

NURIC

WP 3 Development

T3.1-Develop repository of learning materials

Instruction Manual for Using the Learning Materials

Authors: Fabio D'Agostino, Noemi Giannetta, Ilaria Erba (UniCamillus Team)



Co-funded by
the European Union

Funded by the European Union. The views and opinions expressed are solely those of the author(s) and do not necessarily represent those of the European Education and Culture Executive Agency (EACEA). Neither the European Union or EACEA can be held responsible for them.

Table of Contents

Instruction Manual for the Use of Learning Materials	3
(for Instructors).....	3
Aim of this Document	3
Background.....	3
The Learning Material Spreadsheet.....	3
How to Search for Learning Material.....	3
How to Use the Learning Material for the NURIC Nano Courses.....	5
Tips for Using AI to Generate Case Studies, Quizzes, or Lectures.....	9
References	9

Instruction Manual for the Use of Learning Materials (for Instructors)

Aim of this Document

To provide clear instructions for the use of learning materials to instructors who will teach in the NURIC nano courses.

Background

A repository of Open Educational Resources (OER), specifically learning materials organized by curricula topics/modules as identified for the NURIC nano courses, has been created. These materials primarily include scientific articles, book chapters, lectures, videos, podcasts, and web resources, enabling instructors to select and prepare core teaching materials for blended education. Unfortunately, it was challenging to find case studies or quizzes as OER, so this type of material is mostly absent. However, based on the information provided by these resources, instructors can use free artificial intelligence tools (e.g., ChatGPT, Microsoft Copilot) to create case studies or quizzes for blended education.

The Learning Material Spreadsheet

The Learning Material spreadsheet is available online via Google Drive. It is organized into several columns to catalog the collected material using a unique ID, topic, brief description, webpage link, resource description, material type (e.g., webpage, scientific article, video), source country, language, competence level (e.g., beginner, intermediate), OER status, and year of publication (see Figure 1). This structure is designed to facilitate easier searching for instructors.

How to Search for Learning Material

To search for a specific topic, such as "EHR," instructors can use the following methods:

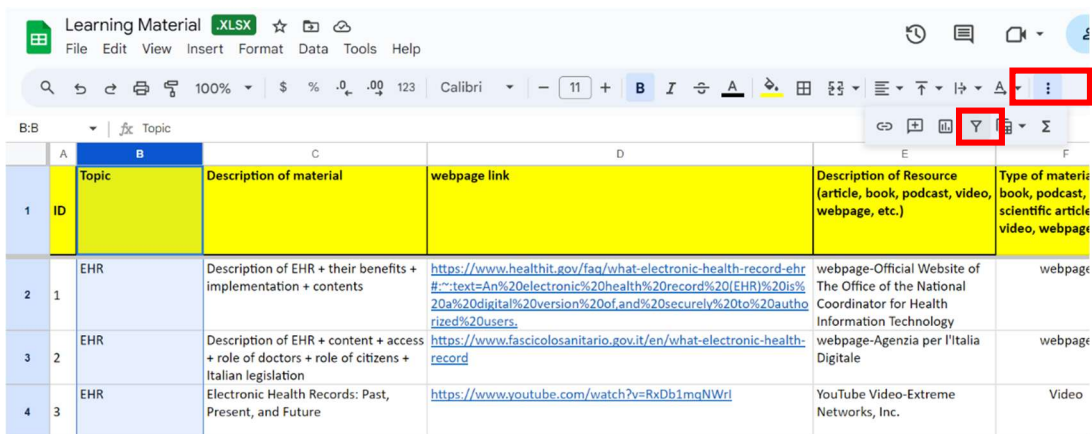
1. Use the "Create a Filter" button in Excel to select the topic of interest (see Figs. 1 and 2).
2. Press CTRL + F on Windows or Cmd + F on MacOS, then type "EHR" (see Fig. 3).



