to ensure that physicians are not only technically competent to practice medicine, but also that they are taking and discussing ongoing life-sustaining work to protect the public.

USMLE Administration, Minimum Passing Scores, and Performance

USMLE is administered continuously, year-round at Pooled test centers in the United States and internationally. The 11-step 2-Clinical Knowledge (CK) exams are administered worldwide while the 1-step 1-Clinical Skills (CS) exam is administered only in the United States. Currently, USMLE is administered at more than 345 US and Canadian Pooled test centers and at approximately 100 international Pooled test centers.

Exam results are processed continuously, and scores are reported weekly on Wednesdays. Individual score reports are made available to examinees via a secure website.

Upon receipt of results, a USMLE recommendation, for each examinee, is based on achievement of specified levels of proficiency established prior to administration of the examination. As a result, no one can determine the percentage of examinees who will pass or fail the examination. Statistical procedures are employed to ensure that, for each Step, the level of proficiency required to pass remains uniform across forms of the examination.

The percentage of correctly answered items received on a step is a very important factor in determining the overall performance of the examinee. How well, or how poorly, an examinee performs on a step is a very important factor in determining the overall performance of the examinee.

Annual performance data for each Step is published on the USMLE website.

2022 Performance at Step 1

On January 26, 2022, the USMLE program transitioned to a pass/fail reporting format for the 2022 Step 1 exam. This change, USMLE carefully evaluated over 2022 Step 1 examinee scores over the year. It was important to not affect the performance of previous examinees compared to the 2022 examinees. The 2022 Step 1 performance data, however, shows that the 2022 examinees performed better than the 2021 examinees. The 2022 Step 1 performance data shows that the 2022 examinees performed better than the 2021 examinees. The 2022 Step 1 performance data shows that the 2022 examinees performed better than the 2021 examinees.

Consequently, there were no examinees who failed the exam. The 2022 Step 1 performance data shows that the 2022 examinees performed better than the 2021 examinees. The 2022 Step 1 performance data shows that the 2022 examinees performed better than the 2021 examinees.

Each year, a national network of medical school faculty and clinicians from a variety of educational backgrounds and specialties work together to develop high-quality Step 1 exams. These items maintain the same standard USMLE writing approach for the 2022 Step 1 exam.

USMLE MEETINGS CALENDAR

- **April**
Management Committee
Student and Resident Advisory Panel
- **June**
Composite Committee
- **September 2**
USMLE Orientation for State Board Members

Quarterly FSMB Update on USMLE

June 2023, Vol. 4, No. 2



USMLE Orientation for State Board Members and Staff Set for September 20, 2023

The annual USMLE Orientation for State Board Members and Staff will be held September 20, 2023 at the FSMB offices in Euless, Texas. The orientation provides attendees with a deeper understanding of the USMLE and serves as a no-commitment way for board members to learn about how they might be able to participate in the program, should they wish to do so. Travel expenses (i.e., airfare, lodging, food) are covered by the USMLE program.

The FSMB and NBME have hosted this orientation annually since 2007. To date, over 200 individuals from 59 medical and osteopathic boards have participated. Fifty-seven past attendees (representing 35 boards) have served subsequently with the USMLE program. This includes participation on standard setting panels and advisory panels, as well as serving on the USMLE Management Committee, the USMLE Composite Committee, and/or item writing and item review committees.

Individuals interested in attending the September 20 orientation should contact Sarah Heermans, FSMB's Coordinator for Assessment Services, at sheermans@fsmb.org and/or Frances Cain, FSMB's Director for Assessment Services, at fcain@fsmb.org.

Irregular Behavior on USMLE: What is Your Board's Role?

While the vast majority of USMLE administrations proceed uneventfully, sometimes candidates engage in behavior deemed by the program to be "irregular," i.e., a threat to the security and/or integrity of the testing process. (Detailed information on irregular behavior can be found [here](#). The USMLE Committee for Individualized Review (CIR) adjudi-

cates these cases. Penalties for exam-related misconduct can include a time-specific bar (e.g., 3 years) precluding access to the exam. For the most egregious cases, the CIR can stipulate that an individual only regain access to USMLE after serving the specified bar and at the request of a state medical board that is fully informed on the facts of the case.

