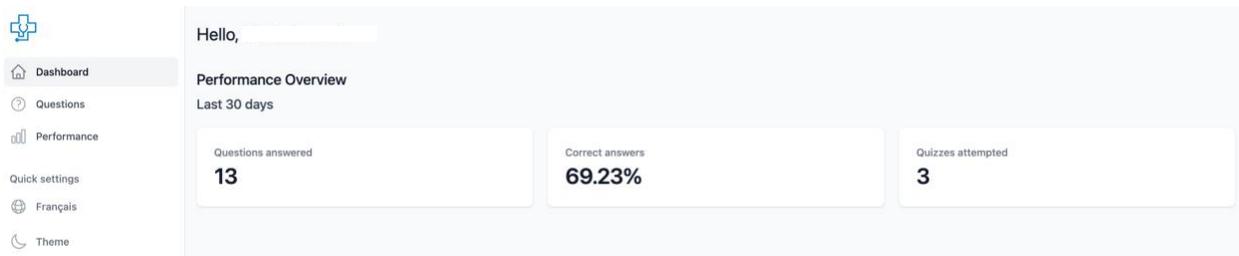




The Ottawa Question Bank, Inc.

Welcome to The Ottawa Question Bank! This brief tutorial will provide a run-through of the platform and how it can be used to optimize your learning. New features and questions will continue to be added!

Let's start at the beginning: once a user logs in they are brought to the site's landing page, shown below:



Navigating to the “Questions” Tab on the left-hand column will bring the user to the entire Ottawa Question Bank, which is organized into 5 “Units” – Foundations and Units I-IV.

Within each unit there are several topics which, when taken together, totals 5500 MCQs and 60 CDMQs (which will continue to be expanded).

As an example, let's look at Unit I, which covers cardiology, respirology, oncology and nephrology. Below is a snapshot of the first 10 topics of Unit I:



Dashboard

Questions

Performance

Quick settings

Français

Theme

| Unit I | | - |
|---|--|---|
| 01 - The normal heart | | + |
| 02 - Heart failure | | + |
| 03 - CAD | | + |
| 04 - Valvular heart disease | | + |
| 05 - Congenital heart disease | | + |
| 06 - Oncology | | + |
| 07 - Normal airway and lung | | + |
| 08 - The lungs in health and in failure | | + |
| 09 - Airway disease | | + |
| 10 - Pneumonitis | | + |

Let's now navigate to "02 – Heart Failure" to access the quizzes available for the topic of heart failure:



Dashboard

Questions

Performance

Quick settings

Français

Theme

| Unit I | | - |
|--|----------|------------|
| 01 - The normal heart | | + |
| 02 - Heart failure | | |
| - | | |
| Course title | Attempts | Best score |
| • Pressure-Volume Loops in Cardiac Physiology | 0 | 0 / 4 |
| • Physiology of Abnormal Ventricular Function | 0 | 0 / 4 |
| • Heart Failure | 1 | 5 / 6 |
| • Practical (Radiology): Introduction to Cardiac Imaging 1 | 0 | 0 / 8 |
| • Chronic Heart Failure | 0 | 0 / 8 |
| • Shock | 0 | 0 / 6 |
| • Acute Decompensated Heart Failure | 0 | 0 / 5 |
| • Practical (ECG): Tutorial #2 | 0 | 0 / 8 |
| • Cardiomyopathy | 0 | 0 / 9 |
| • Regulation of the Effective Circulating Volume | 0 | 0 / 6 |
| • Pharmacologic Treatment of Heart Failure | 0 | 0 / 6 |
| • Clinical Decision-Making Questions (CDMQ) | 0 | 0 / 9 |

The reader's attention is drawn to the following notes:

1. The "Heart Failure" quiz has a green dot next to it – this indicates that the user has attempted this lecture.
2. The "Attempts" column alerts the user to how many times a quiz has been attempted by that user (quizzes can be attempted an unlimited number of times)

3. The “Best Score” column denotes the user’s highest achieved score

Let’s attempt the “Heart Failure” quiz to get an idea of the user interface when attempting a quiz:

The screenshot displays a quiz interface for "Heart Failure". The top navigation bar includes a medical cross icon, a globe, a moon, and a warning triangle. The main content area shows the following details:

- Unit I: 02 - Heart failure
- Heart Failure
- Question 3 of 6
- Author(s): Benjamin Lam (University of Ottawa | MD 2024), Nacera Hanzal (University of Ottawa | MD 2023)
- Score: 1 / 1

The question text reads: "Marissa, a 65-year-old lady, presents to your office with a complaint of fatigue and SOB when lying down over the past few weeks. She claims that she wakes up several times during the night because she feels that she cannot breathe. Upon physical examination, you note pulmonary rales and an S3 gallop. Which of the following is least likely to explain Marissa's condition?"