Co-funded by
the European Union

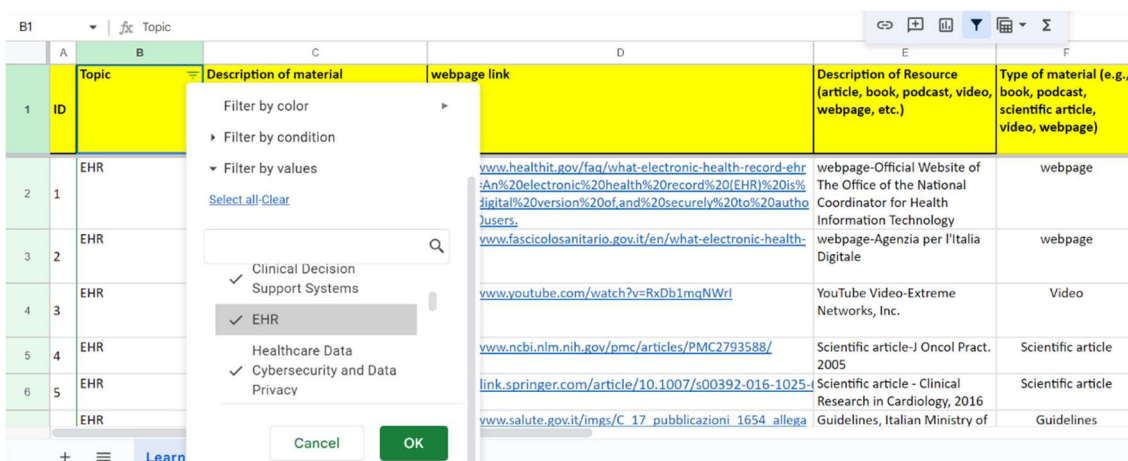
Funded by the European Union. The views and opinions expressed are solely those of the author(s) and do not necessarily represent those of the European Education and Culture Executive Agency (EACEA). Neither the European Union or EACEA can be held responsible for them.

3. Scroll through the document manually to locate the topic of interest.



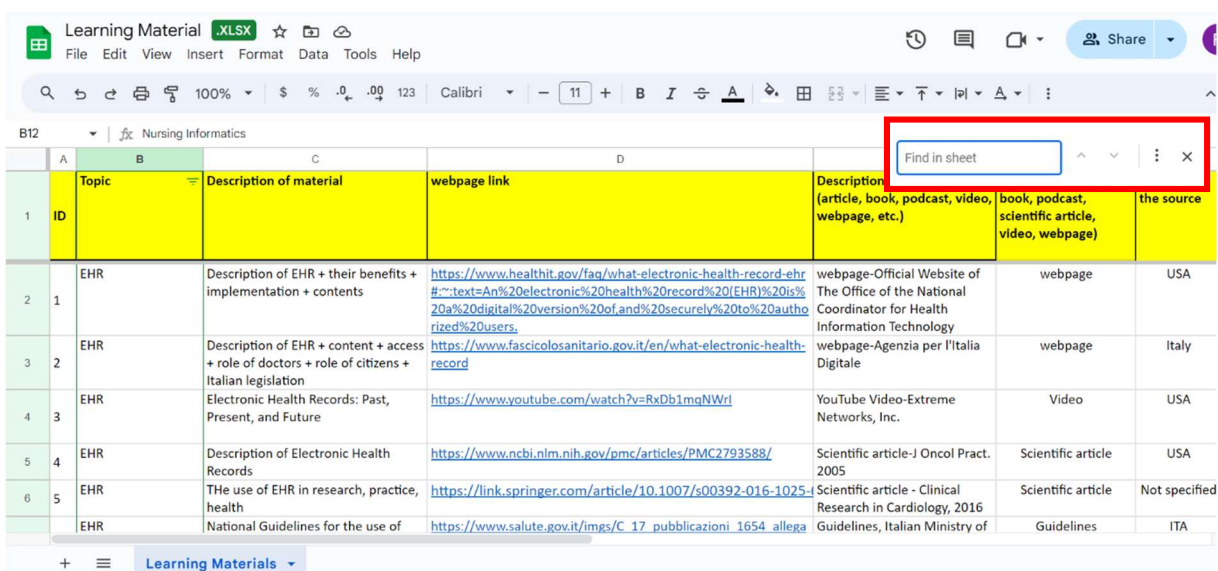
ID	Topic	Description of material	webpage link	Description of Resource (article, book, podcast, video, webpage, etc.)	Type of material (e.g., book, podcast, scientific article, video, webpage)
1	EHR	Description of EHR + their benefits + implementation + contents	https://www.healthit.gov/fag/what-electronic-health-record-ehr#:~:text=An%20electronic%20health%20record%20(EHR)%20is%20a%20digital%20version%20of,and%20securely%20to%20authorized%20users.	webpage-Official Website of The Office of the National Coordinator for Health Information Technology	webpage
2	EHR	Description of EHR + content + access + role of doctors + role of citizens + Italian legislation	https://www.fascicolosanitario.gov.it/en/what-electronic-health-record	webpage-Agenzia per l'Italia Digitale	webpage
3	EHR	Electronic Health Records: Past, Present, and Future	https://www.youtube.com/watch?v=RxDb1mqNWrl	YouTube Video-Extreme Networks, Inc.	Video

