

HOW TO STUDY FOR THE USMLE

“Employ your time in improving yourself by other men’s writings so that you should come *easily* by what others have labored hard for”. Socrates (399-469 BC)

INTRODUCTION

The *highest* score a person can get is as much singular as incomparable. However, and fortunately for everyone reading this, the path that precedes most of the high scores can be decoded into a general pattern clearly valid and reproducible not only for those that succeed above two or three standard deviations from the mean, but also, and once again fortunately, for the majority of you that, by definition, are placed around one standard deviation from the mean. This is for Step 1 and Step 2 CK a score of 228 and 242, respectively (for the USMLE administration year 2016).

This text is not about how to get the actual top score, which is around 270/280 for Step 1/2. This is an individual matter. Everyone is different. Whether you like it or not, there will always be people academically more capable than you. Although it might sound discouraging, however, what everyone has in common is the *ability to reach their limit*. And this is the beautiful part about challenges such as the USMLE, since a significant amount of those above-average scores do not belong to the above-average-IQ-like group of people, but instead to those with average-IQ-like group of people that managed to maximize their capability to reach their limit.

Having said that, I myself consider most of those that get below-average scores to belong not to a lower-IQ-like group, but instead to a *not-well-prepared-like* group. And it’s precisely by those that I am encouraged to write this; those who must cope with greater difficulties, with more hours and months of preparation, with more social, economic and personal limitations, and mostly those who have already failed to reach an average score in Step 1.

Last but not least. Should you follow any of the advices you will find here, please let them be the following:

- Realize and acknowledge that no matter how much or how long you have studied in your life, whether you are a medical student, a surgeon or a cardiologist, you have never faced such an academic challenge as it is the USMLE. Get rid of your academic/professional ego before starting your Steps preparation, here we’re all the same naïve students with the same goals. Here we all need help!
- Follow advices only from people who got high scores (Step 1/2 >240/250). The higher the score, the more reliable. I got 257/257☺, so read carefully!
- Do never follow literally and blindly one advice! Even if it comes from Mr. 270/280!

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Para y por todos mis compañeros de batalla que conocí en Kaplan, Chicago. Colombia, Venezuela, Ecuador, Honduras y México.

I started writing this text back in March 2017 while I was studying for Step 2 CK at Kaplan, Chicago and finished it today September 3rd 2017 while I'm doing research in Jacksonville.

Today I and most of my friends from Kaplan are still halfway, yet we all know *for sure* that tomorrow we will match!

However steep the path might get, don't even think about giving up.

See you all tomorrow!

RETRIEVAL PRACTICE

THEORY

I know you haven't got a clue about who I am. I didn't even say my name. So, why should you believe what I am about to tell you? Simple. This is the only section of this paper where every single word is based on scientific evidence. If you don't believe me, great! You are a doctor or a medical student, so you know very well how to find evidence-based information. If still skeptical, check this book out and its hundred references: Brown, Peter C. (2014). *Make it stick: the science of successful learning*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Now let's get started.

“Retrieval: From Old French retroeve-, stressed stem of retrover ‘*find again*’ (First result on Google)

When you want to learn (i.e. understand and memorize) a concept you first need to get to know the material. The first impression. This is the easy part. You read the paper, hear the teacher and/or watch the video. Then, my dear friend, there comes the struggle. How can you take that information that has initially been placed on your short term memory slot and transfer it to your long term memory slot? The answer is Retrieval!

Think of information as a place in your brain. The first time you knew about this place was thanks to a path you were shown by a paper, teacher and/or video. Nonetheless, this path is like the footprints in the sand, or in the snow if you live in Chicago like me, since they start fading away the very next instant you stop walking through them. But, what if you build another 5 different paths? They would still be fading away after you leave them, but each at a different speed and level, and you would be able to choose, depending on where you are located (what type of question you got on the USMLE), which one can take you more accurately to the exact place. Here is where retrieval comes to play, for the creation of those paths are but the result of the *effort* of your brain trying to recall that information. Putting it on our “place in your brain” context, any USMLE question will initially place you at O'Hare (one of the Chicago airports), will throw you a couple of concepts saying “cloud” and “loop”, and will ask you to first discover what place it is and then how to get there. With that, and only that, you will need to remember that “loop” is how they call the downtown in Chicago and “cloud (gate)” is the official, yet widely unknown, name of the “Bean” (the famous shiny and reflective bean-shaped public sculpture, which is placed in downtown). Now you will have to remember how to get to that place (from O'Hare). If you only know one way, say you take the Blue line and you get out at Washington station and then you walk all the way up to the east, you would get that question wrong if the Blue line happens to be closed that day! At this point you feel lost. Why don't you know another route? Because you weren't forced to find and use it. You certainly read/saw

several the first time you came to Chicago. But until that day, you hadn't had the need to use them, to retrieve them! They faded away and weren't even close to your long term memory slot. Now, let's not give up. Say, you focus and manage to recall that a Colombian friend of yours lives in Lakeview (north of Chicago), and some time ago you had to go from O'Hare to his place, and afterwards, from there to the downtown. Can you see it now? You just retrieved pieces of information and built yourself a new path, and, indeed, got that question right! Only after that day you will *really* have more than one way to go from O'Hare to the Bean. Days bringing such obstacles and their consequent but valuable struggle will give you solid highways toward success!

You thought you would create them by checking -every now and then- some alternate routes just in case the Blue line closes? Or by reading different papers or watching different videos? You wish! Your brain will always *first* try to find the easiest path and *then* to build a new one. Re-checking, re-reading and re-watching are passive dynamics that give you the illusion of mastery, but what they really do is make you walk through the same path over and over again. Retrieval doesn't do that. Retrieval means effort. The success in taking each of the many steps you need to in order to get any USMLE question correct are a reflection of how many paths you've got at your disposal.

That explains why every time you re-read, re-view, re-highlight and re-write that information, you are not getting much more of what you got after the first time you did so.

Now that we've got the "What", we can proceed with the "How".

Years of neuroscience research have found the basis of a successful retrieval practice. It can be explained under the development of the following 4 concepts: Generation, Spacing out, Interleaving and Calibration. But, before going through them, let me explain you how is studying by retrieval in the first place.

After getting familiar with the material (i.e. reading, listening or watching it for the first time) you need to focus on *testing yourself*. The very same way you used to draw nice flowcharts, conceptual maps, data charts or just highlighting, you will now ask yourself about them. The main concepts or key points you considered important enough to put them on those charts are the very same you will ask yourself about. Whether you use a question or draw a flowchart leaving some gaps on it is up to you. What you must always do is try to answer that question or fill those gaps without looking at the material. Remember, effort means learning. The more difficult the question, the less clues you give to yourself, the more information you need to recall in your head in order to answer the question or fill the gap, the *stickier* the concept will get. That effort is not only about you making a thoughtful face and whispering as if you were praying. It is, in fact, your brain gathering material (i.e. making associations) so it can build a new path to the answer. The time you used to spend re-reading, highlighting the material or drawing, writing all sort of conceptual maps, you will now use it for *testing yourself*. After trying to solve those tests or fill those gaps, you will check the material and correct and/or complete what you just did. By the

end of the study session, not only you will have actively reviewed the material, but also, and equally important, you will be able to identify what are your weaknesses, what you haven't understood, and indeed, what you need (and don't need) to work on in the future.

