



MEDICAL | For doctors, by doctors

# USMLE Exams and Post Graduate Training in US

Inder Pahal, MD, MBA  
Global Director University Partnership

# Kaplan Fast Facts

**1M+** Students Worldwide

**19K+** Employees

**30+** Countries

**2600+** Business Clients

**1000+** Educational Partners

**75+** Years Transforming Students' Lives

**Kaplan is one of the world's largest and most diverse education providers.**



# US Medical Licensing Process



# Steps to Become Physician in US

Medical College

Pass USMLE Exams

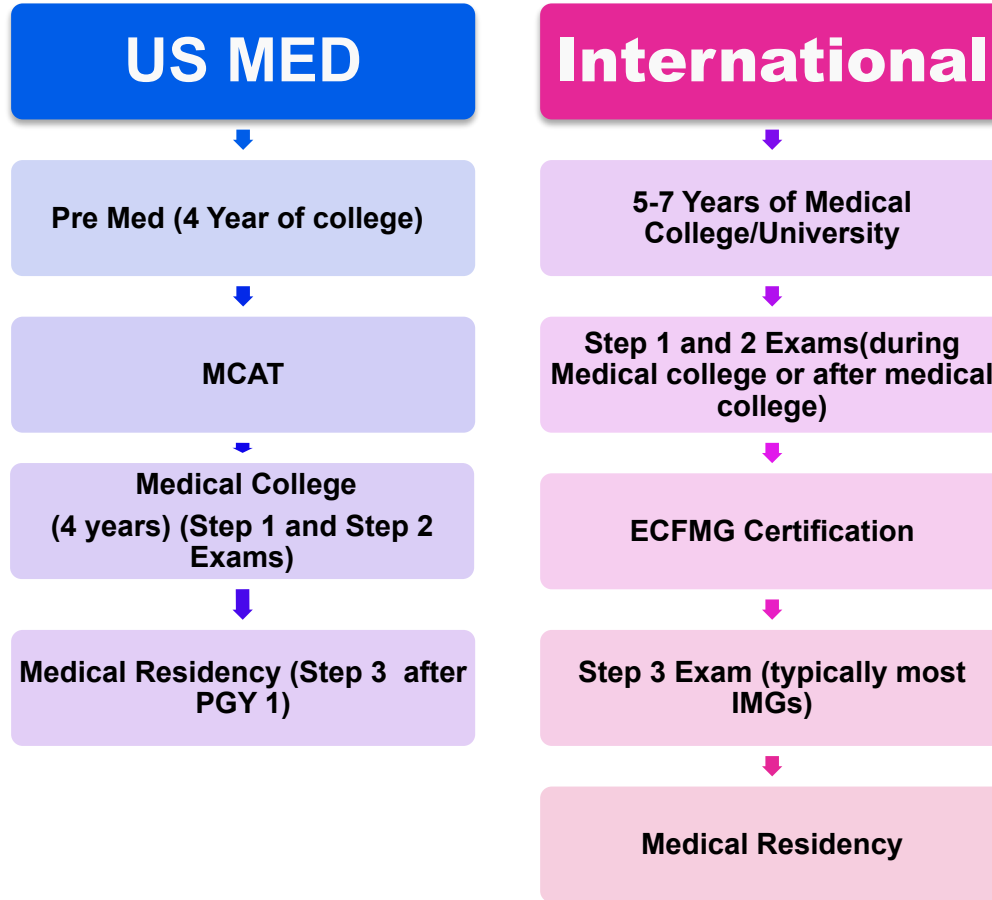
Get ECFMG Certified

Complete Residency Training

Practice Medicine or Join Fellowship



# US vs International System



# USMLE Exams



**In the middle of every difficulty lies opportunity.  
— Albert Einstein**

# What is USMLE?

The USMLE **assesses** a **physician's** ability to apply **knowledge, concepts, and principles**, and to demonstrate fundamental **patient-centered skills**, that are **important in health and disease** and that **constitute the basis** of safe and effective patient care.

Exams are recognized in many countries, such as Qatar, UAE, Israel, Lebanon, New Zealand.



# USMLE Exams

**3 Step Examination for medical licensure in the US, Sponsored by NBME and FSMB**

- USMLE Step 1 or Basic Science Exam
- USMLE Step 2
  - Clinical Knowledge
  - Clinical Skills
- USMLE Step 3 (Patient Management Exam)





# Step 1 (Basic Science Exam)

**Step 1 assesses whether you understand and can apply important concepts of the basic science to the practice of medicine**

- Covers content related to the Basic Science defined disciplines.
- A 1 day exam on computer at Prometric Centers
- Divided into seven 60-minute blocks and administered in one 8-hour testing session.
- Approx 40 questions per block. The total number of items will not exceed 280.
- Question format : Single Best Answer, Sequential Item Sets, Multimedia items, maximum of 5
- Passing score: 194 (starting Jan 2018)



# Step 2 (Clinical Science Exam)

**Step 2 assesses whether you understand and can apply important concepts of the clinical science to the practice of medicine**