Fig. 1. Create a filter



ID	Topic	Description of material	webpage link	Description of Resource (article, book, podcast, video, webpage, etc.)	Type of material (e.g., book, podcast, scientific article, video, webpage)
1	EHR	Description of EHR + their benefits + implementation + contents	https://www.healthit.gov/fag/what-electronic-health-record-ehr#:~:text=An%20electronic%20health%20record%20(EHR)%20is%20a%20digital%20version%20of,and%20securely%20to%20authorized%20users.	webpage-Official Website of The Office of the National Coordinator for Health Information Technology	webpage
2	EHR	Description of EHR + content + access + role of doctors + role of citizens + Italian legislation	https://www.fascicolosanitario.gov.it/en/what-electronic-health-record	webpage-Agenzia per l'Italia Digitale	webpage
3	EHR	Electronic Health Records: Past, Present, and Future	https://www.youtube.com/watch?v=RxDb1mqNWrl	YouTube Video-Extreme Networks, Inc.	Video
4	EHR	Description of Electronic Health Records	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793588/	Scientific article-J Oncol Pract. 2005	Scientific article
5	EHR	THE use of EHR in research, practice, health	https://link.springer.com/article/10.1007/s00392-016-1025-1	Scientific article - Clinical Research in Cardiology, 2016	Scientific article
6	EHR	National Guidelines for the use of	https://www.salute.gov.it/imgs/C_17_pubblicazioni_1654_allega	Guidelines, Italian Ministry of	Guidelines