The USMLE program has recently – for the first time in its 30+ year history – received several requests from state medical boards that wish to sponsor such individuals to take a USMLE exam. Because these instances are very uncommon, we offer guidance on how to respond if your board receives such an inquiry or request.

You should immediately notify the USMLE Secretariat at USMLESec@nbme.org to: (1) ensure that the individual is eligible (i.e., that the minimum duration of the bar has passed and that the individual has notified the USMLE Secretariat of their intent to contact the board) and (2) obtain all of the information related to the events that led to the finding of irregular behavior and imposition of the bar.

As detailed to the examinee in the letter notifying them of the CIR's decision and sanctions, lifting of such a bar will only be considered if:

1. The minimum duration of the bar must have passed. Individuals are provided with the specific date after which a bar may be lifted.
2. Before the examinee submits a request to a state medical board to request that the bar be lifted, the examinee must notify the Office of the USMLE Secretariat in writing (at USMLESec@nbme.org) of their intent to do so. Failure to notify the Office of the USMLE Secretariat in advance could result in significant delays or potential denial.

Resources

Website: www.usmle.org

Bulletin of Information: <https://www.usmle.org/bulletin/>

FAQs: <https://www.usmle.org/frequently-asked-questions/>

Social Media



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3. The USMLE program receives from a state medical board, after full disclosure to it of the events that led to the imposition of the bar, a request to allow the individual to sit for USMLE examinations.

If you or your board have any questions or would like general information about irregular behavior or this process, please feel free to contact Frances Cain, FSMB's Director for Assessment Services, at fcain@fsmb.org.

New State Board Representatives Appointed to the USMLE State Board Advisory Panel

The USMLE program is excited to welcome three new members to the USMLE State Board Advisory Panel:

- Guillermo Guzman, MD, Idaho Board of Medicine
- Mustafa Hamed, MD, Michigan Board of Medicine
- Rebecca Robbins, Medical Licensure Commission of Alabama

In addition to Drs. Guzman and Hamed and Ms. Robbins, the 2023-2024 panel includes:

- Shami Goyal, MD, Illinois Division of Professional Regulation
- Maria Laporta, MD, Illinois Medical Licensing Board
- Stephen Boese, New York State Board for Medicine (Licensure)
- Gerry Dillon, PhD, Pennsylvania State Board of Medicine
- Stephen Brint Carlton, JD, Texas Medical Board
- David Herlihy, Esq., Vermont Board of Medical Practice
- Mark Spangler, MA, West Virginia Board of Medicine

Through participation on the USMLE State Board Advisory Panel, state medical boards – the primary intended user of USMLE scores – can provide firsthand feedback on USMLE issues and initiatives. The meetings also provide the opportunity for USMLE program staff to hear directly from the

board staff and members about issues that are impacting their states and practices that may be of interest or impact to the USMLE program. The panel is scheduled to meet next on November 29, 2023 at FSMB offices in Euless, Texas.

USMLE Brand Refresh

USMLE has refreshed its branding with a new, modernized look and feel that better reflects its relevance to the practice of medicine today.



The new logo (above) features three distinct segments that represent the Step exams that medical school students and graduates take on their journey to medical licensure. It also references a common symbol for health care and medicine – the cross – which represents protection and help at hand.

The new logo and branding are live on the [USMLE website](https://www.usmle.org). Updates to official USMLE transcripts and score reports, as well as USMLE-relevant pages on the FSMB website, will be forthcoming.

USMLE MEETINGS CALENDAR

- **Composite Committee:** Jun 27, Oct 10
- **Management Committee:** Jul 30-Aug 2, Dec 12-13
- **Committee for Individualized Review:** Aug 1-2, Oct 3-4, Dec 5-6
- **Orientation for State Board Members and Staff:** Sep 20
- **State Board Advisory Panel:** Nov 29

USMLE Orientation for State Board Members and Staff



Back Row (L-R): Swadeep Nigam, Dr. Jade James-Halbert, Dr. Joyce Vista-Wayne, Kory Linn, Dr. Naveed Razzaque, Dr. Timothy Holder, Dr. Sara Moghaddam, Lisa Cullen. **Front Row (L-R):** Dr. Alex Mechaber, Suzanne McEllhenney, Frances Cain, David Johnson

On September 20, 2023, the FSMB and NBME hosted eleven members/staff from 10 state medical boards at FSMB's offices in Euless, Texas, and virtually for the 17th annual USMLE Orientation for State Board Members and Staff.