So far so good right! Now, I believe the best way to keep properly unfolding the subject is actually going through the 4 main characteristics of a successful retrieval practice. Remember: if it makes it harder, it will make it stickier. Effort means learning.

Generation

You already know this one. Answering open-ended questions requires more effort than answering multiple choice questions. Drawing the complete flowchart requires more effort than filling some gaps on it. Whatever you are recalling, try to do it as much extensive and complete as possible. If you are trying to remember why Beta blockers are relatively contraindicated in diabetic patients, don't just recall that it's because they mask hypoglycemic symptoms, but instead try to recall the remaining side effects, their selectivity, and the antidote in case of toxicity. Generate a wider answer. Use synonyms or slang in order to get the point with other words, so you don't merely repeat the same sentences from the book.

Spacing out

Unlike generation, you don't know this one. But just like each of these, it's basically founded on adding effort.

Retrieval practice is better when the concept you are trying to recall has faded away to some extent so you have to make an extra effort in order to get it back. Studies have shown that if you give your brain *some time to forget* what it has just read, once recalled, it will stick longer. Say, you and me read a paper about Sarcoidosis today, and let's suppose we had never read anything about that disease. The day after, you have to solve a first test about it. Unlike you, I have to solve it five days later. One month after having read the paper for the first time, you and I are given a new second test about Sarcoidosis. Guess who will get a 260 and who a 220 on that one! It's not an assumption, it's a fact! What happened is that, unlike you, I had had some time to forget about Sarcoidosis when I was given the first test, so in order to answer it, I had to make a greater effort (compared to you) when trying to recall the information. The first test, as a retrieval practice tool, yielded better outcomes for me than for you and just because of the extra effort that I had to make.

The take away: after studying any specific material, give yourself enough time to somewhat forget it, so when the time of retrieving it by testing yourself comes you will be forced to struggle a little bit more in order to get it back. Neither too little so you recall it too easily, nor too much so can't you do it at all.

Interleaving

The idea here is to detach yourself from the associations that helped you learn the material the first times you studied it, so you become independent and don't need to rely on recalling those associations anymore. Diuretics will make this clear.

Everybody learns diuretics in the same order the urine passes through the tubules. First Mannitol, then Carbonic anhydrase inhibitors, then Loop diuretics, then Thiazides and finally Potassium sparing diuretics. You know them very well. Nevertheless, since you have always studied them as a group of drugs, as a sequence of channels, as a one-way path through the nephron, you rely on the associations you've made between them in order to recall one or another. You could know perfectly Thiazides. However, if you happen to forget about Loops diuretics just during your Step 1, you might not be able to recall all what you "know" about Thiazides, since you had always used the path from Mannitol through Potassium sparing diuretics to remember everything in between. Your dependence on that cluster of information (i.e. group of drugs) is dangerous. Here is where interleaving enhances your learning.

From now on, you won't try to remember about diuretics using that path. You won't make a flashcard asking for all the diuretics as a group. You won't draw a flowchart of the nephron and fill the gaps where every diuretic works. From now on, you will try to remember diuretics using that path but backwards. You will make a flashcard asking for the Thiazides only, and one different asking about Carbonic anhydrase inhibitors, and one different asking for those diuretics that causes metabolic alkalosis, and one different asking for those diuretics that are sulfonamides. Furthermore, you won't study all the diuretics the same day. You study half of them today, and half of them three days or one week later. You study one of those flashcards today, and one different tomorrow, and one different next week, and so forth. Likewise, you won't study only biochemistry during this week. You study different topics simultaneously, so you, from the very beginning, grow independent from the groups/orders/sequences in which the material is given. This will make you learn every topic both on association with prior knowledge and independently as if your brain was completely empty.

Calibration

Quality over quantity. Your study time must be intelligently distributed so you are always giving more attention and energy to your weaknesses. USMLE exams are not about fully reading and getting familiar with the material. That's not enough. Before your test day, you will need to have reviewed every topic so many times that you wouldn't believe me. Here is where Calibration shows up.

Once you have studied all the material for the first times, you need to focus on identifying what particular points or concepts need further study. However, since we are talking about months of preparation, those weak points will be fluctuating, and it's highly important that you keep

frequently identifying them as they arise. It sounds kind of abstract I know. Pathoma will make it clear.

Pathoma is the most recommended pathology book for Step 1, and as you would expect, people spend a considerable amount of time and effort trying to master it. What they use to do is what you must not do, nonetheless. They read Pathoma once when reading the Kaplan books at the beginning of their preparation. They read Pathoma again after reading First Aid or finishing the Kaplan Qbank/RX Qbank, and again before starting UWorld, and again after finishing UWorld, and again the week before their test day. Believe me, I'm not kidding. What is wrong with reading so many times an extremely high yield book? Simple, they're breaking the law I wrote at the beginning of this section: Quality over quantity. They're just "wisely" wasting their time. What they should do, if their goal is to completely master Pathoma, is identify the specific points that they haven't yet mastered and focus only on them. Those points, however, won't be the same after reading Pathoma for the first time, or after reading First Aid for the first time, or after finishing UWorld.

How do you identify your weaknesses? You already know: Retrieval practice. Every day when reviewing some topics, and of course when I say review I mean testing yourself in order to follow the retrieval practice, you will be able to see what topics you find more difficult to recall, or the ones you just can't remember. Retrieval practice tells you how to study and what to study.

PRACTICE

In this section I will describe how I applied the previously elucidated concepts to the daily study for the USMLE. I will also state some others study tools that I didn't use but I was suggested to put them on this text.

Please remember: in theoretical terms, everyone must stick to the basic concepts, but in practical terms, everyone is different and thus, everyone must find what best suits them (and must not follow literally what I'm about to explain).

The Journal

This is the most valuable study device I have discovered so far, and it is too for most of the people I have tried to help through the USMLE study process. Please read carefully and try to use it even if it doesn't sound too useful at first sight.

What the name implies are its three main principles: (1) it is made/produced 100% by you, (2) is produced and used in a daily fashion and (3) every page (day) is unique. The journal is a dynamic tool that allows you to actively and efficiently focus your time on topics you find either high yield or difficult to master (target topics)

Here it goes: During a regular study day (“day 1”) you review a certain quantity of information (e.g. books, notes, Qbanks) and while you do so, you’re simultaneously identifying those target topics and placing them on the “page 1” of your journal. At the end of your “day 1” you’ll have written down a list of those target topics. The next day (“day 2”), regardless of what you’ll study that day, you’ll take the “page 1” of your journal (from “day 1”) and will spend 1 or 2 hours reviewing it. Then, as you continue studying (new information) throughout your “day 2”, you’ll write down new target topics on the “page 2” of your journal. The next day (“day 3”), regardless of what you’ll study that day, you’ll take the “page 2” of your journal (from “day 2”) and will spend 1 or 2 hours reviewing it. Then, as you continue studying (new information) throughout your “day 3”, you’ll write down new target topics on the “page 3” of your journal. The next day (“day 4”), regardless of... I’m kidding, I know you already got the point. Those who didn’t, please seek help, it’s never too late.