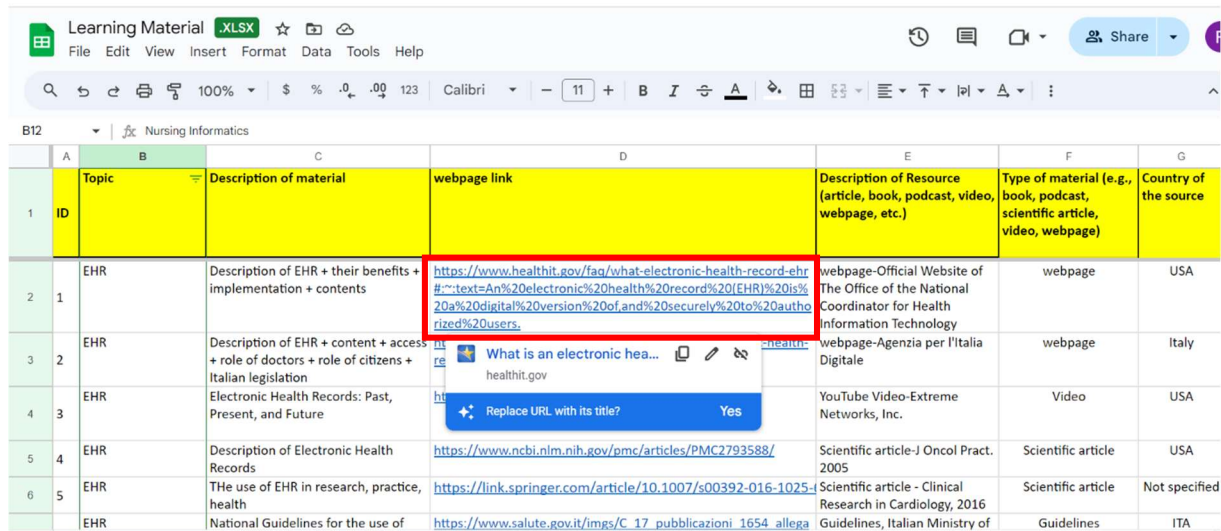
Fig. 2. Select the topic of interest



ID	Topic	Description of material	webpage link	Description of Resource (article, book, podcast, video, webpage, etc.)	book, podcast, scientific article, video, webpage)	the source
1	EHR	Description of EHR + their benefits + implementation + contents	https://www.healthit.gov/fag/what-electronic-health-record-ehr#:~:text=An%20electronic%20health%20record%20(EHR)%20is%20a%20digital%20version%20of,and%20securely%20to%20authorized%20users.	webpage-Official Website of The Office of the National Coordinator for Health Information Technology	webpage	USA
2	EHR	Description of EHR + content + access + role of doctors + role of citizens + Italian legislation	https://www.fascicolosanitario.gov.it/en/what-electronic-health-record	webpage-Agenzia per l'Italia Digitale	webpage	Italy
3	EHR	Electronic Health Records: Past, Present, and Future	https://www.youtube.com/watch?v=RxDb1mqNWrl	YouTube Video-Extreme Networks, Inc.	Video	USA
4	EHR	Description of Electronic Health Records	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793588/	Scientific article-J Oncol Pract. 2005	Scientific article	USA
5	EHR	THE use of EHR in research, practice, health	https://link.springer.com/article/10.1007/s00392-016-1025-1	Scientific article - Clinical Research in Cardiology, 2016	Scientific article	Not specified
6	EHR	National Guidelines for the use of	https://www.salute.gov.it/imgs/C_17_pubblicazioni_1654_allega	Guidelines, Italian Ministry of	Guidelines	ITA

Fig. 3. CTRL + F, keyboard shortcut to search for text within a document.

Once you have identified the topic, click on the corresponding webpage link under the "webpage link" column to access the material (see Fig. 4).



ID	Topic	Description of material	webpage link	Description of Resource (article, book, podcast, video, webpage, etc.)	Type of material (e.g., book, podcast, scientific article, video, webpage)	Country of the source
1	EHR	Description of EHR + their benefits + implementation + contents	https://www.healthit.gov/faq/what-electronic-health-record-ehr#:~:text=An%20electronic%20health%20record%20(EHR)%20is%20a%20digital%20version%20of, and%20securely%20to%20authorized%20users.	webpage-Official Website of The Office of the National Coordinator for Health Information Technology	webpage	USA
2	EHR	Description of EHR + content + access + role of doctors + role of citizens + Italian legislation	https://www.healthit.gov/faq/what-is-an-electronic-health-record-ehr#:~:text=What%20is%20an%20electronic%20health%20record%20(EHR)%20is%20a%20digital%20version%20of, and%20securely%20to%20authorized%20users.	webpage-Agenzia per l'Italia Digitale	webpage	Italy
3	EHR	Electronic Health Records: Past, Present, and Future	https://www.youtube.com/watch?v=...	YouTube Video-Extreme Networks, Inc.	Video	USA
4	EHR	Description of Electronic Health Records	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793588/	Scientific article-J Oncol Pract. 2005	Scientific article	USA
5	EHR	The use of EHR in research, practice, health	https://link.springer.com/article/10.1007/s00392-016-1025-4	Scientific article - Clinical Research in Cardiology, 2016	Scientific article	Not specified
6	EHR	National Guidelines for the use of	https://www.salute.gov.it/imgs/C_17_pubblicazioni_1654_allegato.pdf	Guidelines, Italian Ministry of	Guidelines	ITA