- Clinical Knowledge Exam
- A 1 day exam on computer at Prometric Centers
- Approx 318 items, 8 blocks of ~ 40 items
- One hour of testing time per block
- Nearly 1 hour of break time if you skip tutorial
- Passing score: 209
- Results back in 4-5 weeks



# Step 2 (Clinical Skills Exam)

- One day exam in a simulated clinic
- 12 SP encounters, 15-minutes interactions and 10 minutes for patient note writing/recording
- Doctors graded in 3 areas: CIS, ICE & SEP
- The exam is evaluated by standardized patients (SP) and medical evaluators
- You must pass all sections for taking the exam with a satisfactory grade
- Exam can only be taken in: Philadelphia, Atlanta, Chicago, Los Angeles and Houston



# Question types

Single One  
Best Answer

- Traditional MCQ
- 4-12 or more response options
- Graphic, pictures etc
- Pick the best choice

Sequential  
Item Sets

- Vignette with 2-3 consecutive questions, testing a different point.
- must be answered in sequential order
- One best answer, can't change response

Multimedia

- Audio/Video clip
- Physical findings (Heart sounds, reflexes)
- Around 5-6 questions (varies)



What is the primary cause of anemia in chronic kidney disease?

- A. Acute blood loss
- B. Chronic lymphocytic leukemia
- C. Erythrocyte enzyme deficiency
- D. Erythropoietin deficiency
- E. Immuno-hemolysis



A 32-year-old woman with type 1 diabetes mellitus has had progressive renal failure over the past 2 years. She has not yet started dialysis. Examination shows no abnormalities. Her hemoglobin concentration is 9 g/dL, hematocrit is 28%, and mean corpuscular volume is 94  $\mu\text{m}^3$ . A blood smear shows normochromic, normocytic cells. Which of the following is the most likely cause?

- A. Acute blood loss
- B. Chronic lymphocytic leukemia
- C. Erythrocyte enzyme deficiency
- D. Erythropoietin deficiency
- E. Immuno-hemolysis
- F. Microangiopathic hemolysis
- G. Polycythemia vera
- H. Sickle cell disease
- I. Sideroblastic anemia
- J.  $\beta$ -Thalassemia trait



# Sequential Item Sets

**KAPLAN** MEDICAL **USMLE Step 1 Qbank** HELP

Item: 2 of 48 Mark Previous Next Lab Values Notes Calculator

A 27-year-old man is admitted to the hospital for lethargy and confusion. He has a 5-year history of severe hypertension that is poorly controlled despite four antihypertensive medications. Over the past few days, he has become increasingly lethargic and confused. On the day of admission, his roommate found him in their home, lying on the floor and unresponsive. Upon admission, he is found to have hypotension, dry mucous membranes, and low jugular venous pressure. Laboratory values are as follows:

Serum sodium	112 mEq/L
Serum potassium	5.1 mEq/L
Serum osmolality	230 mOsmol/kg H <sub>2</sub> O
Urine sodium	4 mEq/L

Which of the following substances is most likely mediating the hyponatremia?

- A. Aldosterone
- B. Antidiuretic hormone
- C. Cortisol
- D. Somatostatin
- E. Thyroid-stimulating hormone

Proceed to Next Item

Block Time Remaining: 00:55:48 Timed Suspend End Block



# Sequential Item Sets

7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36

**Item : 28 of 40** Mark Previous Next Lab Values Notes Text Zoom

The following vignette applies to the next 2 items. The items in the set must be answered in sequential order. Once you click **Proceed to Next Item**, you will not be able to add or change an answer.

A 28-year-old G1P0 woman undergoes an uneventful vaginal delivery. She has received good prenatal follow-up and has no significant medical history. The newborn has a strong cry, good reflexes, and good Apgar scores. Physical examination of a term newborn shows a scrotal sac without palpable testes and an enlarged phallus without the normal appearance of a penis. A urogenital sinus is present. A CT scan shows two normal-sized ovaries. A karyotype shows 46 chromosomes with the presence of a Barr body.

**Item 1 of 2**  
Which of the following is the mechanism for the etiology of this patient's abnormality of sexual differentiation?

- A. Excess adrenal production of androgens
- B. Inadequate production of Müllerian-inhibiting factor
- C. Inadequate production of testosterone
- D. Mutation of the 5 $\alpha$ -reductase gene
- E. Mutation of the androgen receptor gene

**Lock Answer**

**You will not be able to change this answer if you proceed to the next item**

Proceed Cancel

Proceed to Next Item

You must select "Proceed to Next Item" to view Item 2 of 2





# Sequential Item Sets

**KAPLAN**  
MEDICAL

USMLE Step 1 Qbank

Item: 3 of 48

Previous Next

Lab Values Notes Calculator

A 27-year-old man is admitted to the hospital for lethargy and confusion. He has a 5-year history of severe hypertension that is poorly controlled despite four antihypertensive medications. Over the past few days, he has become increasingly lethargic and confused. On the day of admission, his roommate found him in their home, lying on the floor and unresponsive. Upon admission, he is found to have hypotension, dry mucous membranes, and low jugular venous pressure. Laboratory values are as follows:

Serum sodium	112 mEq/L
Serum potassium	5.1 mEq/L
Serum osmolality	230 mOsmol/kg H <sub>2</sub> O
Urine sodium	4 mEq/L

Which of the following substances is most likely mediating the hyponatremia?