The answer options are:

- Impaired contractility.** Incorrect because (1) students should recognize that this is likely LHF and (2) this is one of the mechanisms that causes LHF – e.g., through myocardial infarction, dilated cardiomyopathy, etc.
- Decreased afterload.** Correct because (1) the student should recognize that this is likely LHF and (2) in LHF, there is increased afterload, not decreased).
- Impaired ventricular relaxation.** Incorrect because (1) students should recognize that this is likely LHF and (2) this is one of the mechanisms that causes LHF – e.g., through LVH, transient ischemia, etc.
- Obstruction of left ventricular filling.** Incorrect because (1) students should recognize that this is likely LHF and (2) this is one of the mechanisms that causes LHF – e.g., through mitral stenosis, pericardial constriction, or tamponade.
- Uncontrolled hypertension.** Incorrect because (1) students should recognize that this is likely LHF and (2) this is one of the mechanisms that causes LHF and falls under increased afterload.

The sidebar on the right features a progress indicator with six colored boxes (1-6), where box 3 is green and boxes 1, 2, 4, 5, and 6 are grey. Below the progress indicator are "Previous" and "Next" navigation buttons. At the bottom of the sidebar, it displays "Total score: 2 / 6".

Above is an example of a question as it would appear to the user. Once an answer option is selected, the user is notified of the correct answer and a detailed answer key is available explaining why both the correct and incorrect answers are as such.

Below is an example if a user selects an incorrect response:

Unit I: 02 - Heart failure
Heart Failure
 Question 1 of 6
 Author(s): Benjamin Lam (University of Ottawa | MD 2024), Nacera Hanzal (University of Ottawa | MD 2023)
Score: 0 / 1

In response to left ventricular dysfunction, compensatory mechanisms kick in. Which of the following is not a compensatory mechanism?

- Increase in heart rate.**
Incorrect because this is a compensatory mechanism which occurs as part of the sympathetic nervous system.
- Decrease in volume.**
Correct because this is NOT a compensatory mechanism that occurs as a result of LV dysfunction. Instead, there is volume expansion due to the effects of ADH.
- Increase in blood pressure.**
Incorrect because this is a compensatory mechanism which occurs as part of the sympathetic nervous system.
- Vasoconstriction.**
Incorrect because this is a compensatory mechanism which occurs as part of the renin-angiotensin system.
- Upregulation of ADH (antidiuretic hormone).**
Incorrect because this is a compensatory mechanism which occurs as a result of LV dysfunction, and results in volume expansion.

← Previous Next →

Total score: 2 / 6

Note that great care has gone into creating a user interface that is similar to what may be seen on the uOttawa online medical school exams, which is also similar to the MCCQE1 interface. Once a quiz is complete, the user will be directed to a summary page as seen below. Users can also compare their score to the average score achieved by all other users who have attempted that particular quiz.

Review of Attempt
 Heart Failure (2023-09-25)

| | | |
|---|--|---|
| Questions answered 6 of 6 100% | Total score 5 of 6 83.33% | Average result among all users 2.5 of 6 41.67% |
|---|--|---|

[Return home](#) [Return to questions menu](#)

If a user were to now return to this same quiz, they would encounter the following page seen below. Here the user can find their previous attempts, review individual attempts and start a new attempt:

- 
-  Dashboard
-  Questions
-  Performance
- Quick settings
-  Français
-  Theme

Heart Failure

Unit I: 02 - Heart failure

6

Questions

Previous attempts

| Status | Score | Date | |
|----------|-----------|------------|-----------------------------|
| Finished | 5/6 (83%) | 2023-09-25 | Review > |

[Start the quiz](#)

[Return to menu](#)

Now let's navigate to the "Performance" tab on the left-hand side of the screen, as seen below. Here the user can get a large-scale overview of their progress through The Ottawa Question Bank and can also begin to learn about potential areas for improvement. In the case below, the user may want to further review GERD and re-attempt the quiz.

- 
-  Dashboard
-  Questions
-  Performance
- Quick settings
-  Français
-  Theme

Performance



Latest quiz attempts

Heart Failure
Unit I: 02 - Heart failure
6 / 6 answered (2023-09-25)

[Review](#)

Gastroesophageal Reflux Disease (GERD)
Unit II: 02 - Esophagus/Stomach
1 / 8 answered (2023-08-16)

[Resume](#)

Hemoglobinopathies (Lecture)
Foundations Unit: 05 - Red blood cells
6 / 6 answered (2023-08-16)

[Review](#)

Finally, let's review other features available to the user.

When attempting a quiz, users will note three icons in the top-right corner: a globe, a moon and a triangle with an exclamation mark embedded within.

1. Clicking on the globe will allow the user to toggle between English and French, as seen below:

Unité I: 02 - Insuffisance cardiaque
Insuffisance cardiaque
Question 1 de 6
Auteur(s) : Benjamin Lam (University of Ottawa | MD 2024), Nacera Hanzal (University of Ottawa | MD 2023)

Score: 0 / 1

En réponse à la dysfonction ventriculaire gauche, les mécanismes compensatoires entrent en jeu. Lequel des éléments suivants n'est pas un mécanisme compensatoire?