Fig. 4. Webpage link where instructors can access the learning material

How to Use the Learning Material for the NURIC Nano Courses

Instructors can utilize the learning material in various ways. For instance, they might reuse videos or podcasts by assigning them to course participants or use the information from the learning materials to create slides, case studies, or quizzes. The following example demonstrates how to use this material to create a case study and a quiz with free artificial intelligence (AI) tools such as ChatGPT or Microsoft Copilot.

Example of Creating a Case Study on ‘Telehealth and Remote Patient Monitoring’

- 1) To create a case study on ‘Telehealth and Remote Patient Monitoring,’ first select a learning material of interest. For example, you might choose the following webpage: <https://telehealth.hhs.gov/providers/preparing-patients-for-telehealth/telehealth-and-remote-patient-monitoring>. After opening the webpage, select all the text that is relevant for creating a case study. In this example, all the text from the webpage has been selected (see Fig. 5).

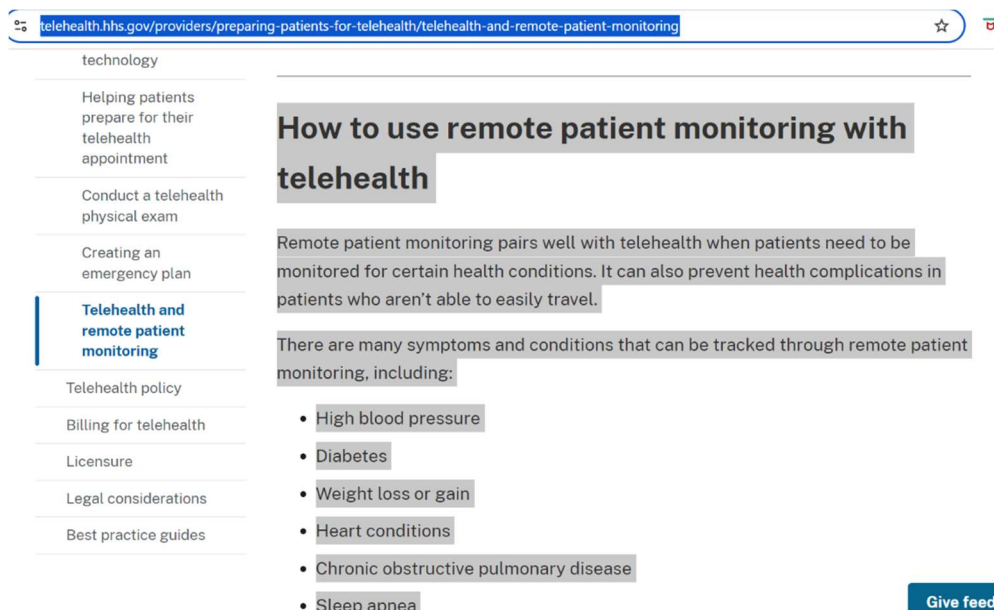


Fig. 5. Selection of the text from the learning material

- 2) Next, paste the selected text into an AI tool, such as ChatGPT, and request that it create a case study for students based on the provided information (see Fig. 6).

