



71 Tips for Mastering Your Medical Specialty Boards

by

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This compendium of 71 board preparation tips provides tools and strategies for practicing physicians to master their medical specialty boards. These tips provide a roadmap that guides you from Starting Smart to Exam Day. These tips will accelerate your learning, boost your testing scores, and give you the confidence you need to master your medical specialty boards.

Introduction

This compendium of medical board study tips is based on learning science, best practices for professional learners, and personal experience coaching physicians in many specialties and at various levels of board preparation. Incorporating these tips into your board preparation can make your review process more efficient, effective, and most of all, successful.

You will find 71 tips in this e-publication to help you successfully pass your boards. The tips are categorized into five critical areas:

- Start Smart (7 tips);
- Use Effective Learning Strategies (18 tips);
- Manage Time Efficiently (16 tips);
- Apply Appropriate Test-Taking Strategies (18 tips); and
- Reduce Stress and Test Anxiety (12 tips).

Assess what you've already done to prepare, then select the tips that will further enhance your preparation. Some ideas will be easy to carry out, others will require more time and effort, but are definitely worthwhile.

Integrate your study program into your schedule by committing to study on a consistent basis—*THIS IS THE MOST IMPORTANT THING YOU CAN DO!*

Pick a specific time and set your smartphone to alert you. Make your board preparation a high priority!



Start studying early! Be willing to experiment with different learning strategies (i.e., reflect on your thinking as you study, ask questions before reading and read strategically, create mind maps or concept maps, use a multi-sensory approach [read-write-speak-move], regularly self-assess your progress, and monitor your emotional well-being). The goal is to engage more fully in the learning process. It may take a few days or weeks to feel comfortable with new study methods, but be persistent—tweak them if necessary. Keep this document handy so you can place a check by the strategies as you incorporate them into your board preparation program. You can do this!

Five Critical Areas for Successful Board Passage

Start Smart (7 tips)

- Get to know the exam and review the exam blueprint
- Subscribe to one or two online question banks
- Purchase a current comprehensive review book highly recommended for your specialty
- Prepare your study area in a place that suits you
- Take a practice test
- Prepare a monthly study schedule
- Create a 3-ring binder with dividers for each topic on the exam blueprint

Use Effective Learning Strategies (18 tips)

- Use “Active” learning strategies based on principles of metacognition
- Develop a multi-sensory approach to learning (read-write-speak-move)
- Create concept / mind maps to get the big picture and visualize topic associations
- Read texts and journals strategically, intentionally
- Live a balanced lifestyle—a regular study regimen with nutrition, exercise, positivity

Manage Time Efficiently (16 tips)

- Create a study plan based on the exam blueprint and your weak areas
- Set daily goals and be accountable
- Use a timer (e.g., Pomodoro timer)
- Record daily the # of MCQs completed, scores, question source, learning issues identified
- Use review cycles (daily, weekly, monthly)
- Control the use of electronic media while studying (don’t multitask!)
- Prepare and plan for Test Day

Apply Appropriate Test-Taking Strategies (18 tips)

- Focus on high-yield topics on the board exam blueprint and your weak areas
- Read multiple choice questions (MCQs) properly
- Analyze MCQs and learn how to correct your mistakes
- Identify and correct bad test-taking habits
- Review test-taking guidelines periodically to refresh your understanding

Reduce Stress and Test Anxiety (12 tips)

- Do breathing exercises regularly
- Check your posture while sitting when you study
- Focus attention on the MCQs
- Keep a positive attitude
- Believe in yourself
- Use positive affirmations frequently
- Become stress-hardy



Start Smart!