A. Aldosterone

B. Antidiuretic hormone

C. Cortisol

D. Somatostatin

E. Thyroid-stimulating hormone

Proceed to Next Item

The patient's urine output is 0.5 L/day and urine osmolality is 690 mOsmol/kg H<sub>2</sub>O. What is his negative free water clearance (L/day)?

A. 1

B. 2

C. 3

D. 4

E. 5

Block Time Remaining: 00:54:46  
Timed

Suspend End Block




# Multimedia Questions

USMLE 2008 Media Demo - Google Chrome

http://jasper.kaptest.com/apps/delivery/item.aspx

- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16


### Media Exhibits




There are certain questions that require the viewing of an audio/video exhibit. There is a button on the lower right corner of the answer choice called "Play Media". Pressing this button will trigger a pop up window containing the media.


### Media Player Control

Play/Pause button: will play or pause the media.


 PLAY

 PAUSE

Volume Control: pressing this button will progressively higher or lower the volume for certain media exhibits with audio.

 VOLUME CONTROL

Close: closes the pop up containing the media exhibit.


 CLOSE

### Practice

- 1. Read the question below. Notice the "Play Media" button on the lower right corner. Press it.
- 2. The media should play on a pop up window. Press the pause button to pause the video, and press play to resume it. Adjust the volume. When done press the "Close" button, the window should close.

---

NOT TIMED

 Lock

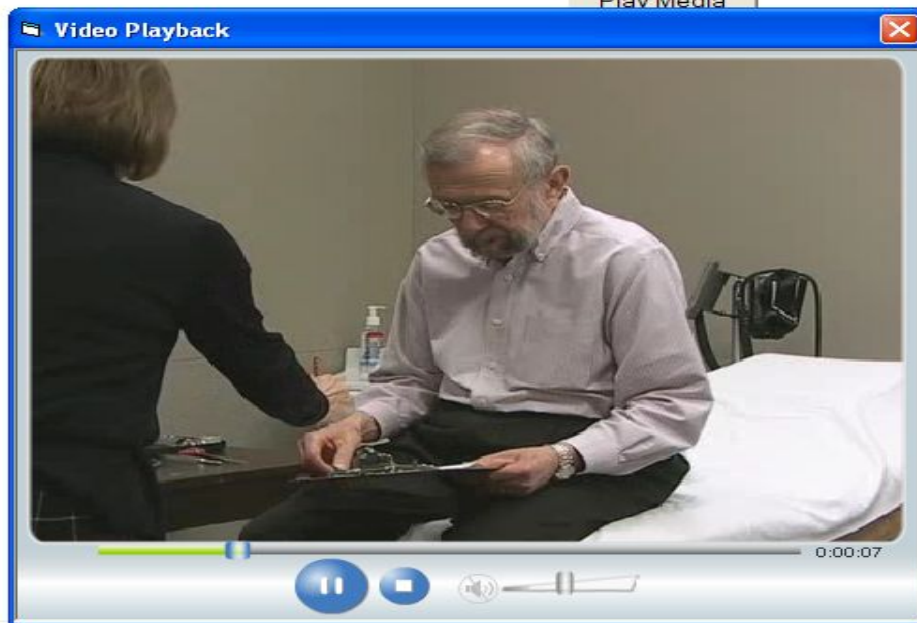


## Media Exhibit Button (continued)

### Practice:

1. Click on the "Play Media" button below.
2. Notice that a new window launches and that the media clip plays automatically.
3. Notice that the volume control is disabled (grayed out) so that headphones are not required.
4. Click on the "Pause" button.
5. Click on the "Play" button to resume playing from the paused frame.
6. Click on the "Stop" button and then the "Play" button to restart from the beginning.
7. Click on and pull the "Seek Slider" handle to the right to advance the video.
8. Notice that the "Seek Slider" indicates (in green) how much of the video has been played.
9. Close the media exhibit window by clicking on the "X" in the top right corner of the window.

Play Media

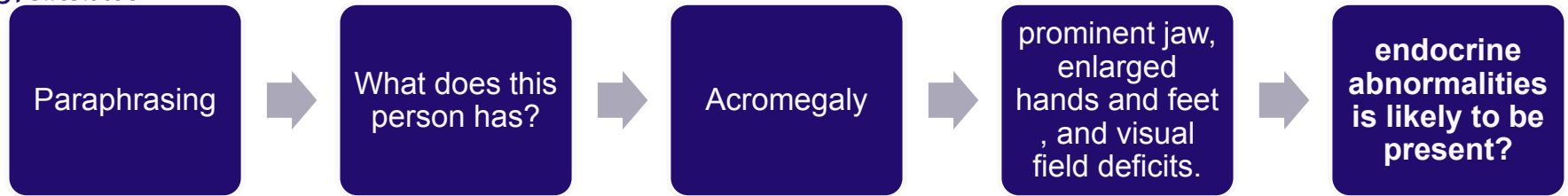


- Welcome
- Monitor
- Sound
- Instructions
- Toolbar
- Timer
- Next
- Marking
- Annotating
- Labs
- Labs
- Labs
- 1
- Locking
- 2
- 3
- Exhibit
- Media
- Media
- Ending
- Warning
- Breaks
- Breaks
- CIN
- Survey
- Block End

# Practice Question



A 45-year-old male complains of gradual weight gain over the past several years. His fingers have enlarged so much that he can no longer wear his wedding ring. He sweats more than usual, and in particular, his hands are constantly sweaty. He has also noticed a gradual coarsening of his facial features. An MRI reveals the presence of a 1.5-cm tumor in the anterior pituitary. Which of the following endocrine abnormalities is likely to be present?