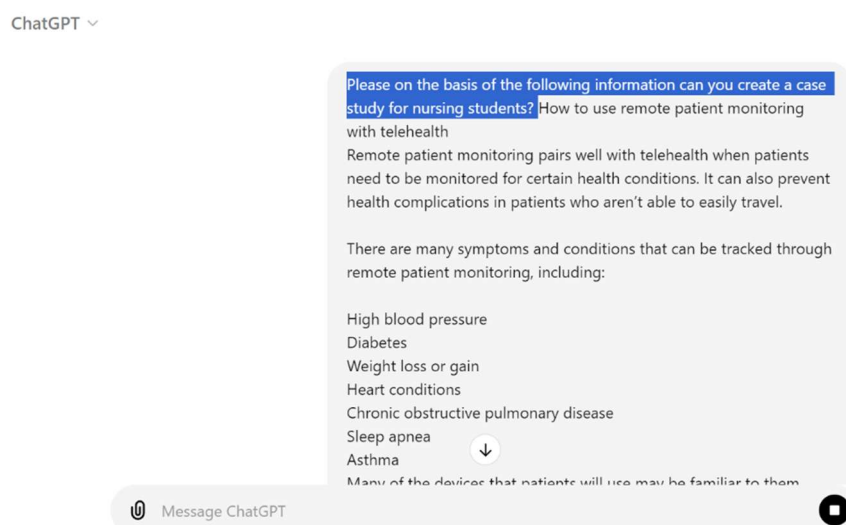


Fig. 6. Asking AI (e.g., ChatGPT) to create a case study

- 3) ChatGPT will generate a case study based on the information, including discussion questions for students (see Fig. 7). Important: The instructor must review the case study for potential inaccuracies and remember that the AI is a tool to assist rather than replace them.

ChatGPT ▾



Case Study for Nursing Students: Integrating Remote Patient Monitoring with Telehealth for Chronic Disease Management

Background:

Nurse Sarah works in a community health clinic serving a population with limited access to healthcare due to geographical barriers. The clinic has recently adopted remote patient monitoring (RPM) and telehealth services to better manage chronic conditions and improve patient outcomes. Nurse Sarah is responsible for educating patients, ensuring proper use of RPM devices, and interpreting the data received.

Patient Scenario:

Mrs. Thompson, a 72-year-old patient with a history of hypertension, type 2 diabetes, and sleep apnea, has been struggling to manage her conditions due to difficulties traveling to the clinic regularly. To help her manage her health more effectively, Nurse Sarah introduces her to RPM devices that will allow her to monitor her blood pressure, blood glucose levels, and oxygen



Message ChatGPT



ChatGPT ▾

Discussion Questions:

1. What role does patient education play in the successful implementation of RPM?
2. How can nurses ensure accurate and consistent data collection from patients using RPM devices?
3. What are the challenges nurses might face when integrating RPM with telehealth, and how can they overcome these challenges?
4. How can nurses use the data from RPM to make informed decisions about patient care?
5. Discuss the ethical considerations of remote monitoring and telehealth, especially in relation to patient privacy and data security.

Conclusion:

This case study illustrates the critical role that nurses play in the successful integration of remote patient monitoring with telehealth. By providing education, support, and continuous monitoring, nurses can help patients manage chronic conditions more effectively, leading to better health outcomes and reduced healthcare costs.



Message ChatGPT



Fig. 7. Case study created by ChatGPT

Example of Creating a Quiz on 'Nursing Informatics'

Imagine you have given a lecture on 'Nursing Informatics' and now want to create a multiple-choice quiz for your students.

- 1) To create a quiz based on the lecture on 'Nursing Informatics,' first select a relevant learning material. For example, you might choose the following webpage: <https://www.himss.org/resources/what-nursing-informatics>. After opening the webpage, select all the text that you consider important for creating the quiz. In this example, all the text from the webpage has been selected (see Fig. 8).



Co-funded by
the European Union

Funded by the European Union. The views and opinions expressed are solely those of the author(s) and do not necessarily represent those of the European Education and Culture Executive Agency (EACEA). Neither the European Union or EACEA can be held responsible for them.