The orientation, first held in 2007, provides members and staff from state medical and osteopathic boards with an opportunity to learn about the USMLE program and engage directly with program staff. The goals of the workshop remain: (1) to inform and educate the medical board/regulatory community on the USMLE program, including new developments and key issues; (2) to create and facilitate relationships USMLE program staff to ensure that state boards have an immediate resource for any USMLE-related questions; and (3) to share opportunities for state board members and staff to participate directly in the USMLE program.

This year's meeting included a brief history of medical licensing examinations in America, starting with the long period of state developed exams then into the era of national exams: USMLE and its predecessors (NBME Parts, FLEX) as well as the NBOME's COMLEX-USA. This review spotlighted two key principles upholding the value of the medical licensing examination—acting as an independent audit of the medical education/training system and providing a common national standard for the assessment of physicians for purposes of initial medical licensure.

The meeting also included an extensive discussion period between attendees and staff. Topics covered included USMLE attempt limits, handling requests from examinees for a board to “sponsor” their access to USMLE, exam security, and the potential for a single examination for licensure.

Attendees also discussed the upcoming change in accreditation for Canadian medical schools effective after June 30, 2025—specifically, Canadian schools will no longer be accredited by the LCME, accreditor of MD programs in the US. The group emphasized the importance of each board checking their statutes as well as rules/regulations for any changes that may need to be made to facilitate the licensure of Canadian medical school graduates following this change.

The meeting also featured an opportunity for physician board members to learn about USMLE testing formats and item development, including multiple-choice item development and Step 3 computer-case simulations. During this time, board staff had the opportunity to meet separately with FSMB staff from other key departments and services, including Physician Data Center (PDC), Education, Uniform Application (UA), Federation Credentials Verification Service (FCVS), and Assessment Services.



Attendees (in-person and virtual) included:

- Sara Moghaddam, MD, Delaware
- David Harris, Georgia
- Joyce Vista-Wayne, MD, Iowa
- Savannah Okoronkwo, Maine-Medical
- Jade James-Halbert, MD, Missouri
- Naveed Razzaque, MD, Missouri
- James Guyer, MD, Montana
- Kory Linn, Nevada-Medical
- Swadeep Nigam, MSc, MBA, Nevada-Osteopathic
- Maria Plummer, MD, New York (Licensure)
- Timothy Holder, MD, Oklahoma-Medical
- Lisa Cullen, Oklahoma-Medical

Since the creation of USMLE in 1992, more than 250 individuals with experience on state medical boards have participated with USMLE in some capacity (e.g., item writing, item review, governance, finances, integrity, advisory panels, standard setting).

Individuals interested in attending the next orientation should contact Frances Cain, Director of Assessment Services at FSMB, at fcain@fsmb.org.

Impact of 2021 USMLE Attempt Limit Change

The USMLE attempt limit policy was reduced from six attempts per Step to four attempts per Step for applications submitted on or after July 1, 2021.

Under the four-attempt limit policy, examinees with four (4) or more failing and/or incomplete attempts at a Step without a pass (including Step 2 CS) are ineligible to apply for any USMLE Step. The sole exception to the 4-attempt limit is sponsorship by a state medical board for one additional attempt. This exception is not an option for examinees with four or more failing attempts at Step 2 CS without a pass since that exam has been discontinued. If the board-sponsored additional attempt is passed, the individual can resume the USMLE sequence. If the additional attempt is not passed, the individual is not allowed to continue with USMLE. If an examinee needs sponsorship for more than one Step, they must pass on the first state-board-sponsored attempt to request a sponsored attempt on the other Step.

The USMLE program does not “advertise” the exception criteria online or in our operational materials. It is provided only to examinees upon inquiry, due to its dependence on individual exam history. Examinees with complicated exam histories or

detailed inquiries are encouraged to email the Office of the USMLE Secretariat at USMLESec@nbme.org.