- A. Decreased plasma growth hormone concentration
- B. Decreased plasma IGF-1 concentration
- C. Decreased plasma insulin concentration
- D. Impaired glucose tolerance
- E. Increased suppression of growth hormone secretion with oral glucose
- F. Increased plasma IGF-1 concentration

## One More last Question! 😊

---

A 24-year-old woman states that she has consumed 25 acetaminophen tablets in a suicide attempt. A screening physical exam reveals a lethargic patient with a temperature of 99 ° F, heart rate of 96, BP of 102/60 and a non-focal neurological examination. Complete blood count and serum electrolytes are normal. Which of the following is the most appropriate next step?

- A. Admit the patient to psychiatric service
- B. Administer flumazenil
- C. Obtain serum toxicology screen and acetaminophen level
- D. Discharge with psychiatric follow up
- E. Order gastric lavage

## Factors Impacting Scores (On Average)

- **Knowledge Base: 60-70%**
- **Test Taking Skills: 25-30%**
- **Attitude/Emotions: 10-15%**

# Steps to Become Physician in US

**Medical College**



**Pass USMLE Exams**



**Get ECFMG Certified**



# ECFMG Certificate

ECFMG is a private, nonprofit, nongovernmental organization that is authorized in federal regulations to serve as **the certifying agency** for international medical graduates (**IMGs**) entering the **U.S. physician workforce** as **trainees** in postgraduate medical education.



**It's not going to be easy, but it's going to be worth it.**

# ECFMG Certificate

## ECFMG Requirements

- Degree from Accredited Medical College/University
- Medical College/University Transcripts
- USMLE Step 1, 2 CK & CS (pass within 7 year)