Now, here’s the secret, and if you guessed it, I’m proud of you! When I said “you’ll write down new target topics on the “page #” of your journal”, what I really meant was “you’ll write down *questions* about new target topics on the “page #” of your journal”. And when I said “you will spend 1 or 2 hours reviewing it”, what I really meant was “you will spend 1 or 2 hours *answering* it”.

Next, I will describe exactly how I do it. Today is “day 1” and I’m studying Sarcoidosis and Leukemias or I did an UWorld block where I got wrong some questions about Sarcoidosis and Leukemias. Throughout “day 1” I wrote down some questions about the target topics on the “page 1” of my journal. This is what I got at the end of “day 1”.

1. What electrolytic disorder is seen in Sarcoidosis and why?
2. What is the only Leukemia that is not diagnosed by Flow Cytometry and why?
3. What is the only Leukemia where I won’t find neither “B” symptoms nor lymphadenopathies? And what is the other name of it? (because it’s got two names)
4. What kind of pathology I find in a lung and lymph node biopsy in Sarcoidosis? Write other three diseases that cause the same pathology findings.

Today is “day 3” and before I start studying or doing my UWorld block, I’m going to answer the “page 1” of my journal.

****Why am I answering “page 1” (from “day 1”) during “day 3”?**

Because of the “Spacing out” rule; I feel that 2 days is the perfect time for me to forget enough (but not too much) and consequently have a better retrieval practice, so I always try to answer my journal 2 days after I write it.

Here are the answers, which I write down on a piece of paper and then compare them with my Review Book (First Aid, Master the Boards, UWorld).

1. What: Hypercalcemia. Why: Main pathology phenomena in Sarcoidosis is the formation of noncaseating granulomas which, by definition, are formed by Macrophages. If you

remember, these cells produce the enzyme 1- α -hydroxylase which converts 25-hydroxy Vitamin D to 1,25-Dihydroxy Vitamin D and, given their overactive state in Sarcoidosis, they end up producing high levels of it and consequently increasing the intestinal absorption of Calcium (main role of Vitamin D in Calcium homeostasis).

2. What: Chronic Myelogenous Leukemia. Why: its diagnosis is focused on the identification of the Philadelphia Chromosome, which has the 9:22 translocation. Thus, we use FISH or PCR, not Flow Cytometry which is used to detect clusters of differentiation (CD) and not chromosomal abnormalities.
3. What: Hairy Cell Leukemia. Other name: Leukemic Reticuloendotheliosis.
4. What: Noncaseating granulomas. Other three causes: Crohn disease, Hypersensitive pneumonitis and Berylliosis.

Last but not least, after answering “page 1” of my journal, the questions I got wrong or couldn’t answer will be marked because I will try to answer them again the next day. Therefore: During “day 4” before I start studying or doing my UWorld block, I’m going to answer the wrong questions of “page 1” and all the questions of “page 2” of my journal. During “day 5” before I start studying or doing my UWorld block, I’m going to answer the wrong questions of “page 1” and “page 2” and all the questions of “page 3” of my journal. And so on and so forth.

The journal, as you can see, allows you to efficiently review what you studied during the past days. Thus, regardless of what subject you’re studying today, you’re always working on your weaknesses and important topics that need further study. Moreover, it’s fundamentally built on the key characteristics of a successful retrieval practice: Generation, Spacing out, Interleaving and Calibration.

Flashcards

A flashcard is a self-made small piece of high yield information that you review over and over again, from the day you write it until the day before your test day.

Remember, this is an accessory tool that shouldn’t take a big part of your study time. If you study 6-8 hours a day, reviewing your flashcards shouldn’t take you more than 30 min. And the best flashcard is the one you make yourself.

What subjects should be placed on them? High yield topics which are the most difficult to memorize.

How am I going to review them? By following the rules of a successful retrieval practice.

- Generation: On the front of the flashcard, write as less information as possible. On the back of the flashcard, I suggest you to write nothing, just the page number of the topic, so you force yourself to memorize the whole page and not what you believe is more

relevant. Furthermore, as you study and review UWorld, you will be constantly adding new information to your Review Book, like updating it, and you don't want to spend more time updating both your book and the back of your flashcard.

- Spacing out and Calibration: You'll classify your flashcards according to your level of mastery on them. The classification is dynamic and varies throughout your preparation, as it's expected if you're doing a good job.

I suggest 3 groups:

- Group 1: Review twice a week: Mondays and Thursdays
- Group 2: Review twice a week: Tuesdays and Fridays
- Group 3: Review once a week: Wednesdays.

Groups 1 and 2 contains those flashcards that you are just getting familiar with or are still difficult to remember (i.e. those you haven't mastered). Group 3 contains those that you have already mastered. All flashcards should start either on Group 1 or 2 and then move onto Group 3. If you feel that you know a flashcard so well that you don't need to review it again, it means that you shouldn't have made it in the first place. Either it wasn't that difficult to memorize or wasn't high yield enough.

- Interleaving: Do not make a flashcard with all of the Leukemias, other with all of the Interleukins and other with Trinucleotide repeat disorders. Do make one flashcards with two or three Leukemias plus the odd-numbered Interleukins plus the only two Trinucleotide repeat disorders that are not autosomal dominant, and other flashcard with the remaining two or three Leukemias plus the even-numbered Interleukins plus the Trinucleotide repeat disorders that are autosomal dominant.
- Quality over quantity: Make the proper amount of flashcards so you can review them at least once a week. It's worthless making a flashcard that you'll only review every two or three weeks, let alone the people who make hundreds of flashcards and end up learning only 10% of them despite spending most of their study time reviewing them. It's not about how many you should make/review. It's about how much time will you spend reviewing them.

Anki (<https://apps.ankiweb.net/>)

This is an app which helps you in the making of flashcards or a journal and allows you to reuse and sort your questions in the way you think is better for you. You can classify the question according to the importance or difficulty, so you can come back to them every now and again. Also, it allows you to write down a full explanation of each question with images and graphics, in case you feel that your Review Book or UWorld is not enough or lacks important information.

HOW TO USE A QBANK

It's clear enough that Qbanks (UWorld, Kaplan Qbank, USMLE-RX Qbank, Becker Qbank) are the best study tool for the US medical boards. Thus, most of your study time should be spend on those resources. But, why is that? If you guessed it, I'm super proud of you! Yes, using Qbanks is retrieval practice at its finest. However, I don't want to spend time explaining why it is so. Instead, I want to focus on how to enhance the use of such a wonderful resource.

****Alert!!** This is the most controversial topic around the USMLE preparation. People will tell you to do UWorld three times so you memorize the questions and all the material, others will tell you to do two or three blocks a day to get the endurance for the actual test, others that you should review only the wrong questions, others that you should do blocks by subjects and not mixed, so on and so forth. So please, by rephrasing what I wrote on the first page of this document: "Follow advices only from people who got high scores (Step 1/2 >240/250). The higher the score, the more reliable" and "do never follow literally and blindly one advice! Even if it comes from Mr. 270!" As far as I'm concerned, I strongly believe that *if you do it properly, once is enough*. What is properly? Keep reading!