- 1. Get to know the exam and review the exam blueprint. Visit your board's website to answer these questions: How long is it? How many questions? How many sections? How many questions per session? How much time per section? Which topics are of highest yield? Use the exam blueprint to inform and focus your study.
- 2. Subscribe to one or two online question banks whose questions closely match the level of difficulty of the questions on your board exam. For many subspecialties, it may be difficult to find more than a few hundred practice questions. Consider making up questions as you read or ask your program director for questions. Additional questions can be found by using the *general specialties* question bank.
- 3. Purchase one current comprehensive review book highly recommended for your medical specialty. Use this as a go-to-resource for questions you miss when doing practice tests and when you want to expand your understanding of a particular topic.
- 4. Prepare your study area in a place that suits you. Remove clutter. Organize your board prep resources in one place, preferably a bookcase. Find a good desk (or table) and a comfortable chair. Use a desk lamp to ensure adequate lighting. Create a BOARD PREP folder on your computer for board exam information, study schedules, notes, practice test results, digital flashcards, etc. Personalize your study space by adding posters, signs, and/or photos that motivate you.
- 5. Take a practice test. Use one of your online question banks to complete 300 multiple-choice questions covering the topics on the exam. This will establish a baseline of your current knowledge. Repeat each month to watch your scores increase.
- 6. Prepare a monthly study schedule and hang it in a prominent place. First, identify how many hours you will need, would like, or will be able to study. Include learning at home, reading during slow times at the hospital/clinic or while on call. Aim to study a minimum of two hours per day at least three times a week.
- 7. Organize a 3-ring binder with dividers for each topic of the exam blueprint. Keep your notes, diagrams, self-assessments, practice tests, and other material assembled here.

Now you're ready to study!



Use Effective Learning Strategies

- 8. Create flashcards (organized by topic) with information that you do NOT know well. Record the ONE key point of each question you get wrong or are unsure of. Revisit this information 4-5 times prior to the exam.
- 9. Make mental associations to remember information. Linking ideas creates knowledge networks of related content. Dense neural networking is needed for rapid information retrieval and problem solving. Mind maps are an easy way to connect ideas by creating a visual overview of different connections. This creates a visual memory which can be recalled.
- 10. Focus your study on completing multiple-choice questions – this is more time efficient. Identify what you know/don't know. Then, go to one or two review books to learn the content that you need to know, but avoid reading large textbooks—it is too time consuming. Remember, questions may present a case, but instead of asking for the diagnosis, the question may ask for the best treatment or the best next step.
- 11. Read MCQs correctly: (1) read the interrogatory first (i.e., end of the scenario); (2) then read scenario carefully; (3) predict the answer *before* looking at distractors (during review); (4) select best response; (5) make the final pass (eliminate incorrect responses, select) and move on.
- 12. Each day review the critical missed questions from the previous day; spend 3-4 hours on the weekends consolidating and connecting the information learned during the week.
- 13. Take a weekly inventory of your progress. Concentrate on solving MCQs at least 60-70% of your preparation time.
- 14. Elaborate your knowledge while reading by asking questions and self-quizzing (Why? How? What-if?), comparing and contrasting data, and explaining the thinking that underlies your decisions.
- 15. Read articles and books strategically. Before you begin a thorough read, get a sense of the material by reviewing the objectives, main headings, introduction and summaries, figures, tables and graphs. Try to link the pieces together, then begin to read critically.
- 16. Use repetition. Revisit information > 6 hours after you review it and ideally after a good night's sleep (again, at least 6 hours). Recite what you learned as you commute to work, walk the dog—be as detailed as possible. Recite from memory your latest learning entry.

- 17. Link 'new' knowledge to 'prior' knowledge in order to make learning meaningful and easier to remember. Don't isolate facts, connect them to previous learning and patient cases. connect clinical sciences to basic sciences; match MCQ scenarios with your patients.
- 18. Use an "active" study approach ("deep learning") to stay mentally engaged and awake. Put new learning into your own words as soon as possible--walk/talk out loud. Reflect in writing. Relate it to something you have experienced. Self-assess. Categorize. Generate questions. Make flowcharts. Diagram. Make your own flash cards. Solve it. Build algorithms. Color code your notes.
- 19. Enhance your learning by spacing out your study, interweaving (mixing up) topics, and testing rather than merely rereading the material. The problem with repeated rereading is that it gives you a false sense of familiarity. You feel like you know the material, but you've never tried to retrieve it.
- 20. Speak out loud instead of simply reading. You are 50% more likely to remember something if you speak it out loud instead of simply reading it over and over.
- 21. If you find yourself easily distracted, see strategies for "active" learning (#16). If you have ADHD or might have challenges with concentration, seek a diagnosis and treat it. The consequences of failing your boards are catastrophic and even more tragic if preventable with treatment.
- 22. If you prefer to learn by listening, create a podcast (or other audio recording) after reading a chapter or set of questions. Teach yourself the material that you just read, and then listen to the audio recording on your commute or at other times. Consider using audio review courses. You will need to combine listening with more active studying (see #17).
- 23. If you prefer to learn by doing a task, write, diagram, draw, build an algorithm, color code your notes, compare and contrast information as you take notes. However, writing alone is not enough, but it may help build a foundation for other forms of studying.
- 24. If you prefer to attend a review course, complete all of your exam studying prior to the course. Review course material and complete at least 1200 questions before the course. Take the exam as close to the end of the course as possible. Review courses are not very useful, because their lecture-style format primarily involves passive listening.
- 25. Increase your self-awareness (or metacognition) of every aspect of your learning-- this includes *planning* your study time (setting goals), *monitoring* your cognitive activity (selecting appropriate learning strategies, self-testing, and monitoring task performance), and *self-regulation* (evaluating processes and products of learning and revising goals and strategies accordingly).