**When you have faith, everything is possible.**

# Steps to Become Physician in US

Medical College



Pass USMLE Exams



Get ECFMG Certified



Complete Residency  
Training

# Residency Training

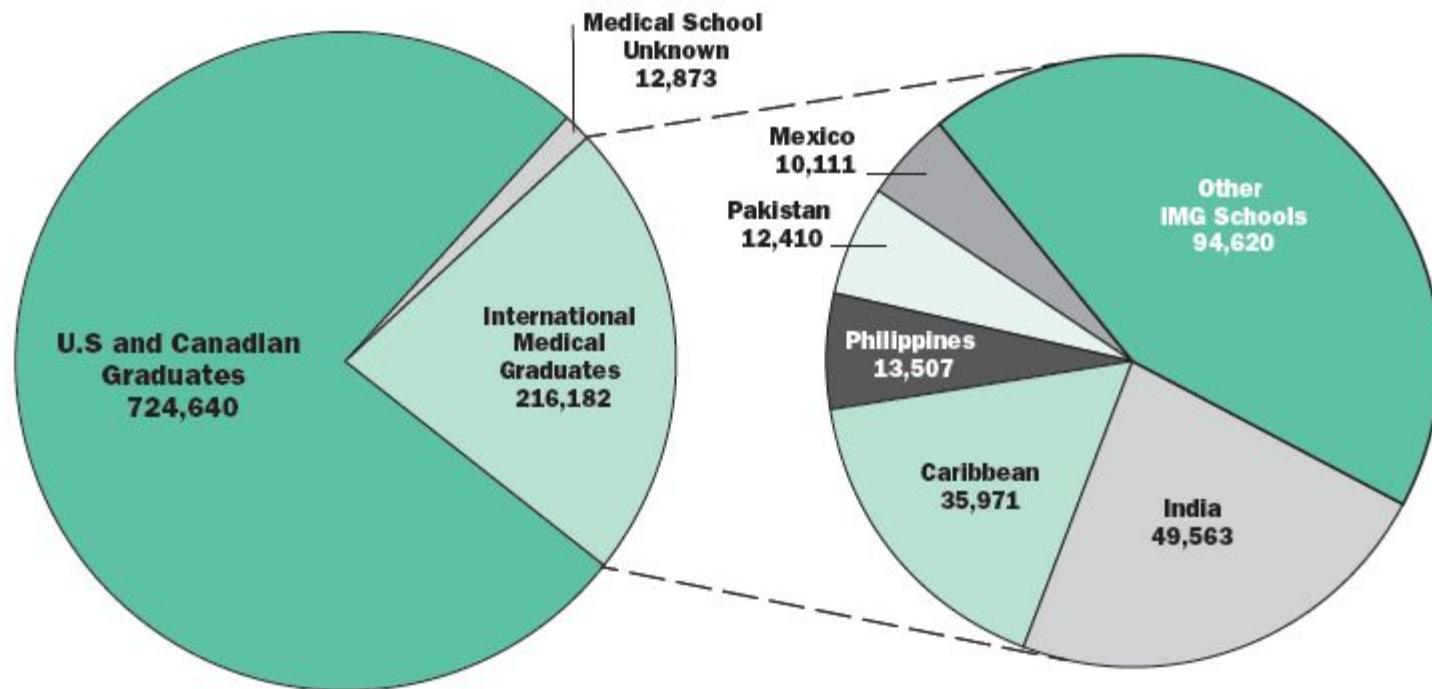


# What is a Medical Residency?

- Graduate Medical Training (required to become licensed physician)
- 3-5 Years Long
- Paid Training



**Figure 2**  
**Actively Licensed Physicians in the United States and the District of Columbia**  
**by Location of Medical School Graduation, 2016**



Source: 2016 FSMB Census of Licensed Physicians.

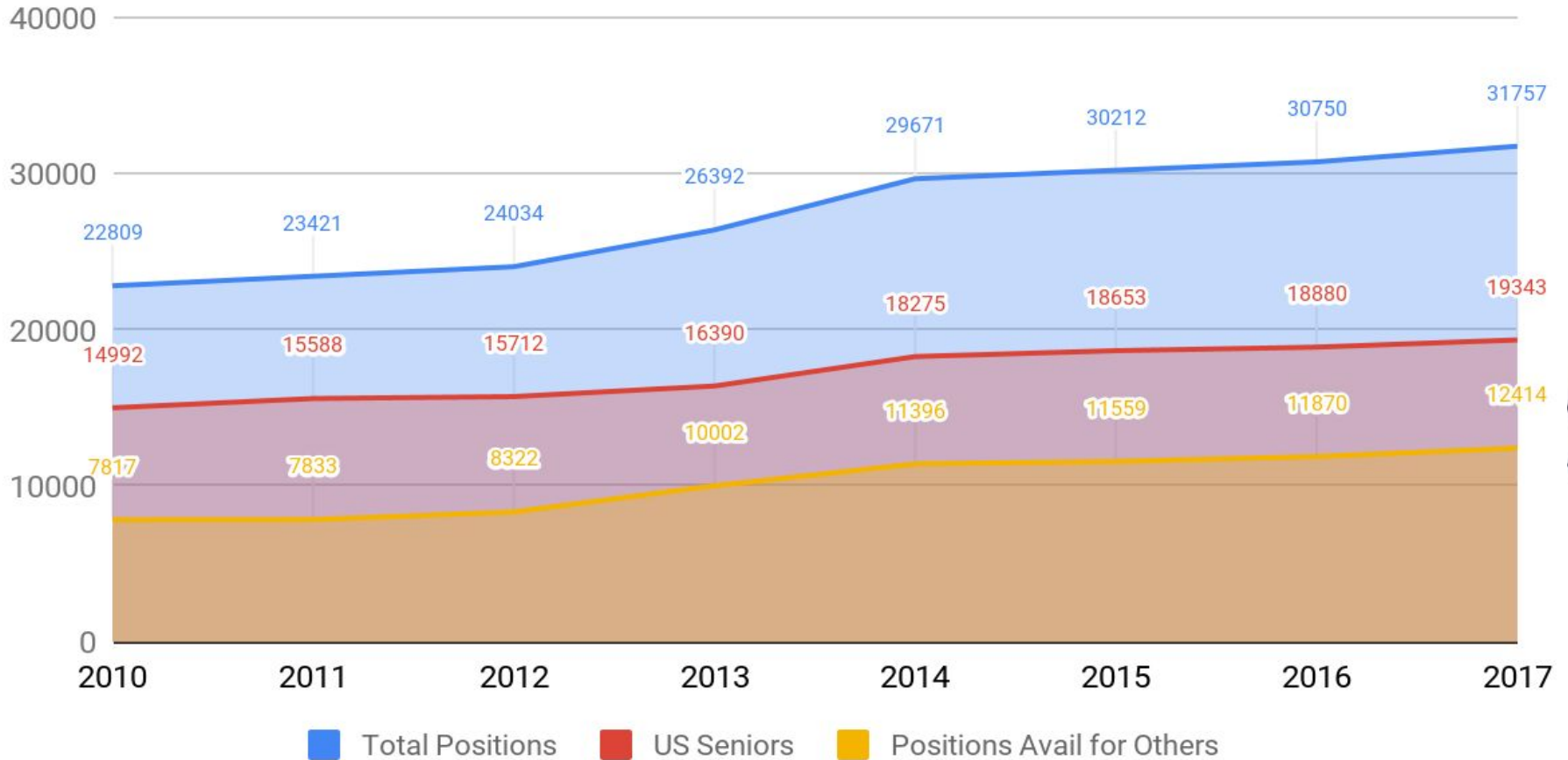


## Number of IMGs in the United States!

<b>Number of physicians in United States</b>	<b>985,375</b>
Number of IMG physicians in United States	254,396
% IMG physicians in United States	25.8
% IMGs in residency programs	26.3*
% IMGs in patient care	75.5
% IMGs on full-time staff	29.9
% IMGs in research	19.9
% IMGs in medical teaching	16.7*
% IMGs in administration	12.0

\*Percentages exclude residents/fellows unless otherwise noted.

