Inside Step 3 CCS

Hello, I'm Dr. Miguel Paniagua, Medical Advisor at the National Board of Medical Examiners. Today, I'm going to show you how to navigate a computer-based case simulation, or a CCS case. CCS cases appear on the USMLE Step 3 exam.

What is a CCS case?

Well, it's a dynamic and interactive clinical scenario where you are responsible for the patient's care. In the Step 3 exam, you will see a series of CCS cases which are designed to evaluate your clinical judgment and your medical management. You most likely have not interacted with CCS or its software, Primum, before.

We hope this video prepares you to navigate Primum so you can comfortably manage each case on the exam. Throughout this video, we will be referencing the Primum CCS Frequently Asked Questions or FAQs available on USMLE.org under the practice materials for Step 3 CCS.

To begin, let's go over the concept of time as it relates to managing a CCS case.

On CCS, there's real time and simulated time.

Real time is the literal amount of time you have to complete each case.

You'll be shown the maximum allotted real time you have before each case starts.

The amount varies for each case and a certain portion of that amount of time is reserved for any case ending actions.

It is also important to know that depending on your actions in a given case, you might not need the full amount of maximum allotted real time.

Now, simulated time is time that elapses during the clinical simulation for one patient.

In simulated time, some cases last for weeks, others for days, some just for a few hours.

For example, you can complete a CCS case in, let's say 11 minutes of real time, but manage the patient in that case over the course of two weeks in simulated time.

At the end of this video, we will review the concepts of real and simulated time.

Now, let's walk through a case together.

First, you will see the case start screen, which shows you your maximum allotted real time.

Click Start Case to launch the Primum software and manage your patient.

Now that Primum has launched, let's take a look at the top of the screen.

You will see that this case begins in simulated time on Monday at 11AM.
At this time, feel free to adjust your reverse color or increase font settings.

These controls can be found in the upper right hand corner of your screen and can be adjusted as often as you'd like and at any time in the case.

Now let's read the introduction of this office case.

Click OK when you are done reading.

Primum will move to the next screen.

Next, you are presented with the patient's vital signs.

When you're done reviewing this information, click OK to review the initial history.

It's important to note that we can't ask the patient any questions.

However, be reassured, CCS case writers take this into consideration and provide all the relevant information you will need.

Now you are able to manage your patient.

I'd like to start by clicking on the Write Orders or Review Chart tab to refresh my memory on whether the patient is taking any medications.

The patient is taking oral contraceptive pills.

Now as her current physician, I have the option to leave this prescription as is, or cancel it.

If I wanted to cancel the order, I'd simply click on the order and select Yes or No to the prompt.

For now, I'll leave this order as is.

Next, I'd like to perform a physical exam.

To do that, click on the Interval History or PE button in the top-left corner.

Then, select the desired components, Skin, HEENT/Neck, Chest/Lung, CV, Abdomen, Extremities/Spine.

Click OK.

The Primum software tells me how much simulated time the results will take to return.

Click OK.

Primum will now process my requests and advance simulated time.

Here are my results.
At this point, I'd like to order some tests.

To do this, I must ensure I am within the Write Orders or Review Chart tab.

I can either start typing or click on the Order button below.

I have the option to enter orders one by one or place orders in a list format.

Primum can handle both types of entries and also allows me to place orders all throughout the case.

For this group of orders, I'll choose to enter them as a list.

First, I want to order CBC, which I could also type as complete blood count.

Primum will recognize both entry types.

Next, CMP, ESR, and Arthrocentesis.

Primum will prompt me to confirm each order, or, when available, select the frequency in which I'd like to have the study recur.

For instance, I could order the CBC once every eight hours if I wanted to.

But I'll choose to enter this as a one time only order.

These confirmation screens may seem redundant but because the Primum database contains thousands of orders that are often very similar in spelling, we want to make sure you have the opportunity to place the orders you've intended.

This function also gives you the opportunity to cancel an order before it's carried out, if you choose.