Manage Time Efficiently

- 26. Prepare for your boards like preparing for a “Cognitive Marathon”—you need to use successful strategies, resources, eat healthy food (good nutrition), exercise regularly, review on a consistent basis, and get sufficient rest.
- 27. Develop a study plan that schedules a regular time to study—*this is the most important thing to do* to prepare for boards! Set an alert on your smartphone as a reminder. Also, build in at least a couple of “float” days on your schedule.
- 28. Divide your study week so that you put in at least 2 hours per night, 3 days/nights per week. Add 20% to the time you think it will take to cover a sub-topic.
- 29. Rather than concentrating on just one topic for several days, study a different topic each day, forcing you to learn, forget, retrieve, and relearn—all essential processes to understand and remember material for the long-term.
- 30. Set goals for each study period and stay thoughtfully engaged by doing something with the material (i.e., develop a compare/contrast table, draw, summarize and reflect).
- 31. Manage your thinking by monitoring your effort, your emotions, and how you spend your time. Keep a log of your progress (i.e., date, # of MCQs completed, source of questions, your score, learning issues identified, time on task).
- 32. Stay focused and improve your study habits by using the *Pomodoro Timer*. Divide your session into 25-35 minute segments (called “Pomodoros”). After each segment, take a 5-minute break to check phone messages, stretch, get some fresh air, then resume your study by starting another “Pomodoro cycle”. Ideally, complete 4 cycles per day.
- 33. Don’t multitask while studying! Research has shown that multitasking (rapid task-switching) leads to mental fatigue, increased errors, and lower scores. Manage your time by blocking out time for undistracted studying. Use “tech breaks” to check incoming texts, emails, etc. Start with short “uni-tasking” blocks (25-35 minutes) with 5-10 minutes for tech breaks, then build up to an hour or more of uni-tasking.
- 34. Enhance your study by keeping specific patient cases in mind while you read; refer back to an article after seeing a challenging patient.
- 35. Study in shorter bursts of time. We don’t always have hour-blocks of time to study. Make use of 15-minute chunks of time, too. Download the [Pomodoro Timer](#) onto your desktop for convenience.

