

Primum® Computer-based Case Simulations (CCS) Frequently Asked Questions (FAQs)

1. What are my responsibilities?

You should function as a primary care physician and maintain responsibility for the patient in all management locations throughout each case.

Do not assume that other members of the health care team (eg, nurses, medical consultants) will write or initiate orders for you when a patient is admitted to a facility or transferred for a surgical procedure. Responsibility for the primary care of the patient may include (but is not limited to) all of the following:

- Ordering laboratory tests, imaging studies, and diagnostic procedures
- Changing management locations as necessary
- Initiating and modifying treatment regimens
- Handling life-threatening emergencies
- Monitoring the patient's condition over simulated time
- Preparatory patient care that, if neglected, might jeopardize the patient (eg, in the preoperative setting, this may mean requesting IV fluids, a blood type and crossmatch, and antibiotics)
- Addressing health maintenance issues. **Note:** The nature of each case dictates whether or not health maintenance issues are relevant within the simulated time frame.

Your responsibilities for each patient are fulfilled when the case has ended.

2. How do I manage a patient?

Primum CCS allows you to manage only one patient at a time. There is no option available to assess or treat anyone other than the patient. However, it is possible to order education or counseling for the patient's family or sexual partner. You manage one patient at a time by:

Reviewing the history

An initial history is given to you at the beginning of each case. Throughout the case, you may periodically ask how a patient feels by ordering an interval/follow-up history or monitor the patient by ordering a physical examination. Any information not included in the history or physical examination is normal or noncontributory for your patient.

Selecting physical examination components

Physical examination should be requested if and when you would do the same with a real patient. Requests for interval history and physical examination automatically advance the clock in simulated time.

Writing orders on the chart

The order sheet is the primary means for implementing your patient management plan. At any time, you may type requests for tests, procedures, and therapies directly on the order sheet.

Advancing simulated time to execute orders, obtain diagnostic information, and observe the effects of treatment by selecting the clock option

To see results of tests and procedures and to observe effects of treatment, you must advance the clock. When you do so, your orders are implemented, test results are returned, and therapies are initiated. As you advance the clock, the patient's condition may change based upon the underlying condition(s), your management, or both. Note that if a clock advance to a requested appointment time is stopped to review results from processed orders, the requested appointment is canceled.

Changing the patient's location

Change the patient's location by selecting the "Change Location" button. You can move the patient to and from home, office, emergency department, inpatient unit, and intensive care unit. **Note:** You will not be able to change the patient's location after the Case-end Instructions screen is presented.

3. How do I write/cancel orders?

You write orders by typing your requests on the order sheet section of the patient chart, one per line. You can place orders **only** in the order sheet section of the patient chart. You cannot place orders while you are in any other section of the chart (eg, Progress Notes, Vital Signs, Lab Reports, Imaging, Other Tests, and Treatment Record).

Order recognition

If the clerk recognizes the first three characters of the name or acronym (eg, "xra," "ECG"), you will be shown a list of options that match your entry. If the clerk does not recognize your order, you may have to type it differently. It is not necessary to type commands (eg, "administer," "give," "do," "get"); simply type the name of a test, therapy, or procedure. You must request drugs by specific trade or generic name. The clerk does not accept drug class names such as "antacids" or "beta-blockers."

Routes of administration

Once you have selected an order from the list presented, you must also specify route and type of administration by selecting those options during the order confirmation process. Assume that "continuous" administration also encompasses periodic administration (eg, every 4 hours) if that is appropriate for the treatment. Note that intravenous fluids are not available as a "One Time/Bolus" order in *Primum* CCS. Available routes of administration include epidural (EP), intra-articular (IA), intramuscular (IM), inhalation (IN), intravenous (IV), ophthalmic (OP), otic (OT), oral (PO), rectal (RE), sublingual (SL), subcutaneous (SQ), topical (TP), and vaginal (VA).

Dosage and administration rates

It is not necessary to specify dosages or administration rates; these will not appear on the order sheet, but you can assume these have been optimized for your patient's condition.

To taper a medication, simply discontinue (cancel) it by clicking on the order and confirming the cancellation.

Medications cannot be administered prn. When a medication is indicated for the patient, order it. When it is no longer indicated, cancel it.

Medication duration is assumed to be optimal.

Canceling an order

To discontinue a therapy or cancel a test or procedure, select it on the order sheet and respond "yes" to the prompt.

The patient's current medication(s)

There may be cases in which a patient is on a medication at the beginning of the case. In these situations, the patient's current medication will be displayed on the order sheet (eg, "oral contraceptive"). These orders appear with an order time of Day 1 @00:00. When current medications are displayed on the order sheet, you must decide whether to continue or cancel the medication, as you deem appropriate for the patient's condition; these orders remain active throughout the case unless canceled.

Reviewing orders

Information that has already been presented can be reviewed at any time on the patient chart in the Progress Notes, Vital Signs, Lab Reports, Imaging, Other Tests, and Treatment Record sections. **Note:** You can write orders **only** in the Order sheet section of the chart.

4. How do I see order results?

After you write orders, you must advance the clock in simulated time to obtain results of diagnostic studies, monitor the patient's progress, or see the patient's response to therapies. Every diagnostic order placed on the order sheet will have a report time (the simulated time at which the result of that order will be displayed). Advancing the clock using the "With next available result" option will automatically advance the clock in simulated time to the next pending result.

5. How do I advance simulated time in a *Primum* CCS case?

Advancing the clock in simulated time in a *Primum* CCS case is what "makes things happen." To see the results of tests and procedures and to evaluate the effect of therapies, you *must* advance the clock in simulated time.