# Match Statistics





# Residency Decision Sequence:

Program director's perspective

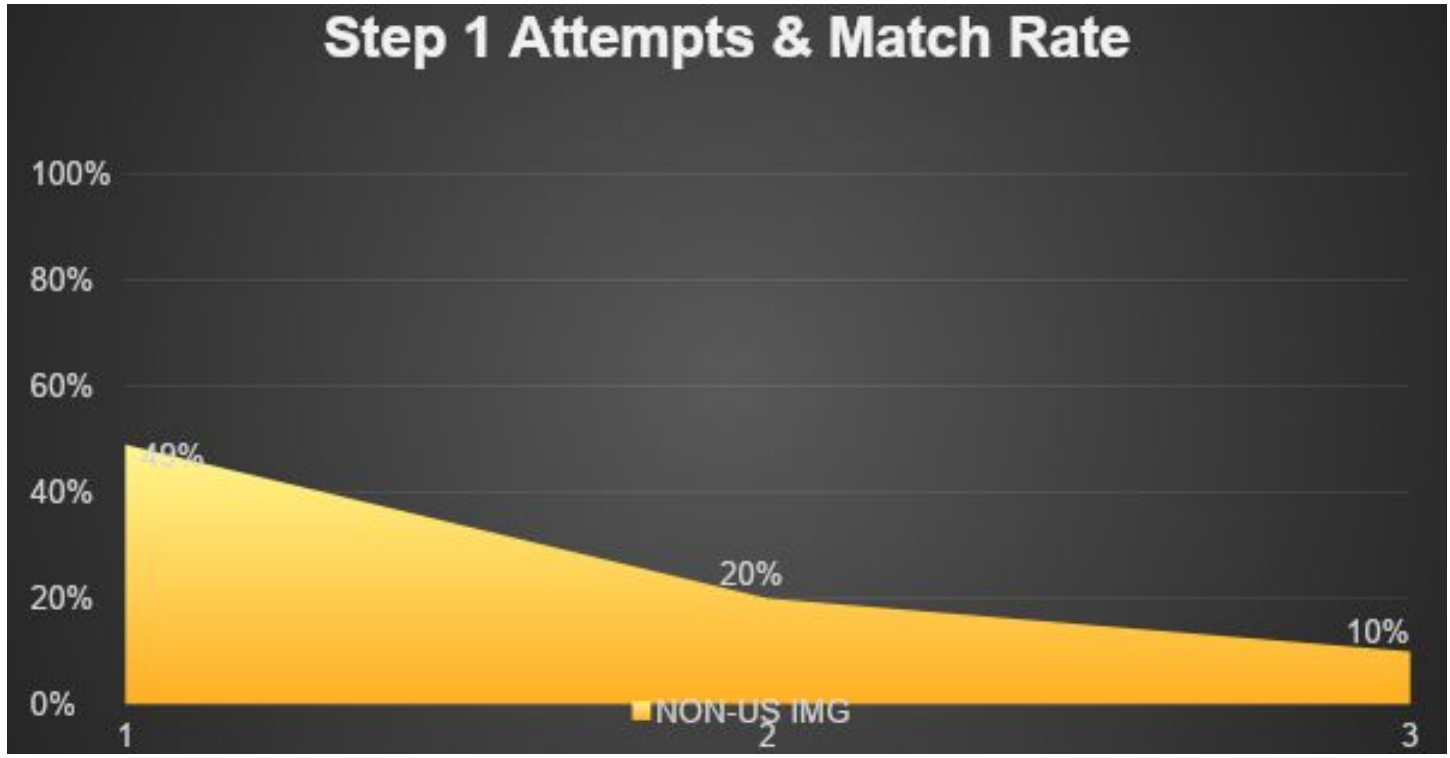
1st cut: **USMLE scores**

2nd cut: Application package

3rd cut: Interviews



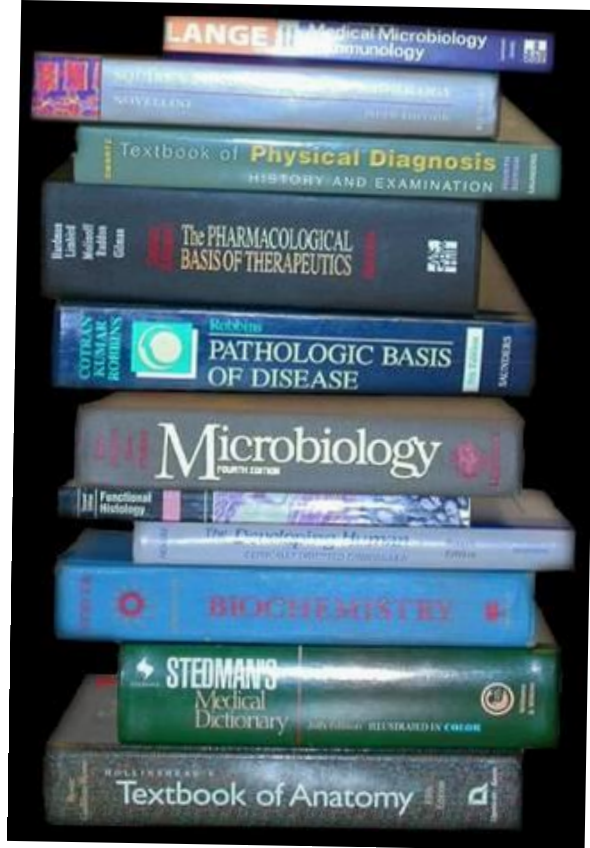
# Match Rate by # Attempts



# How to prepare for USMLE Exams?



# How to Prepare



# The Kaplan Program

# Prepare with the world leader



# Why Kaplan Medical?

**Leader in the Medical Profession Board Review.**

**40 years** of experience

Helped **tens of thousands** of students and physicians pass their medical licensing boards with high scores.