GENERAL RULES

- Start with Unused Untimed Mixed blocks of 40 questions
 - Unused: always new questions. You get it. You'll need to redo the wrong ones and the marked ones but only at the end of your preparation. This part is explained at the end of this text in the "Final Weeks" section.
 - Untimed: 60 min are not enough to take the most out of each question. If you're concerned about training yourself to finish every block on time, I understand you and assure you that you can get the proper training by doing about 600 questions (15 blocks) with the timer on. Therefore, given the 2400 questions (60 blocks) that UW offers, I suggest you that, in order to follow the study dynamics here explained, you go for the first 75% of UW (1800 questions, 45 blocks) untimed, and the last 25% (600 questions 15 blocks) timed. More of this will be explained in the "Study Plan" section.
 - Mixed: two reasons: (1) it's the way your actual test will be given and (2) it's also what "interleaving" in retrieval practice means.
- Only one block a day

If you follow what I'm about to tell you, you'll see that it'll take you at least 6 to 8 hours to properly answer and review one block (40 questions). You're allowed to do more than one block a day only when you're about to finish UWorld (you have done more than 70% of the questions), since you'll need to get the endurance for the actual test.

ANSWERING THE QUESTIONS

Most of the people, when *answering* Qbanks, focus on two things: (1) getting the right answer/highest score per block and (2) finishing on time (less than 60 min per block). This is understandable, since the academically nourishing part of the Qbanks is seen only in the *review* part and not in the answering one. Nonetheless, I'm telling you now that *the answering part is as much academically rich as the reviewing part*. How come? By enhancing the mental process that you go through when answering a question you get to take the most out of each one.

Every time you start reading a question, you will do so by dividing the question in 3 parts: Vignette/Stem, Question, Choices. As you follow the next instructions, you should use the "note" tool that you'll find in all the Qbanks. Here you can write notes on every question while you are answering the block. Write your doubts, why you picked that choice instead of the other, why you are not sure about your pick, etc. Afterwards, when reviewing the questions, this notes will guide you through your weak points and will remind you what you thought when answering each question.

Step by step this is how it goes:

- (1) "Imagination is more important than knowledge" used to say Mr. Einstein!

Most of the questions will start with the age, sex and race of the patient. So you'd better start by giving to the patient a real face and body. Pick a real face and body for the white elderly male patient, may be your father. For the childbearing age African American woman you might pick your ex-girlfriend (I know you haven't forgotten her). Choose people that you can easily remember, thereby, after reading the first line age, sex and race, you automatically imagine the picture of that real person and from that first line onward you just remember the face and body of that person instead of repeating yourself the actual age, sex and race of the patient.

- (2) Control the question and not the other way around

As you continue reading the vignette, you start thinking about possible differential diagnosis. Period after period, you will stop and quickly summarize what you have read, and by doing so you'll take the positive symptoms/signs or relevant information and start thinking about possible diagnosis. Then, right before getting to the Question, you stop and try to anticipate or guess the question. By doing so, you force yourself to mentally organize the information you were given and to recall concepts that could be asked according to your academic suspicion. You'll see that when you have no idea of what is the diagnosis or the pathway given in the vignette, you go to the question or the choices just to orientate yourself through the case. This is the easy way! And if you read the first part of this paper, you already know why easy is not good for you.

(3) Better earned than given

Then, you read the question and without looking at the choices you try to answer it. This part is crucial. I can't stress this enough. This is all about "generation" in retrieval practice. After thinking about the possible answer, you look at the choices and try to find the one you had in mind.

(4) Make every choice correct!

Next, you rule out each of the other choices by mentally explaining yourself why each of them is incorrect and by explaining to yourself what would you have to change in the vignette (patient characteristics, labs results) in order to make every choice correct.

(5) Pick and move on

Finally, if you are not sure about the choice you have picked, mark the question. Then, and only then, you pass to the next question. Please do not stay on the question after having picked your choice! Pick and move on! Now, I think you understand why I talked about untimed blocks, nonetheless, as you practice, you'll gain speed and fluency, to the point where you'll follow this steps automatically and finish the block on time.

REVIEWING QUESTIONS

Here you'll understand why I say you should do (i.e. answer and review) only one block per day. Think of the explanation of each question as a lecture about certain topic or a real patient. First of all, if the topic is unknown or not completely understood, you need to focus more on that lecture/patient (i.e. spend more time reviewing the wrong questions). Then, if you know which is the specific topic, you'd better study beforehand in order to take the most out of that lecture/patient. And finally, by learning about the topic explained in that lecture/patient, you force yourself to study and consequently to learn about others related topics (i.e. those given by the multiple choices/wrong choices). You can perfectly understand a topic from the books, but you know that if you see a real patient (or get a question) with the symptoms and signs about that topic, you'll understand and memorize it better.

What does this mean in real practice? You'll start your review with the wrong and marked questions and you'll spend enough time with each one. I must say, however, that you have to review each of the correct questions from head to toe, even if you think that you perfectly know the topic. You have no idea about what you don't know/what you are missing until UW shows it to you. Therefore, review each question as thoroughly as if it was your single opportunity to do so, as though you knew it will show up in your actual test, because it will!

Step by step this is how it goes:

(1) Why did you get it wrong?

Read the vignette once again (trying to answer the question again) and try to see whether or not it was possible for you to have picked the right choice. Perhaps you misinterpreted

or misread some word, or just missed something. Here you find out how much you know, and mostly, what you don't know about the topic and why you got that question wrong.

(2) Good students always study before the lecture!

Open your Review Book (First Aid or Master the Boards) and read the pages and your notes about the topic of the question. Then, with the information found in your book and your notes, you see whether or not you are able to answer the question correctly. This allows you to do a rapid review about the topic thereby getting ready/competent enough for the explanation of the question given by UW (which you haven't yet seen) in order to better understand it and associate it with your prior knowledge.

(3) The lecture

Now, and only now, you go through the explanation of the question. Read thoroughly and complete your notes or Review Book with the missing information that you find in UW. Spoiling alert! Anything that you find in UW could (and probably will) show up in your actual test, so you'd better learn/understand/memorize every single word. Fortunately, I cannot say the same about the other Qbanks.

(4) Make every choice correct (once again)!

As I said before, studying the case by focusing on the correct answer is not enough! If you really want to improve, you need to study a broader material spectrum than just the one given by each question. After having understood why the correct choice was the right one, you need to understand why the wrong ones are incorrect! I know it sounds obvious, however, this is the part that most of the people don't understand nor do. It's not only about reading the two-three lines explanation given by UW. It's about reading the whole topic of each choice from your Review Book and notes. It's about thinking what is the single word/patient characteristic/symptom/sign/lab result that you would have to change in order to make every choice correct. This exercise helps you find out what the most important single fact about each topic is and also to study many topics within a single question.

STUDY PLAN

All I want for you is that you *get the highest score you can get*, not the one you want or need. I know everybody wants a 260/270, however, as you'll see, it's not about just studying as much as you can. If this was the case, all of those who study more than one or even two years would get a 270, and you'll see that this is not the case! As a matter of fact, although this is only an short individual experience, all of the >250/260 on Step 1/2 that I've met during these 18 months I've been going to Kaplan center (Chicago) have studied for no more than 9 and 5 months for the Step 1 and 2, respectively.