Attempt Limit Exception Requests:

Since July 1, 2021, the Office of the USMLE Secretariat has approved 153 state board exception requests. These requests have come from 16 boards. If an examinee needs sponsorship for more than one Step, they must pass on the first state-board-sponsored attempt to request a sponsored attempt on the other Step.

If your board receives a request from an examinee to be sponsored for an additional attempt, please be aware that 1) the USMLE program does not require you to "entertain" or approve any such requests, and 2) the additional attempt must be in compliance with your board's USMLE attempt limit policy for Initial licensure (i.e., if your board only allows three attempts at any USMLE Step, your board is not allowed, under USMLE policy, to sponsor an examinee for an additional attempt).

If you have any questions about the attempt limit policy, please feel free to contact Frances Cain, Director of Assessment Services at FSMB, at fcain@fsmb.org, or Debbie Cusson, Manager of Assessment Services at FSMB, at dcusson@fsmb.org.

USMLE Meetings Calendar

USMLE Composite Committee
October 10, 2023

USMLE Medical Student and Resident Advisory Panel
October 18, 2023

USMLE State Board Advisory Panel
November 29, 2023

Resources

[USMLE.org](https://www.usmle.org)
[Bulletin of Information](#)
[FAQs](#)

Social Media

 facebook.com/usmle
 twitter.com/TheUSMLE
 linkedin.com/company/USMLE

Contact

Frances Cain
Director of Assessment Services
fcain@fsmb.org, (817) 868-4402

Reflecting on 2023

As December draws to a close, we want to express our appreciation to the many volunteers from the medical licensing community who devoted their time and effort to support the USMLE program. In particular, we would like to thank those who served on the USMLE Composite and Management Committees in 2023: Lois Krahn, MD (AZ), Andrea Anderson, MD (DC), Jeffrey Carter, MD (MO), Sarvam TerKonda, MD (FL), Danny Takanishi, MD (HI), Nicole Gilg, MD (IA), Kristin Spanjian, MD (MT), Bryant Murphy, MD (NC), Cheryl Walker-McGill, MD (NC), Patricia Hunter (VT). We thank these individuals and the many additional volunteers who served on other USMLE committees and panels. Their contributions are invaluable.

The USMLE program benefited immensely from the input of key stakeholders through our State Board and Medical Student & Resident Advisory Panels. Much the same can be said from the participants at this year's USMLE workshop for state medical board members and staff. Their insight and thoughtful evaluation of program activities will help shape our efforts going forward.

Looking ahead, we remain committed to strengthening USMLE's ability to assess key physician competencies valued by the licensing community. Accordingly, we will keep you apprised of ongoing pilot work to identify new formats for assessing clinical reasoning and spoken communication. At the same time, we will continue exploring new and enhanced ways to communicate USMLE activities to you.

Finally, we wish all the staff and members at the state medical and osteopathic boards a happy and healthy holiday season.



David Johnson
FSMB Chief Assessment Officer



Alex Mechaber, MD
NBME Vice President of USMLE

USMLE State Board Advisory Panel



The USMLE State Board Advisory Panel met at FSMB's Texas offices on November 29, 2023. The panel brings together board members and staff from state medical and osteopathic boards for in-depth discussions between the licensing community and USMLE program staff. For more than a decade this panel has convened annually as a reactor panel and sounding board offering feedback, advice and input from the medical licensing community on all aspects of the USMLE program. Current members include the following board staff and members (pictured left to right in the photo above):

- Mustafa Hamed, MD – Michigan-Medical
- Gerard Dillon, PhD – Pennsylvania-Medical
- Rebecca Robbins – Alabama (licensure commission)
- Shami Goyal, MD – Illinois
- Stephen Boese, MSW – New York (licensure)
- Maria Laporta, MD – Illinois
- Stephen Brint Carlton, JD – Texas
- David Herlihy, Esq – Vermont-Medical
- Guillermo Guzman, MD – Idaho
- Mark Spangler, MA, LPC – West Virginia-Medical (not pictured; participated virtually)

Topics discussed during the meeting included:

Interactions between state board and USMLE staff: The focus was primarily on unusual circumstances, such as invalidation of a USMLE score following release and reporting of the score to a medical board, and individuals barred from USMLE as a result of engaging in irregular behavior who contact a board for sponsorship to regain access to USMLE. The consensus was that USMLE staff will identify optimal ways to specifically flag and draw the attention of all pertinent board staff to these situations. This may include, for example, direct communication with the executive director and/or providing a new, updated transcript – with explanatory cover letter – directly to the medical board via the FSMB's board portal.