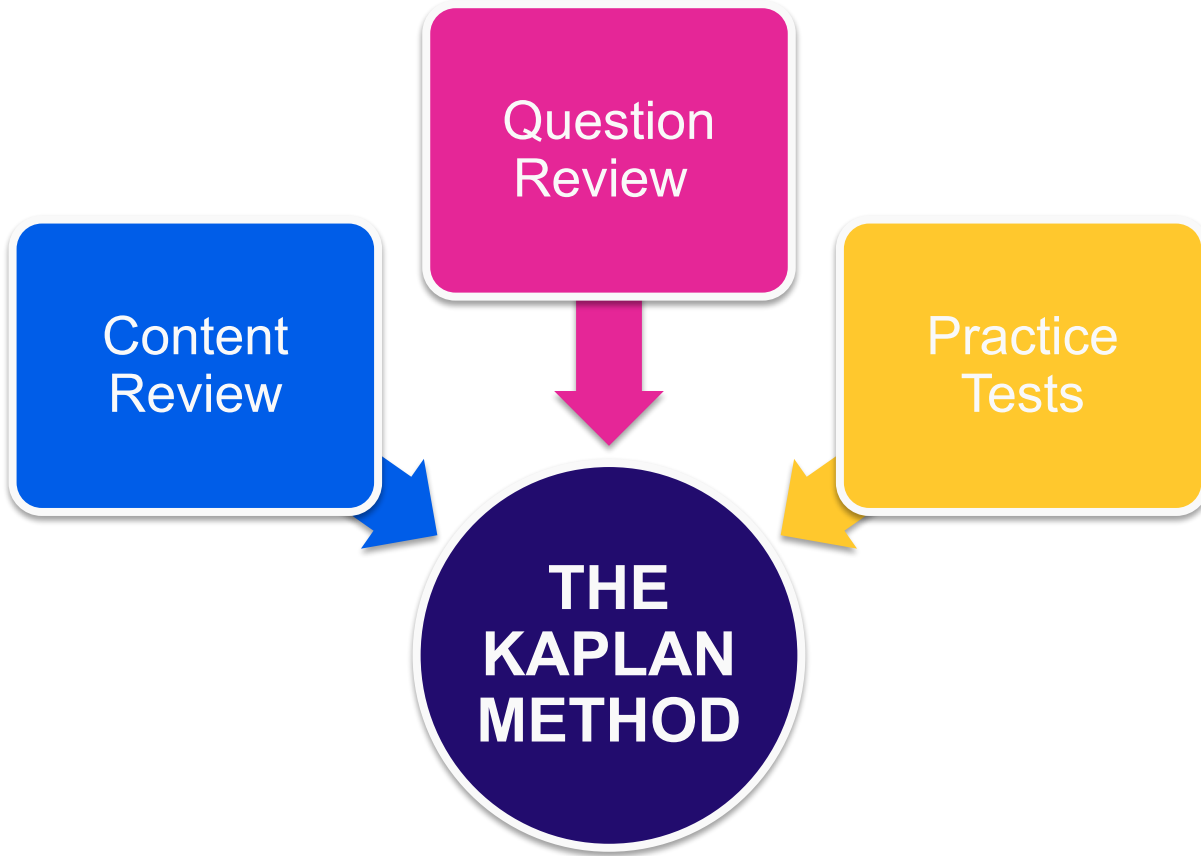
Courses are **mapped** to corresponding exam content

**Personalised service**

**All what students' needs, from practice question to extensive content review and remediation.**



# The Kaplan Method



# Live Prep

**Live structured live lectures to give students the most relevant content.**

**Live interactive** high-yield structured lectures with our award-winning US based medical faculty

**Master Faculty** - more than 50 experts with 250 awards, 760 published research studies and 940 years of collective experience.