How can you reach *the highest score you can get*? By setting and following *the best study plan you can think of* with the date of your actual test right after the end your plan. Please do not say "I will study indefinitely and whenever I get an NBME/Self-Assessment above the score I want to get, I will set a date and consequently take the test". This is a naïve, mediocre and dangerous thinking. Why naïve and mediocre? Because the score you want might not be the highest score you can get! What is it then? You don't know yet! When will you know it? When you completely finish your *best study plan*! Why dangerous? Because even if your NBME/Self-Assessments say that you're above the score you want, you could happen to get a low performance during the actual test and score 10 to 20 points below your range! If you are well prepared, this wouldn't mean a low score since this would be your highest score ever possible. But if you're under-prepared, this would definitely do.

Please see the logic and importance on each of the following steps and realize why it might be *the best study plan you can think of*.

STEP 1

Kaplan books (2-3 months)

Please be aware that this is the only opportunity to review *thoroughly* every single topic! Please do not take it lightly saying to yourself that "this is just a quick read in order to familiarize myself with the material and not to completely understand or memorize it". Again, *if you do it properly, once is enough*. The idea is that you never have to come back to these books once you finish them. If you do so, it means that you didn't read this part. I suggest you to do this by dividing the books in two groups and subsequently interleaving them. One group is for those that are basically a list of things that you must memorize: Anatomy, Microbiology, Pharmacology and Pathology. The other is for those that are full of processes and dynamic concepts: Biochemistry, Physiology, Genetics and Immunology. By interleaving I mean that you study them simultaneously, taking two books at a time, one from each group and then going through them at the same time. Say, you start with the couple Anatomy and Physiology. You start reading the first chapter of Anatomy and once you finish that chapter, you start the first chapter

of Physiology and once you finish that chapter, you continue with the second chapter of Anatomy, so on and so forth.

Now, the secret! During the days you're studying a certain chapter of Anatomy, you are taking around one hour of your day for reviewing the topics that you have already studied about Physiology. Then, during the days you're studying a certain chapter of Physiology, you are taking around one hour of your day for reviewing the topics that you have already studied about Anatomy, back and forth. At the end of each week, you can do a big review of what you have studied that week and the past weeks. Once you finished some books, you'll have to take some time to review them in order not to forget what you have learned. Say, you take Saturdays for reviewing those books, so from Monday through Friday you focus on new books only, and on Saturday only on old (already reviewed) books. How will you do this review? By using retrieval practice! I myself used the journal for this, however, I believe that Kaplan Qbank is an excellent resource for this purpose. You can start doing ten questions a day about the books you have already read. It won't (and it shouldn't) take you more than one hour to answer and review 10 questions.

First Aid + Qbanks other than UWorld (1-2 months)

Once you have finished Kaplan books, it's time to get started with the heavy stuff! First Aid (FA) is the single most important book for Step 1, since every word you find there will potentially show up on your actual test. Before doing any Qbank you need to read/review FA at least once. But again, passive reading as a review method is not what I want you to do. That's why I suggest you to start doing questions from this point onward. Use a Qbank in order to review FA from head to toe. I suggest USMLE-RX Qbank for this purpose. Why? Because it's written by the same guys who wrote FA, so both the questions and their explanations are based on the content of FA. This means you'll always be reading high yield stuff! That's why I cannot say the same about Becker Qbank and Kaplan Qbank.

How should you do this? Split your time in (passive) reading and (active) questions. Half of your day you read FA and the other half you go for twenty questions and review them using FA as a Review Book (of course).

For how long? Until you are ready for UW. Normally it takes around 2 months.

When will I be ready? After one or two months doing questions and FA, you have to find out if you are ready to start UW by taking an Assessment, which is normally an NBME CBSSA (National Boards of Medical Examiners, Comprehensive Basic Science Self-Assessment), which will be your first one! Do it untimed please! At this point you haven't practiced (and you need not so) the time for your blocks. If you get >215 then I consider you are ready to start UW.

Why >215? People say that by doing UW properly, you should expect to raise your score up to ten points per month of study (but no more) during the three or four months that it takes to do the 2400 questions of UW. Thus, if you get 215 on your first NBME (right before starting UW), you can expect to safely reach a 240 at the end of UW.

What if you get <215? You need to study FA better. You don't need to read others books or articles. FA is enough! I suggest you to do one or two more months of questions, whether you use USMLE-RX Qbank or Becker Qbank or Kaplan Qbank it's up to you. The idea is that you spend more time trying to understand and memorize FA by doing questions and reviewing them the way I told you. Then, you take another NBME and find out if you are ready to start UW.

What if I get a 205 on my first NBME and I start UW right away? You wouldn't be taking the most out of UW. In order to follow the academic mental process I explained in the "How to use a Qbank" section you must have a baseline knowledge that allows you to think of differential diagnosis by recalling several concepts. If you're not ready, you would be reading some questions while saying "what the hell are they talking about?" and then you would randomly pick any choice only by guessing. That's exactly what you shouldn't do. That would be a wasted question. And of course, after seeing the explanation you would say "wow! What a stupid pick, it was obvious that I had to pick the other choice, now everything is so clear!" Of course it's clear! That's why they call it "explanation". But that is not your goal. You need to read a question and be able to recognize the diagnosis/topic and to suspect which might be the correct choice, what are the wrong ones and, most of the time, to find yourself between only two possible answers.

First Aid + UWorld (3-4 months)

First of all, you must realize that this two resources are by far the most valuable ones for Step 1, which means that the time you'll spend using them will be the most valuable and influential for your score. All you need to know in order to get a 270 is in FA and UW. Therefore, at this point your life should have a big change. You're now an Olympic athlete. Focus your 100% on this last months. Remember this: you need to study as much as you need to rest. Nothing else! For your body; eat and sleep (and, if possible, exercise) properly every single day. For your mind; rest properly on the weekends (or at least on Sundays). Never: eat less or too much, sleep less or too much, study 7 or more days in a row. You need 1 day off every week! I can't stress this enough! Off means zero hours of study during the 24 hours of that day. Trust me in this one!

Now back at study matters. First, you need to go to "How to use a Qbank" section and read it again. I'll wait for you ... Done? Alright, let's carry on.

How to use UW for Step 1:

- Rules: First, answer your block at the beginning of your day so you can review all the questions during the rest of the day and you never have to leave questions to review for the next day. Second, review every single question with FA. No matter how easy the

question was for you, go through all the steps described in the “How to use a Qbank” section, which includes the extensive use of FA as your only Review Book.