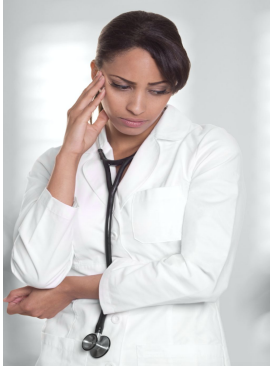
- 36. Establish daily study routines. Some individuals find their most effective study time in the early morning, prior to getting ready for work. The more often you create a study habit, the less likely you'll have to think about it—this study routine will become automatic.
- 37. Use structured review cycles to make learning *meaningful* and *remembered*:
 - HOURLY - reflecting/reviewing 10 minutes for every hour of study;
 - DAILY - each day review the weak topics from the day before;
 - WEEKLY - schedule a minimum of half or whole day to review and consolidate, and connect the past week's material with previously learned material;
 - LAST 3 to 5 DAYS PRIOR TO EXAM - do an overall review, but do NOT cover "new" material.
- 38. Focus your review on completing a large quantity of multiple-choice questions (MCQs) that align with the level of difficulty of the questions on your board exam. If you are planning on doing questions only, aim to complete 2500 MCQs prior to the exam. If you are planning on reading a review series and completing practice questions, aim to complete a minimum of 1500 MCQs before your boards. Retrieval strengthens memory and prevents information loss.
- 39. Decide what successful strategies to use. The three strategies (below) were used by physicians who made MAJOR improvements in their board scores:
 - a. Practice tests: Promoted focus and demonstrated improvement; paid attention to critical phrases ("at this time", etc.) in patient management questions.
 - b. Learning modules: They took copious notes, reviewed notes two weeks before the exam, made flash cards from notes, read aloud, recorded and yellow-highlighted articles from journals, listened to these recorded articles
 - c. Video tapes: Reviewed most of the tapes; also used a text book as reference—looked things up and tried to summarize the lectures.
- 40. Take regular study breaks to help your brain absorb more information and keep you focused and motivated. Take a short break after 45-50 minutes as anything new after 90-minutes does not get assimilated. Ideally, use the Pomodoro Technique.
- 41. Listen to the correct type of music while studying. Create a Mozart Spotify playlist. Music that is soothing and relaxing can help you beat stress or anxiety while studying. During long study sessions, music can aid endurance. Music can aid memorization by creating a positive mood, which indirectly boosts memory formation.



Apply Effective Test-Taking Strategies

- 42. Don't give up if you've failed medical boards in the past. There is NO such thing as a poor standardized test taker. Doing well is a matter of identifying and developing the requisite skills necessary to become test-wise. Thus, take responsibility for the outcome of the exam. Make sure that you are not trying to memorize the content, but that you understand the information and how it aligns with your specialty.
- 43. Consider ethnicity, race, gender, geography and occupation as well as key words (diagnostic information, abnormal lab values, and any qualifying terms) in practice questions.
- 44. Read the interrogatory of the clinical vignette FIRST, before reading the stem. Read the vignette actively by—asking questions, describing signs and symptoms of the condition, projecting what you would expect to find upon examination, what labs/x-rays would most likely reveal.
- 45. Generate possible answers to the MCQs BEFORE looking at the choices. This is a very helpful learning strategy! However, during the exam you won't have time to do this.
- 46. Unless the MCQ asks you to identify the incorrect answer, eliminate all answers that make the statement false. Notice answers that are at one extreme or the other as well as answers that use unfamiliar words.
- 47. When two or more answers appear to be correct, the more specific option is more likely to be the correct choice.
- 48. Know normal values for laboratory studies and study clinical images (i.e., dermatology, pathology, radiographs, CT scans, ultrasound images, electrocardiograms, peripheral blood smears, biopsies, skin findings and ophthalmologic findings).
- 49. Know what's NOT on the test: (1) areas that change rapidly; (2) details that are usually looked up; (3) controversies not ready for primetime.
- 50. When you are clueless, don't panic! It could be an experimental question. Re-read the question carefully. Don't pick an answer you've never heard of.
- 51. Beware of common problems with answering MCQs: (1) misreading questions, thus misinterpreting them; (2) negatively phrased questions; (3) anxiety and fatigue; and (4) passing over questions that are difficult and/or changing answers.