**7 Week Schedule** - Over 260+ hours of basic science lectures with our most time-efficient schedule.

**7 volume of Lecture notes (books) are included**

**Locations: India, Poland, Hungary, and USA**





# Live Prep Online

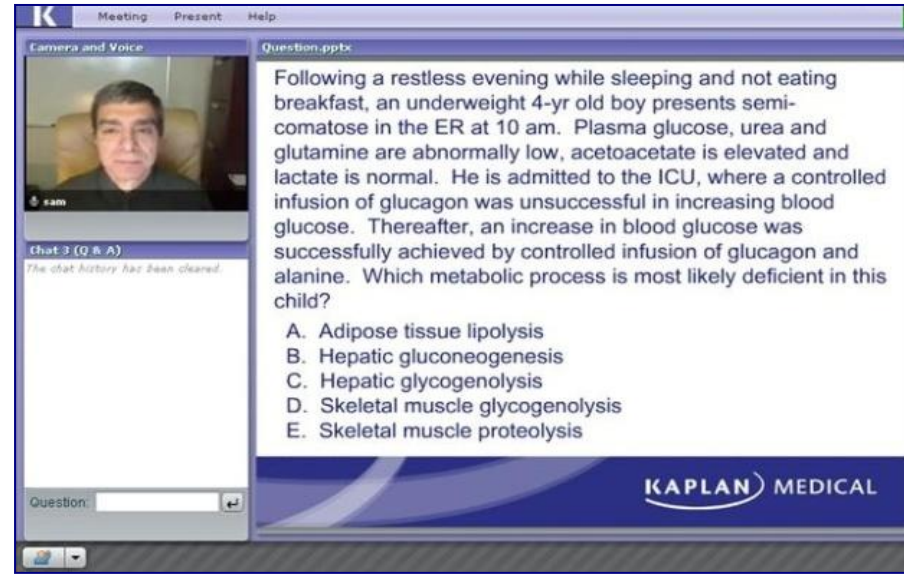
**Live structured live lectures to give students the most relevant content.**

**14 Week Schedule** - Over 260+ hours of basic science lectures with our most time-efficient schedule.

**4 hours per day**

**5-6 days per week**

**Classes will be in Virtual Classroom**



The screenshot displays a virtual classroom window with a purple header. On the left, a video feed shows a male instructor with the name 'sam' below it. Below the video is a chat window titled 'Chat 3 (Q & A)' with the message 'The chat history has been cleared.' At the bottom left is a 'Question:' input field. On the right, a slide titled 'Question.pptx' contains a clinical case and a multiple-choice question. The case describes a 4-year-old boy with hypoglycemia and hypoglutaminemia. The question asks for the most likely deficient metabolic process. The options are: A. Adipose tissue lipolysis, B. Hepatic gluconeogenesis, C. Hepatic glycogenolysis, D. Skeletal muscle glycogenolysis, and E. Skeletal muscle proteolysis. The Kaplan Medical logo is in the bottom right corner.

Meeting Present Help

Camera and Voice

Question.pptx

Following a restless evening while sleeping and not eating breakfast, an underweight 4-yr old boy presents semi-comatose in the ER at 10 am. Plasma glucose, urea and glutamine are abnormally low, acetoacetate is elevated and lactate is normal. He is admitted to the ICU, where a controlled infusion of glucagon was unsuccessful in increasing blood glucose. Thereafter, an increase in blood glucose was successfully achieved by controlled infusion of glucagon and alanine. Which metabolic process is most likely deficient in this child?

A. Adipose tissue lipolysis  
B. Hepatic gluconeogenesis  
C. Hepatic glycogenolysis  
D. Skeletal muscle glycogenolysis  
E. Skeletal muscle proteolysis

Chat 3 (Q & A)  
The chat history has been cleared.

Question:

KAPLAN MEDICAL



# OnDemand Prep (Online)

**Convenient, comprehensive prep at your own pace.**

**Complete** - over 200 hours of video lecture content, including over 900 videos and over 8,000 updated presentation slides.

**Self-Paced** - study at your own pace—instantly access.

**Engaging** - over 3900 quiz questions between lectures.

**User-Friendly** - Interact with content. Flag material, take notes and create playlists

**Mobile** - on the go by access on iphone or android.

**12 or 24 Month Access**



**Dr. Gwanmesia, Step 1 Prep - On Demand user**

**“What a game changer! Previously tried other revision courses without success. With Kaplan, a high score is certainly guaranteed, and you have at your fingertips what you need to ace the USMLEs.”**



# Question Bank (QBank) 12 Month Access

**High-yield structured live lectures to give students the most relevant content.**

**Easy to use** interface with test-like questions and a streamlined user experience.

Over **2,000** updated, realistic practice questions.

Can be **customized** in multiple dimensions:

**Track scores** over time with **personalized** progress reports.

New **mobile** app for on-the-go practice



# Three things happens to everyone!

- **Test Anxiety: Fear will replace excitement**
- **Not everyone will be supportive**
- **It's expensive**



**Don't expect to see a change, if you don't make one!**

"The road to success and the road to failure are almost exactly the same."

**DO IT NOW. Sometimes "LATER" becomes "NEVER"!**



# Thank you!

Inder Pahal, MD, MBA  
inder.pahal@kaplan.com  
1-856-571-5052



[kaplanmedical.com/institutionalprograms](https://www.kaplanmedical.com/institutionalprograms)