- First 70% of UW: One untimed mixed block of 40 unused questions per day. No more, no less. Spend the whole day reviewing it! If you finish before your day ends, it means you're reviewing it too superficially. If one day isn't long enough, you're reviewing it too thoroughly.
- 70-85% of UW: One timed mixed block of 40 unused questions per day. It's time to set the timer on. More about the timer will be explained in the “Final Weeks” section, but for now focus on finishing the blocks under 60 minutes, just as the timer allows to.
- 85-100% of UW: One timed mixed block of 40 unused questions plus one timed mixed block of 40 wrong or marked (used) questions per day. That is two blocks a day, which you'll answer one right after the other without pause (i.e. 80 questions in a row). The review of the wrong or marked questions block should be quick, since you should focus mostly on the used (repeated) questions (i.e. review thoroughly the wrong questions and superficially the right ones). The review of the unused questions block should be as always (i.e. every single question thoroughly). This will allow you to review both blocks in a day. Why don't you do all the unused questions first and then you go for the used questions? Because you don't want to get used to repeated questions, especially right before your actual test, since, as you'll notice, answering used questions requires less mental work compared to unused questions. It feels easier, lighter. You'll finish answering those blocks in much less time. So, in order to redo all the wrong and marked questions, we start at this point and by mixing them with unused questions we avoid losing rhythm or skills required for a block of unknown questions.
- After 100% of UW: Two or three timed mixed blocks of 40 wrong and marked (used) questions until you have done all the wrong and marked ones. Once you're done with that, your plan is completed. You're ready and it's time to go to the “Final Weeks” section.
If you do UW this way, which I consider is the best, it shouldn't take you less than 3 months.

Finally, I know I haven't talked about doing UW twice or three times, neither have I done so about when to take NBMEs and Self Assessments, and to decide whether or not you're ready for your Step 1. But please don't worry, this will be clear in the next section.

Assessments: NBMEs CBSSA and UW Self Assessments (UWSA)

- The NBMEs are numbered progressively as they are released. The #13 is the oldest one, the #19 is the newest one. The newer the better.
- First Assessment: Which one? NBME 15. When? Right before starting UW. How? Untimed. What will it tell me? Whether or not I'm ready to start UW.
- Second Assessment: Which one? NBME 16. When? At 70% of UW. How? Untimed. What will it tell me? How much have I learnt by doing UW and how much more could I improve. You start seeing the big picture of your progress and the real scores you can aspire to get. It doesn't change your conduct. It gives you important information but you shouldn't take any decision based on this score. Remember that it doesn't matter whether you get a 260 at this point, you still need to finish your whole plan in order to make sure you're at your finest, at your 100%.
- Third and Fourth Assessment: Which ones? NBME 18 or 19 and UWSA-1. When? After you have done 100% of UW. How? Timed. What will they tell me? Whether I have reached my goal (target score), and if not, how far I am from it. Why two Assessments? Because this Assessments will decide whether or not you go and take Step 1 within the next weeks. Thus, in order to make sure the assessment score is reliable, you need to do two instead of one, since by increasing the sample you increase the power of the study. You will take both within the same week or so, and then you'll calculate the average of both. That average score (+ or – 10 points) is most likely the score you'll get if you take Step 1 within the next two or three weeks. Bear in mind that the scoring system of UWSA-1 will give you a score around 10 points higher than the NBMEs. It's not that UWSA-1 is easier than NBME 18 or 19. It's just the scoring system. So, you'll subtract 10 points from your UWSA-1 and that will be your real assessment score which you will use to calculate your average score (e.g. NBME 18 score: 240. UWSA-1 score: 254. Average: $240 + (254 - 10) / 2 = 242!$

Then, at this point, what if I'm at or above my target score? Go to the "Final Weeks" section. And what if I'm below my target score? That's coming up next.

PLAN B: I finished UW and I'm still below my target score.

You completed your Plan A and still you're not where you want to be. If you gave all of your effort and were disciplined enough during all the steps throughout this plan, you're probably closer than ever to *the highest score you can get*, even if that means a score below your expectations. However, you can't give up! You must try to get closer to that target score, you

must give yourself a second chance, you must strive, and you must struggle and pursue that dream even if it seems impossible!

What is Plan B? It is taking more time of your day for reviewing your weaknesses and the rest of it for doing UW once again. Say, you will spend around three hours a day improving specific topics you consider your weaknesses and the rest of the day you will be doing UW. You can do one or two blocks a day. It depends on what score are you getting in those used (repeated questions). If you're getting 85% or above on each block of used questions (34 right questions out of 40) you probably don't need to spend so much time reviewing the right questions, so you can do two blocks a day and focus your review time mostly on the wrong and marked questions. That will allow you to review two blocks per day and to do again the 2400 questions in no more than 2 months. Nonetheless, if you're getting below 80% on each block, you need to review thoroughly each block, just as you did the first time (with new-unused question). This means you should answer and review only one block a day at least during the first 50% of this second round of UW. After that 50% you should be able to jump up to two blocks a day. In total, it should take you around 3 months.

Then what? Only after having finished the totality of the 2400 UW questions for the second time, you will take another NBME (18 or 19, since you should have done only one of those at the end of your first round of UW) and the score you get here will be *the highest score you can get*. After that NBME, you will do what you'll find in the "Final Weeks" section.

STEP 2 CK

Before you start reading this section, if you haven't read the "Step 1" section, please do it now. There you will find important information that is equally useful for this section.

The main difference for the Step 2 CK preparation is that there isn't a perfect Review Book as there's for Step 1. The "best" books are Master the Boards Step 2 CK (MTB2) and First Aid Step 2 CK (FA2); both are equally incomplete and inaccurate, yet both are the best options for you. Take a look at both of them before starting your study plan and pick the one you like better.

Having said that, it's reasonably obvious that UW gets now even more relevance for this test. However, you still need to go through your Review Book, since you need the foundations for a proper understanding of the dynamic and the content of the test. In other words: do not start doing UW if you haven't gone through your Review Book for at least one month.

Finally, I would like to share my experience about how I set my Step 2 CK study plan up. Since the academic resources for this test are not as plainly defined as they are for Step 1, I surveyed 15 IMGs that had gotten >250 in Step 2 CK about their preparation and what they consider most important. The results were pretty consistent in the sense that all of them recommended doing UW thoroughly and having either MTB2 or FA2 as a Review Book, and none of the four people who had used Kaplan Books, Step up to Medicine Book, Kaplan Qbank or DIT videos, recommended them at all. Also, all of them said the most reliable assessment was UWorld Self-Assessment 1. They were divided regarding the use of NBMEs, with some of them supporting the two most recent NBMEs and others none. Now, based on that information and my personal experience, the following is what I consider the best study plan for Step 2 CK.

Pre-UWorld Review

This section is split in two according to how much time has passed since you took your Step 1 and what score did you get.

- Short Time (no more than three months) and above-average Step 1 score (>228).
These two things mean that you have strong and recent foundations. Therefore, you don't need to spend much time studying your Review Book before starting UW. Nevertheless, make sure you spend at least one month during this section. Use the study techniques I previously explained in the "Step 1" section, especially those for the "Kaplan books" section. Only when you have reviewed 100% of the content of your Review Book, you can start UW. Not before. Do not waste those precious questions.
- Long time (more than six months) and/or below-average Step 1 score (<228)
Either of these two things mean that, before starting UW, you need extra time for building strong foundations. How are you going to do that? By following the same dynamic one follows for the Step 1 initial preparation.