Intealth/ECFMG Recognized Accreditation Policy: In 2010 the Educational Commission for Foreign Medical Graduates (ECFMG), a division of Intealth, announced its policy calling for international medical graduates (IMGs) to have graduated from an accredited medical school as a requirement for ECFMG Certification effective in 2024. Initial implementation of the Recognized Accreditation Policy will involve reporting of a medical school's recognized accreditation status via the ECFMG Certification status report. This reporting is for information purposes only and will not impede an individual's eligibility for ECFMG Certification. Detailed information about this policy and implementation is available on the ECFMG website at <https://ecfm.org/accreditation/>.

ECFMG Certificates Subject to Expiration: The panel also discussed the possible implications for USMLE and licensure requirements related to the expiration of ECFMG Certificates issued to applicants who satisfy the clinical and communication skills requirements for ECFMG Certification through a Pathway. For an IMG's ECFMG Certificate to become valid indefinitely (i.e., no longer subject to expiration), the applicant must have successfully completed at least 12 months of clinical education in an eligible U.S. graduate medical education (GME) training program. IMGs who do not enter GME prior to the expiration of their Certificates will be required to revalidate. Information on how to revalidate an expired ECFMG Certificate will be provided in time for applicants to complete the revalidation process prior to the expiration of the certificates. ECFMG recommends that the USMLE program and state medical boards only accept ECFMG Certificates that have not expired. Detailed information about the ECFMG Pathways is available on the ECFMG website at <https://ecfm.org/certification-pathways/>

USMLE Research Update: The panel reviewed the body of USMLE research demonstrating higher USMLE performance is associated with positive outcomes such as lower risk of state board disciplinary actions, higher specialty board certification scores, and improved patient outcomes. The panel strongly recommended that USMLE develop ways to more broadly disseminate this important research validating the exam's appropriateness as part of the medical licensing decision; and to specifically present this information to state medical and osteopathic boards.

Alternatives to the Traditional Model for Medical Licensure: The panel discussed recent legislative activity that creates alternate licensure pathways by modifying traditional elements of the licensure model—specifically, softening requirements around post-graduate training in an ACGME-accredited program in the U.S. and requiring only a portion of the USMLE sequence. The panel encouraged USMLE (or its parent organizations: FSMB and NBME) to engage in this topic via advocacy and legislative efforts and to advocate the importance of completing the full USMLE sequence.

Change in Accreditation of Canadian Medical Schools: Effective late June 2025, Canadian medical schools will no longer be accredited by the US-accreditor for MD degree programs, the Liaison Committee on Medical Education (LCME). This change means USMLE will categorize Canadian medical students and graduates as international candidates required to obtain ECFMG Certification. Program staff are working through the operational elements of this transition; details will be shared with state medical boards as soon as available. A list of Canadian medical schools currently accredited by LCME is available on the LCME website at <https://lcme.org/directory/accredited-canadian-programs/>

Annual USMLE Report

The *2023 Annual Report on the United States Medical Licensing Examination* is now available and has been provided along with this newsletter. The report is distributed via email to all state medical boards and provides a timely snapshot into major developments within USMLE as well as foundational information explaining the program.

As of 2022, approximately 61% of the 1,044,734 physicians licensed in the United States have taken all or part of the USMLE sequence; 56% have taken all Steps (1, 2 and 3). (Note: Physicians with a partial USMLE sequence include those who took a combination of USMLE and either the previously administered NBME Parts exams or the FLEX exam.)