There are various ways to advance simulated time in *Primum* CCS cases. At the top of the chart, select the "Obtain Results or See Patient Later" button. Under the

Reevaluate screen, you can advance simulated time by using one of the following options:

- Select a date on the calendar for future evaluation.
- To reevaluate the patient on a specific future date, choose "On" under Reevaluate Case. Select a date on the calendar or enter a future day and time.
- To select a relative time in the future, choose "In" under Reevaluate Case (eg, reevaluate patient in 3 hours).
- To advance the case to the time when your scheduled test result will be available, choose "With next available result" under Reevaluate Case. If no results are pending, the case will advance to the next patient update message or to the end of the case.
- To end the case (once you are satisfied that you have completed all necessary patient management), choose "Call/See me as needed" under Reevaluate Case. This will instruct the patient to call you as needed for future visits. Do not assume this means that the patient will be monitored.

In general, any pending test results or messages from the patient, the patient's family, or another member of the health care team will give you an option to stop simulated time. If there are no pending test results or patient updates, advancing the clock may take you to the end of simulated case time. At that point, you will receive the Case-end Instructions screen and have an opportunity to finalize your orders.

6. Can I change my mind or cancel an order?

You can change your mind at any point in the case by canceling orders and/or writing new orders. However, once you write an order and advance the clock to move forward in simulated time, you cannot go back. Therapies are initiated as soon as the clock is advanced in simulated time. Diagnostic orders and procedures cannot be canceled once the results are seen. As in real life, there is no opportunity to undo what has already been done.

Discontinue a therapy or cancel a test or procedure by selecting it on the order sheet and responding "yes" to the prompt. Canceling a medication, IV fluid, or therapy removes it from the order sheet. Canceling a test or procedure before a result is returned means the test/procedure has not been carried out.

7. When should I order a consultation?

Typically, consultants are not helpful since computer-based case simulations are designed to assess your patient management skills. However, requesting consultation at appropriate times may contribute to your score. In some cases, it may be necessary to implement a course of action without the advice of a consultant or before a consultant is able to see your patient. In other cases, a consultant may only be helpful if called after you have obtained enough information to justify referring the patient to his or her care.

8. What kind of feedback do I get while caring for the patient?

After advancing the clock in simulated time, you will receive results of diagnostic studies you requested and reports of changes in the patient's condition.

You may obtain intermittent reports about the patient's condition through messages from the patient, the patient's family, or other health care providers. You may also directly request information about the patient's current condition by ordering an interval/follow-up history.

It is possible that a patient's condition might worsen despite optimal care on your part. It is also conceivable that a patient's condition might improve with suboptimal care or no care. The effect of an intervention may not be seen until an appropriate amount of simulated time has passed. You can monitor the effect of interventions you order by ordering a diagnostic test or physical examination component that will reflect a change or improvement in the patient's condition. You must order the diagnostic test or physical examination component at a point in simulated time when you would expect a clinical improvement.

9. How long do cases last?

Simulated time

Cases can last from a few minutes to several weeks of **simulated** time. You are not told how much simulated time will elapse in each case. It is your responsibility to manage simulated time based upon your understanding of the urgency of the case. To move forward in simulated time, use the Advance the Clock option.

Real time

Cases will be allotted varying amounts of maximum **real** time to complete each case. Before you begin each case in the examination, you will be informed of the maximum real time allotted. However, you may not need to use the entire amount of available real time. The real time you actually use may vary based on your actions. For example, if you accomplish a case's measurement objectives quickly, that case may end in just a few minutes. Alternatively, if you do not provide appropriate intervention but continue to advance the clock in simulated time, the case may also end before the maximum allotted real time. Please note that if during the examination, you do not use all the allotted real time for a case, the "remaining" real time is **not** added to the allotted real time for any other case.

A case will end when you have demonstrated your skills sufficiently or you have run out of real or simulated time.

10. How do I end a case?

If you have finished all patient management, you can end the case by advancing simulated time. Use the clock as you normally would to receive results of pending tests and procedures. Once there are no longer any pending patient updates, tests, or procedures, use the clock to advance simulated time until the case ends.

11. What do I do when the case ends?

Near the end of each case, you will be presented with the Case-end Instructions screen, which will notify you that the case will end shortly.

At that time, you will be given a few minutes to:

- Review all previously presented vital signs, test and imaging results, and patient updates using the chart tabs at the top of the screen.
- Write new orders to be done now or in the future.
- Cancel any pending tests or orders that you no longer wish to carry out or active therapies that you want to discontinue at that time.

After the Case-end Instructions screen is presented, you will **NOT** be able to:

- Order a physical exam or interval history
- Change the patient's location
- Receive the results for pending tests and diagnostic studies
- Schedule a follow-up appointment
- Advance the clock in simulated time

After finalizing patient care, you **must** select **Exit Case** to exit the case. You will then see an "END OF CASE" message.

12. What should I do if I have a computer problem?

In the event of a computer problem during a live examination, notify the proctor. A case may be restarted by testing center staff. **Only one restart per case is permitted.** If a case is restarted more than once, the restart restriction will prevent the interrupted case from being completed, and the next case will appear.

13. Where can I find more information about CCS and *Primum*?

A comprehensive overview on CCS and *Primum* can be found at <http://www.usmle.org/practice-materials/index.html> under the **Step 3 CCS** section. You can familiarize yourself with this portion of the Step 3 exam in the following ways:

- Watch an **Instructional Video** that illustrates how to run a case using the *Primum* software.
- Practice with six CCS cases and receive case-related feedback by downloading the **Tutorial and Practice Items for Multiple Choice Questions and Primum Computer-based Case Simulations (CCS)** (Windows only).
- Read the **Feedback for Step 3 CCS Practice Cases** to learn about the different types of management strategies and review examples of actions that would add to, subtract from, or have no effect on an examinee's score for each case.