The orders I placed are on the order sheet.

Now, I want to see the results of the studies.

I can see when they'll return in simulated time by reviewing the Report Time column on the order sheet.

Notice that the orders return at different points in simulated time.

So I have to advance the clock in simulated time to receive the results of each individual order.

Please remember, orders will not be carried out unless you advance simulated time.

To advance simulated time, select Obtain Results or See Patient Later.

Under Reevaluate Case, select With next available result.
Click OK.

To continue seeing the results of each order I placed, I have to continue engaging with the clock to advance through simulated time.

I'm going to stop here to order cell count synovial fluid since the arthrocentesis procedure has taken place.

Click on Order and type cell count.

Because Primum contains several orders that are similar, I have to make sure to select the specific order I want, which is cell count, synovial fluid.

To see the results of the cell count, I'll have to advance simulated time again.

I have received the results of cell count, synovial fluid.

For now, I am content with all the results I have.

I'd like to send the patient home and see her in a few days.

Click Obtain Results or See Patient Later.

Select on day five at 15:00 hours.

Click OK.

Click OK again.

I'm notified that the patient is being sent home.

To agree to this action, click OK.

The system is asking me whether I want to continue advancing through time.

I do because I'd like to see the patient at the appointment I scheduled for day five.

I just received an alert that the patient is feeling worse.

Click OK after reading this patient update.

I am prompted to stop advancing time.

I'm going to stop advancing time because I want to bring the patient back into the office soon.

To bring the patient back, click Change Location.
Select Office.

Click Change Location.

Click Schedule an Appointment.

Make appointment in 30 minutes.

Click OK.

Click OK again.

Click Confirm Move.

I received a message that the patient has arrived in the office.

Acknowledge the vital signs to proceed and click OK.

At this point, I'd like to order a repeat physical exam.

Click on Interval History or PE, select Extremities/Spine.

Click OK when you're done.

Now, I'd like to order a knee X-ray and a rheumatoid factor test.

Once again, I have to advance the clock to see the results of each.

Review the results of your studies.

I believe this patient has rheumatoid arthritis.

So, I'd like to initiate a treatment plan.

To do so, click on the Order sheet.

I will enter ibuprofen and methotrexate.

I am prompted to select the intended route of administration for each drug.

There is no need to worry about dosages for the medications, the system will optimize them for you.

However, you do need to order specific medications either by brand or generic name.

I feel comfortable with the treatment plan so far, and now I want to see how the patient responds.

To do this, select Obtain Results or See Patient Later.
And under Reevaluate Case, click Call/See me as needed.

Click OK.

The patient is going home because there are no orders pending in the queue.

I'm prompted to continue advancing time, and I'd like to continue to do so.

Good news!

I received an update that the patient's condition has improved.

I would agree to continue advancing through simulated time to see how she responds to the treatment.

Great, I received another notification that the patient is feeling better.

I'll agree to continue advancing through simulated time.

I received a warning that I have two minutes left of real time in the case.

When you're done reading the instructions, click OK.

At this point, I have the option to place other orders.

However, because I received the case-end warning, I can no longer order physical exam components or change the patient's location.

And because I can no longer advance simulated time, I will not see the results of any pending orders.

I'd like to order a rheumatology consult and also provide my rationale.

The patient has RA.

Now, I'm ready to exit the case.

To do so, click Exit Case.

I completed the case and am thanked for taking care of the patient.

As promised, we're going to recap real and simulated time.

17 days elapsed in simulated time, but I only managed the patient for the length of this instructional video.

To deepen you CCS knowledge, we encourage you to access the resources which can be found on USMLE.org in the Step 3 CCS portion of the practice materials.
You can watch an animated demo on Primum's various features and functions.

Practice with six CCS cases and receive case-related feedback by downloading the tutorial and practice items.

And lastly, make sure you read the Step 3 content description and General Information booklet as well as the Primum CCS FAQs.

Thanks for watching and good luck on your test.