Medical licensing authorities and their representatives continue to be key stakeholders and contributors to the USMLE program. In 2023, 35 individuals from 24 state medical and osteopathic boards across the United States participated in USMLE in some capacity. Since implementation of the USMLE in 1992, 338 members and staff from state medical boards have participated in the USMLE program in some capacity. These individuals represent 65 different U.S. medical and osteopathic boards. More detailed information about state boards' involvement with USMLE is provided in the "State Medical Boards Participation in USMLE" section of the report.

State board members and staff who are interested in learning more about USMLE or serving on a USMLE committee, panel or taskforce can contact Frances Cain fcain@fsm.org for information about participating in the annual USMLE Orientation.

New Study: USMLE Performance Tied to Better Patient Outcomes

A recent article published in *Academic Medicine* explores the correlation between examinee performance on the USMLE and improved patient outcomes. This new research provides additional support for the validity and importance of USMLE's role in the medical licensure process and the connection between examinee performance and providing safe and effective health care for patients.

The authors conducted a retrospective analysis of nearly 200,000 hospitalizations (with five common inpatient diagnoses) in Pennsylvania over a three-year period with more than 1,750 family physicians and general internists, connecting their USMLE scores with outcomes of in-hospital mortality and length of stay. Results showed that better physician USMLE performance across the series of exams was associated with lower mortality and shorter length of stay.

Prior studies have documented the link between performance on licensing exams and the number of test attempts with other markers of physician competence – demonstrating associations between USMLE and specialty board exam performance, clinical performance evaluations, and ensuing disciplinary actions by state medical boards. In showing higher USMLE performance connects with improved patient outcomes, this study strengthens the evidence that USMLE assesses competencies essential to patient care.

“The USMLE is designed to ensure that licensed physicians have the necessary knowledge and skills to provide safe and effective patient care,” said Alex Mechaber, MD, Vice President, USMLE, NBME. “This latest research further demonstrates the positive correlations between USMLE scores and improved patient outcomes of care,”

For further information about the important and continuing role of independent standardized assessments for medical regulation and the conclusions about trainee/physician performance, read the full paper [“The Associations Between United States Medical Licensing Examination Performance and Outcomes of Patient Care” in Academic Medicine.](#)”

USMLE Meetings Calendar

USMLE Committee for Individualized Review
December 5-6, 2023

USMLE Composite Committee
February 6, 2024




USMLE Management Committee
December 12-13, 2023

USMLE Committee for Individualized Review
February 15-16, 2024

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Contact

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Director of Assessment Services
fcain@fsmb.org, (817) 868-4402

APPENDIX C

USMLE Aggregate Performance Data 2021-2022

The data tables below are extracted from the performance data provided on the USMLE website at <https://www.usmle.org/performance-data>. Performance data for USMLE administrations dating back to 2012 are also available on the website.

Table 1.C

2022 STEP 1 ADMINISTRATIONS * Number Tested and Percent Passing		
	# Tested	% Passing
Examinees from US/Canadian Schools that Grant:		
<i>MD Degree</i>	24,317	91%
1 st Takers	22,828	93%
Repeaters**	1,489	71%
<i>DO Degree</i>	4,722	89%
1 st Takers	4,659	89%
Repeaters**	63	67%
Total US/Canadian	29,039	91%
Examinees from Non-US/Canadian Schools		
1 st Takers	22,030	74%
Repeaters**	2,926	45%
Total non-US/Canadian	24,956	71%

*Represents data for examinees tested in 2022 whose scores were reported through February 1, 2023.

**Repeaters represents examinations given, not number of examinees.

Table 2.C

2020-2021 STEP 2 CK ADMINISTRATIONS *		
Number Tested and Percent Passing		
	# Tested	% Passing
Examinees from US/Canadian Schools that Grant:		
<i>MD Degree</i>	24,632	98%
1 st Takers	24,205	99%
Repeaters**	427	71%
<i>DO Degree</i>	5,199	97%
1 st Takers	5,177	97%
Repeaters**	22	73%
Total US/Canadian	29,831	98%
Examinees from Non-US/Canadian Schools		
1 st Takers	12,708	89%
Repeaters**	1,369	57%
Total non-US/Canadian	14,077	86%

*Data for Step 2 CK are provided for examinees tested during the period of July 1 to June 30 whose scores were reported through February 1, 2023.