You're going to spend between two and three months reviewing the basic stuff plus your Review Book. Whether you use Kaplan books, Step up to medicine, Kaplan Qbank or DIT videos, it doesn't matter. It's all about getting the general and basic knowledge for each subject. It's about reviewing slowly and patiently every topic, focusing on the understanding of the basic and most important concepts of each disease. As per my opinion, I would recommend Kaplan books for this purpose, since they're large enough and up to date to cover the material you need at this point, and make sure you have studied 100% of the content of your Review Book before going for UW. Once again, use the study techniques I previously explained in the "Step 1" section, especially those for the "Kaplan books" section.

Unlike the Step 1 preparation, you don't have reliable assessments for finding out whether you're ready to start UW. The only one you've got is the UW Self-Assessment 1 which you want to save for the end of your study plan to see whether or not you're ready to take your test. Therefore, you must not get stuck in the "Pre UWorld Review" period. You should follow it properly, but once done, you must go for UW.

UWorld + Review Book (MTB2 or FA2)

Part of this section is exactly the same as the "First Aid + UWorld" section for Step 1. However, there're several changes that are crucial for your Step 2 CK. Read carefully.

First of all, you must realize that this resource is by far the most valuable one for Step 2 CK, which means that the time you'll spend using it will be the most valuable and influential for your score. All you need to know in order to get a 270 is in UW. Therefore, at this point, your life should have a big change. You're now an Olympic athlete. Focus your 100% on this last months. Remember this: you need to study as much as you need to rest. Nothing else! For your body; eat and sleep (and, if possible, exercise) properly every single day. For your mind; rest properly on the weekends (or at least on Sunday). Never: eat less or too much, sleep less or too much, study 7 or more days in a row. You do need 1 day off every week! I can't stress this enough! Off means zero hours of study during the 24 hours of that day. Believe me in this one!

Now back at study matters. First, you need to go to "How to use a Qbank" section and read it again. I'll wait for you ... Done? Alright, let's carry on.

How to use UW for Step 2 CK:

- Rules: First, answer the questions at the beginning of your day, so you can review all of them during the rest of the day and you never have to leave questions to review for the next day. Second, review every single question with your Review Book (MTB2 or FA2). No matter how easy the question was for you, go through all the steps described in the "How to use a Qbank" section, which includes the extensive use of your Review Book.

Third, you will copy everything you find in UW that is lacking in your Review Book, especially the tables and flowcharts.

- Strategic tip: For each question of UW and your actual Step 2 CK, when you start reading it you should always highlight the patient's primary information (sex, race, and age) and his/her main complain. This information is usually given in the first two lines of the vignette. Next, keep reading the stem and right before reading the actual question, stop and go back and read again the highlighted patient's primary information and his/her main complain. Then, and only then, you read the question and try to answer it. Why? Because the Step 2 CK questions are very long and extremely confusing. So many things pass through your mind while you're reading the whole vignette and by the time you get to the question, your differential diagnoses and potential answers are supported mostly by what you read during the last half of the case stem. And, as you'll see, the distractors you encounter as you read the case will make you focus on some specific points that not necessarily will take you to the right answer. Instead, the distractors will make you forget about that first line of the case, which happens to be (most of the times) the patient's primary information and his/her main complain.
- First 60% of UW: One untimed mixed block of 40 unused questions per day. No more, no less. Spend the whole day reviewing it! If you finish before your day ends, it means you're reviewing it too superficially. If one day isn't long enough, you're reviewing it too thoroughly.
- 60-85% of UW: One timed mixed block of 40 unused questions per day. It's time to set the timer on. More about the timer will be explained in the "Final Weeks" section, but for now focus on finishing the blocks under 60 minutes, just as the timer allows to.
- 85-100% of UW: One timed mixed block of 40 unused questions plus one timed mixed block of 40 wrong or marked (used) questions per day. That is two blocks a day, which you'll answer one right after the other without pause (i.e. 80 questions in a row). The review of the block of used questions should be less extensive by reviewing thoroughly the wrong questions and superficially the right ones. The review of the block of unused questions should be as always (i.e. every single (wrong and right) question thoroughly). This will allow you to review both blocks in a day.

You would be wondering why you don't do all the unused questions first and then you go for the used questions. Because you don't want to get used to repeated questions, especially right before your actual test, since, as you'll notice, answering used questions requires less mental work compared to unused questions. It feels easier, lighter. You'll finish answering those blocks in much less time. Therefore, in order to redo all the wrong and marked questions, we start at this point and by mixing them with unused questions

we avoid losing rhythm or skills required for a block of unknown questions (i.e. your actual test).

- After 100% of UW: Two or three timed mixed blocks of 40 wrong and marked (used) questions until you have done all the wrong and marked ones. Once you're done with that, your plan is completed. You're ready and it's time to go to the "Final Weeks" section.

If you do UW this way, which I consider is the best, it shouldn't take you less than 3 months.

Assessments: NBMEs and UW Self Assessments (UWSA)

There's not much relevant information to mention here given the fact that the only reliable assessment is the UWSA-1. The only advice you should follow strictly is this one: take the UWSA-1 only when you have completed 100% of UW. Not before. The other assessments are optional and not very important for your study plan or test date. Take one or two as you go through UW. Say, NBME 6 or 7 at 50% of UW, and UWSA-2 at 70% of UW. However, the date of your test should be placed three or four weeks after completing 100% of UW according to your study plan. And once you take the UWSA-1 you either confirm your study plan and go ahead for that date, or move it forward if you haven't reached your target score.

Then, at this point, what if I'm at or above my target score? Go to the "Final Weeks" section. And what if I'm below my target score? That's coming next.

PLAN B: "I finished UW and I'm still below my target score"

You completed your Plan A and still you're not where you want to be. If you gave all of your effort and were disciplined enough during all the steps throughout this plan, you're probably closer than ever to *the highest score you can get*, even if that means a score below your expectations. However, you can't give up! You must try to get closer to that target score, you must give yourself a second chance, you must strive, and you must struggle and pursue that dream even if it seems impossible!

What is Plan B? It is taking more time of your day for reviewing your weaknesses and the rest of it for doing UW once again. Say, you will spend around three hours a day improving specific topics you consider your weaknesses and the rest of the day you will be doing UW. You can do one or two blocks a day. It depends on what score are you getting in those used (repeated questions). If you're getting 85% or above on each block of used questions (34 right questions out of 40) you probably don't need to spend so much time reviewing the right questions, so you can do two blocks a day and focus your review time mostly on the wrong and marked questions. That will allow you to review two blocks per day and to do again the 2400 questions in no more than 2 months. Nonetheless, if you're getting below 80% on each block, you need to review thoroughly each block, just as you did the first time (with new-unused question). This means you should answer and review only one block a day at least during the first 50% of this second round

of UW. After that 50% you should be able to jump up to two blocks a day. In total, it should take you around 3 months.

Then what? Only after having finished the totality of the 2400 UW questions for the second time, you will take another assessment (NBME 6 or 7, or UWSA-2) and the score you get will be *the highest score you can get*. After that assessment, you will do what is explained in the “Final Weeks” section.

FINAL WEEKS

KNOWLEDGE

Around 70% of your test will be about High Yield (HY) topics. If you want to get an average score you must, at least, master that 70%. If you want to get an above-average score you must master that 70% HY *plus* the remaining 30% Low Yield (LY) content. I know everybody wants an above-average score, but my point is that one thing must precede the other.