- ✘ **Augmentation de la fréquence cardiaque.**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système nerveux sympathique.
- ✔ **Diminution du volume.**
Correct car ce n'est pas un mécanisme compensatoire qui se produit à la suite d'une dysfonctionnement LV. Au lieu de cela, il y a une expansion de volume en raison des effets de l'ADH.
- ✘ **Augmentation de la pression artérielle.**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système nerveux sympathique.
- ✘ **Vasoconstriction.**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système rénine-angiotensine.
- ✘ **Régulation positive de l'ADH (hormone antidiurétique).**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit à la suite d'une dysfonctionnement LV, et entraîne une expansion de volume.

← Précédent Suivant →

Pointage total: 5 / 6

2. Clicking on the moon will change the “theme” from light to dark:

Unité I: 02 - Insuffisance cardiaque
Insuffisance cardiaque
Question 1 de 6
Auteur(s) : Benjamin Lam (University of Ottawa | MD 2024), Nacera Hanzal (University of Ottawa | MD 2023)

Score: 0 / 1

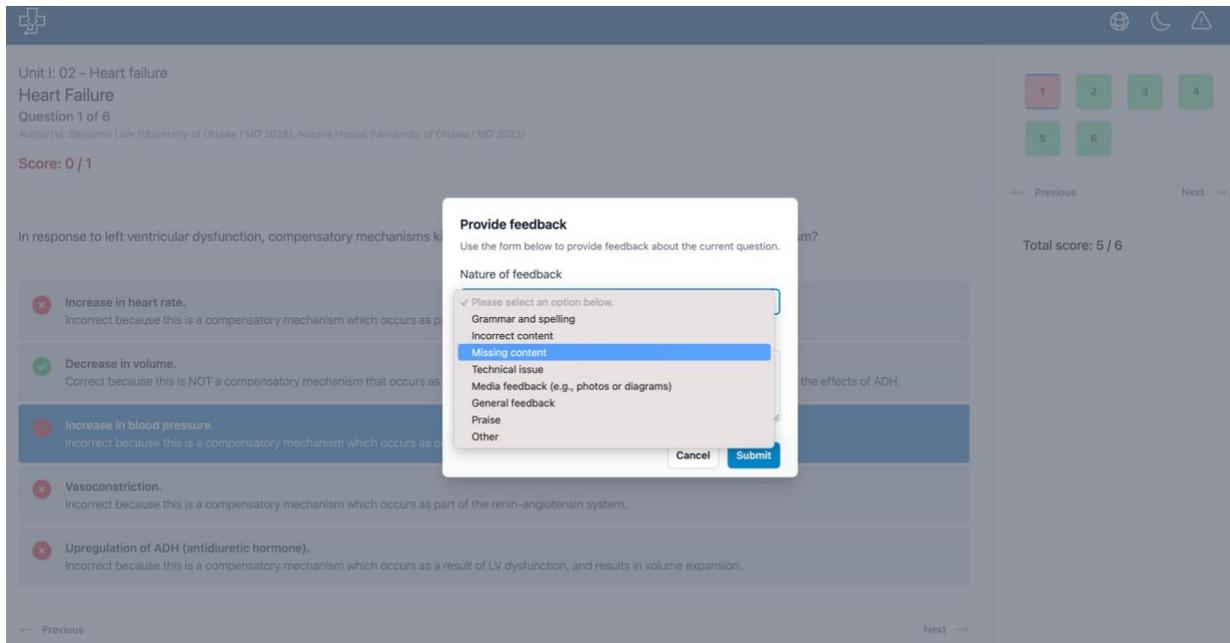
En réponse à la dysfonction ventriculaire gauche, les mécanismes compensatoires entrent en jeu. Lequel des éléments suivants n'est pas un mécanisme compensatoire?

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Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système nerveux sympathique.
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Correct car ce n'est pas un mécanisme compensatoire qui se produit à la suite d'une dysfonctionnement LV. Au lieu de cela, il y a une expansion de volume en raison des effets de l'ADH.
- ✘ **Augmentation de la pression artérielle.**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système nerveux sympathique.
- ✘ **Vasoconstriction.**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit dans le cadre du système rénine-angiotensine.
- ✘ **Régulation positive de l'ADH (hormone antidiurétique).**
Incorrect car il s'agit d'un mécanisme compensatoire qui se produit à la suite d'une dysfonctionnement LV, et entraîne une expansion de volume.

← Précédent Suivant →

Pointage total: 5 / 6

3. Clicking on the triangle allows the user to provide feedback on the selected question. A textbox is also available for the user to provide comments/explanations:



This feature in particular allows the Ottawa Question Bank team to be alerted to any issues and to promptly address them. It is this quality control step integrated within the platform that allows for errors, should they occur, to be addressed ASAP.

New features will continue to be added as we continue to improve The Ottawa Question Bank.

Thank you and good luck!

- *The Ottawa Question Bank Team*