**Repeaters represents examinations given, not number of examinees.

Table 3.C

2021 STEP 3 ADMINISTRATIONS * Number Tested and Percent Passing		
	# Tested	% Passing
Examinees from US/Canadian Schools that Grant:		
<i>MD Degree</i>	22,336	97%
1 st Takers	21,633	98%
Repeaters**	703	76%
<i>DO Degree</i>	100	96%
1 st Takers	98	96%
Repeaters**	2	†
Total US/Canadian	22,436	97%
Examinees from Non-US/Canadian Schools		
1 st Takers	10,993	91%
Repeaters**	1,294	64%
Total non-US/Canadian	12,287	89%

*Represents data for examinees tested in 2021 whose scores were reported through February 1, 2023.

**Repeaters represents examinations given, not number of examinees.

†Performance data not reported for categories containing fewer than 5 examinees.

APPENDIX D

Program-related Publications by USMLE Staff in 2019-2022

Arnhart K, Cuddy MM, Johnson D, Barone MA, Young A. Multiple United States medical licensing examination attempts and the estimated risk of disciplinary actions among graduates of US and Canadian medical schools. *Academic Medicine*. 2021;96(9):1319-1323.

Baldwin P, Yaneva V, Mee J, Clauser BE, Ha LA. Using natural language processing to predict item response times and improve test construction. *Journal of Educational Measurement*. 2021;58(1):4-30.

Bezirhan U, von Davier M, Grabovsky I. Modeling item revisit behavior: the hierarchical speed–accuracy–revisits model. *Educational and Psychological Measurement*. 2021;81(2):363-387.

Cain FE, Arnhart K, Young A, Johnson D. Characteristics and outcomes of individuals engaging in USMLE irregular behavior, 2006–2015. *Journal of Medical Regulation*. 2020;106(4):8-16.

Chaudhry HJ, Katsufakis PJ, Tallia AF. The USMLE Step 1 decision: an opportunity for medical education and training. *JAMA*. 2020;323(20):2017-2018.

Chaudhry HJ, Kirch DG, Nasca TJ, et al. Navigating tumultuous change in the medical profession: the coalition for physician accountability. *Academic Medicine*. 2019;94(8):1103-1107.

Cuddy, M. M., Liu, C., Ouyang, W., Barone, M. A., Young, A., & Johnson, D. A. An Examination of the Associations Among USMLE Step 3 Scores and Likelihood of Disciplinary Action in Practice. *Academic Medicine*. Published Ahead of Print.

Feinberg RA. Estimating classification decisions for incomplete tests. *Educational Measurement: Issues and Practice*. 2021;40(2):96-105.

Hammoud M, Foster L, Cuddy MM, Swanson D, Wallach P. Electronic health record use during the obstetrics and gynecology clerkship by medical student graduates between 2012 and 2016. *Obstetrics & Gynecology*. 2019;134(1):46S.

Hamstra SJ, Cuddy MM, Jurich D, et al. Exploring the association between USMLE scores and ACGME milestone ratings: a validity study using national data from emergency medicine. *Academic Medicine*. Published online June 15, 2021. doi:10.1097/ACM.0000000000004207

Harik P, Feinberg RA, Clauser BE. How examinees use time: examples from a medical licensing examination. In: Margolis MJ, Feinberg RA, eds. *Integrating timing considerations to improve testing practices*. Routledge; 2020:73-89.

Jodoin MG, Rubright JD. When examinees cannot test: the pandemic's assault on certification and licensure. *Educational Measurement, Issues and Practice*. 2020; doi:10.1111/emip.12361

Jurich DP, Daniel M, Paniagua M, et al. Moving the United States Medical Licensing Examination Step 1 after core clerkships: an outcomes analysis. *Academic Medicine*. 2019;94(3):371-377.

Jurich DP, Liu C, Clauser A. To the Editor: Limitations and alternative solutions to a USMLE COMLEX-USA concordance. *Journal of Graduate Medical Education*. 2022;353-354.

Jurich DP, Santen SA, Paniagua M, et al. Effects of moving the United States medical licensing examination Step 1 after core clerkships on Step 2 clinical knowledge performance. *Academic Medicine*. 2020;95(1):111.

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