- 52. Learn from MCQ item distractors. Don't just move on once you know the answer. Change the stem so that the incorrect distractor is correct. Identify learning issues as you go along, then at a later time review that content in greater detail.
- 53. Identify bad test-taking habits by selecting a set of 50 questions from a good source (that you have not seen before). Set a clock for one hour. When the time is up, do not score questions, repeat the exercise taking as much time as you need. Then, look at the answers and score yourself. Compare your 'timed' and 'untimed' scores. Identify particular question answering problems that you have. Note what these mistakes are, think about what to do so you can correct this problem.
- 54. Don't agonize over a question that you're not sure about or don't know the answer to. Aim to answer one question every one or two minutes. At the end of the exam, return to the questions you skipped. Don't change a response unless you are positive you misread the question the first time or have remembered pertinent information.
- 55. Approach the test by pacing yourself (spend < 2 minutes / question). Don't rush—read carefully. Answer easy questions first. Spend time on questions you know something about, not where you're clueless. Change answers if more than a gut feeling. Answer every question.
- 56. Scrutinize pictures. Carefully examine photos (e.g., radiographs, ECGs, physical findings). They're kind of small (bring reading glasses). They are there for a reason. May be normal. Findings won't be subtle.
- 57. More than one answer may appear correct. The obvious answer is usually correct. Prioritize—what do you do next? Be wary of absolutes ("must", "always", "never"). Think evidence-based, cost-effective, safest, least invasive. Standard care—don't be creative.
- 58. Suggestions for Exam Day: eat before the test; try to be well rested; arrive at least 30 minutes early; take a few minutes to relax prior to starting; maintain a positive attitude; pace yourself; control your anxiety; budget your time for the entire exam.
- 59. On Exam Day review the instructions before each section—they change. Don't read more into the question than you see. Don't overthink a question. Divide questions into three rounds (answer easy questions; answer more difficult/not sure questions—skip the first time; and answer ones that are more difficult—may require writing, diagramming, and/or making calculations).



Reduce Stress & Test Anxiety

- 60. Develop and maintain a positive attitude. Research has demonstrated that EMOTIONS impact the learning strategies you use while studying. Negative emotions lead to superficial learning strategies (rote memorization of details and rehearsal strategies) and algorithm-based problem solving. So, be optimistic and set your worries aside while you study.
- 61. Believe you are capable of obtaining a high score, a passing score. A major predictor of academic achievement is believing you are capable of doing so.
- 62. Practice progressive muscle relaxation (i.e., abdominal breathing and contracting, relaxing various muscle groups, visualization) consistently prior to and during the examination. Make this a daily routine at a regular time of at least 20 minutes twice daily.
- 63. Plan ahead for the examination day by enjoying a restful evening, experience a good night's sleep, and eat a nutritious breakfast before the examination.
- 64. Monitor your internal state ... NO negative self-talk. Be prepared to talk to yourself DURING the examination with scripted comments that prevent or control negative self-talk (i.e., "There are specifics I can do to refocus during the examination rather than freeze; I will use the technique of" "Haven't I learned to solve other problems in my life?" "I can learn to remain relaxed and focused by learning to ..." "I can learn all of the material." "I know how to study effectively.")
- 65. Your goal is to remain focused on the examination questions rather than on worry emotionality. Concentrate on one question at a time and answer the easiest questions first
- 66. If you don't know something, don't panic. If you feel nervous, stop and take several deep, slow breaths.
- 67. Use "cueing", a metacognitive process, to analyze MCQs to avoid becoming overwhelmed with test anxiety when encountering difficult questions. Persons with test anxiety experience interference with STORAGE and PROCESSING of the exam content. (Cueing involves identifying the information you actually know about the content involved.)
- 68. Learn to navigate the stressful times by developing stress resilience—the ability to handle stress well. Characteristics of the stress hardy include: having perspective, being in control and exercising mastery, life-balance, having a support network, using relaxation techniques, and having an attitude of acceptance.

- 69. Don't leave as soon as you're finished. Review your work. After the test, reflect and stop any tendencies toward catastrophic thinking, instead reward yourself for completing an objective test reflection.
- 70. Practice power poses now and before the exam. Watch the TED talk by Amy Cuddy. In addition, practice meditation or positive affirmation exercises.
- 71. If you are experiencing anxiety that is paralyzing, strongly consider seeking treatment. It is not uncommon for physicians, both in training and in practice, to seek mental health help for exams.

I hope this resource has propelled your board preparation to a successful conclusion. For more information on how to study and prepare for boards, I highly recommend these two resources--the source of many of these tips:

- *(Book)* - *How to Study for Standardized Tests*, by Sefcik, Bice, & Prerost (2013), the source of many of these study tips.
- *(Article)* - Guerrasio J, Nogar C, Rustici M, Lay C, Corral J. Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle. *MedEdPORTAL*. 2017; 13:10593.

Visit my website (www.FacultyEdSolutions.org) to learn about *Coaching for Medical Specialty Boards*, my personalized virtual coaching program designed for physicians.

Yours for Successful Board Passage!

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