Taking as starting point the regular schedule of preparation for an average IMG, around 3 or 4 weeks before your test day (TD) you must have read, studied, reviewed and memorized most of the content found in your review material as it habitually is FA, MTB and UW. Nevertheless, and given the circumstances at this point of your preparation, your study strategy should be changed and adapted in order to optimize one of the most important skills for your actual TD; the easy and rapid retrieval to all the content you have been storing during these last months. I know you probably master most of the material, you've got it on your solid long-term memory slot. Nonetheless, there's a significant amount of that solid knowledge that right now is neither easy nor rapid accessible for you. Perhaps you haven't reviewed it lately, say, the last question you get about it was 4 or 5 weeks ago, or perhaps you mastered it and memorized it so well that you haven't taken a look at that page recently, even if you got some questions about it lately. Whether you like it or not, it has been fading away, and, unless you do something, it will have considerably gone farther by the time of your TD.

The take away: It is time to leave aside the "studying-memorizing new material" strategy and replace it by the "re-view re-fresh all, old and new, HY material". It is not time to get new knowledge, especially if it is not HY material. It is time to review all the HY material, to identify your weaknesses and to focus only on that material. Make sure you read carefully 100% of your material (Review Book and UW notes) and write down every single HY topic you find difficult to recall, since those topics are the only ones you will review once again before your TD. It is also time for memorizing all those formulas and long lists of unrelated facts. It is time for cramming. Doing it properly, and spending around 8 hours per day, it shouldn't take you less than 5 days.

CONDITIONING

"Train as if you were competing and you will compete like you trained"

I know it is impossible to do 7-8 blocks a day during all your preparation, but it doesn't mean you can't get an optimal conditioning that allows you to end most of the blocks around 50-55 minutes and maintain your performance throughout the whole day, especially in the last 2-3 blocks. What I am telling you is that it is totally possible not to give points away due to time, post-prandial somnolence and fatigue issues.

The rules you set for your TD regarding the timing, your breaks and your meals must be decided based on your personal experience and not on what your friends or I say. You must go on simulation for some days in order to try different combinations, particularly breaks and meals, and to be able to compare and to pick the one that suits you better.

Timing

Please do not train yourself allowing you to use 60 minutes per block. During the real test you will be scared and you will face different types of questions, so don't expect to be as fast as you were when sitting in your comfortable usual study place without any comparable amount of pressure and feelings. Please do train yourself allowing you to use no more than 50-52 minutes per block.

Set about two time checkpoints that allow you to evaluate your pace and take action before it's too late. It's not about going as fast as possible. It is about going at the same pace you practiced. The checkpoints will allow you not to lose focus by looking at the time when feeling that you're spending too much time in a question or when too nervous or scared. If you are three or more minutes ahead of your checkpoint, you're going too fast. Stop and breathe deep and slowly for one minute, tell yourself "I'm doing great, I'm killing it, just slow it down a little bit". If you're behind, take one deep breath, fill yourself with confidence, and carry on! That's the point in doing it. You correct yourself before it turns into lost points.

Breaks

Please do not do two or three blocks without stopping in between. Please do take at least three minutes between every block, even if you don't leave the room. For those small breaks in front of the computer: Breathe deep and slowly, fill yourself with confidence, believe in what you're doing even if the block you just did was tough. You still have some revenge ahead.

Please do not rush the end of your test by not taking all of your remaining break time. The one before the last block. Even if you feel super energized and confident. Please do take all of your remaining break time. Even if it's 30 or 40 minutes. Trust me in this one, that time is harmless. Fatigue is not. You do need that time!

Food

Please do not eat like you eat every day in your life. You do not take the step 1 or Step 2 CK every day! Please do eat and drink as less as possible. Preferably fast digesting carbs. A little of hunger won't do any harm, but a heavy postprandial somnolence will definitively decrease your performance. I can't stress this enough! Once you have finished, you will be free to eat 260 Chipotle bowls if you want.

SIMULATION

Please go on at least three simulations. Preferably a few days before TD.

Simulation means

- Go to bed the night before and wake up at exactly the same time you will for your TD.
- Get exactly the same breakfast you will for your TD.
- Wear exactly the same clothes you will for your TD.
- Do not take more than 60 minutes for breaks. In the actual test, the remaining time you have left in every block, once finished, will be added to your break time, but remember that in the actual test it will probably take you longer to answer every block. So do not trespass those 60 min. Do not simulate based on assumptions.
- Every day try different combinations of breaks and meals.
- How do you know what really suits you better? The feeling after each block might tell you something, but it's 100% subjective. The scores and the remaining time after each block, however, can give you objective information. I myself find the remaining time after each block as the most reliable index of fatigue. Take into account both sources and make your choice.
- The strategy you pick is the one you will strictly follow in your TD. Please do not change it in your TD, since stress, anxiety and fear don't match good conclusions. This is exactly what you prepare for, to perform as your best, not as your feelings when nervous and scared.

FINAL TWO WEEKS PLAN

- No more NBMEs. No more Self assessments.
- From the Day 15 on you will go to bed and wake up at exactly the same time you will for your TD. During the last week, try to eat as much similar as possible.
- Day 15 through Day 9: 7 days total.
 - Read all your review material (FA, MTB, UW tables, UW notes), focusing mostly on HY topics.
 - Identify your weaknesses (only on HY material) and write them down in a piece of paper.
 - Once again. Doing it properly, and spending around 8 hours per day, it shouldn't take you less than 5 days.
 - Just to keep on track, your rhythm, do two blocks every day and review superficially only the wrong questions. It shouldn't take you more than 2 hours. At this point, you must have done all UW, including the wrong and the marked ones.

- Day 8: Rest! Do not touch any book or notes. Keep your mind and body busy with active and enjoyable activities. Do not just stay in bed or at home chilling.
- Day 7 through Day 5: 3 days total
 - Simulation: 7 and 8 timed blocks of 40 questions for Step 1 and Step 2 CK, respectively. Three days in a row, so you can easily compare and decide what strategy suits you better. Of course you will use UW and the 120 free USMLE.org questions available for both Step 1 and Step 2 CK.
 - Whether you review the answers or not, it's not relevant. You will be so tired after each simulation that whatever you read, it will not stick.
- Day 4 through Day 2: 3 days total
 - Review and do everything you can in order to memorize the HY weaknesses you wrote down on that piece of paper when you reviewed your guide material.
 - Here you could find very useful fast memorization devices such as “memory palaces” or “person-object-action”. Take a look at them on Google.
 - Just to keep on track, your rhythm, do two blocks every day and review superficially only the wrong questions. It shouldn't take you more than 2 hours.
- Day 1: Rest!! Do not touch any book during those 24 hours. Keep your mind and body busy with active and enjoyable activities. Do not just stay in bed or at home chilling. Please trust me in this one, do not study on Day 1. Not a single minute. You need this rest time!! I really can't stress this enough!
- **DAY 0: Wake up and destroy the USMLE!! Stick to the plan and you will succeed!!**

Now you must share this. Make Socrates proud!

Thank you for having given me the opportunity to help you!

Sincerely,
Gabriel