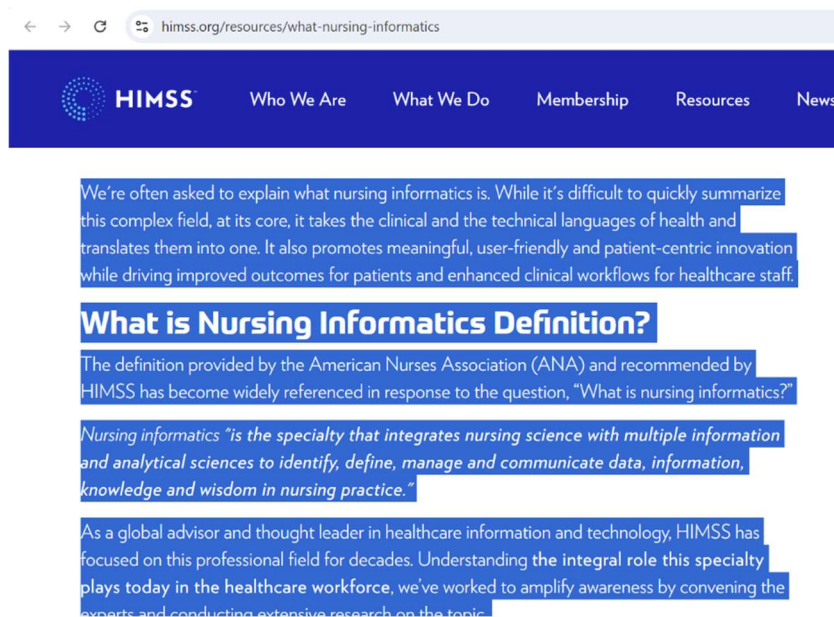


Fig. 8. Selection of the text from the learning material

- 2) Next, you can ask the AI to create a quiz for students based on the text selected and pasted into the AI tool (see Fig. 9).

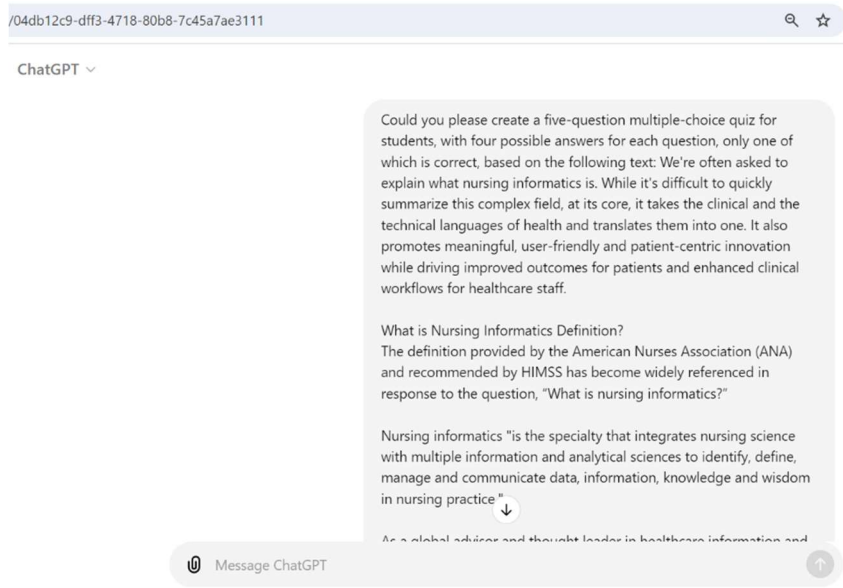


Fig. 9. Asking AI (e.g., ChatGPT) to create a quiz

- 3) ChatGPT will generate a quiz based on the provided information, including highlighting the correct answers (see Fig. 10). Important: The instructor must review the quiz for any potential

inaccuracies and remember that the AI is a tool to assist rather than replace them.

ChatGPT ▾

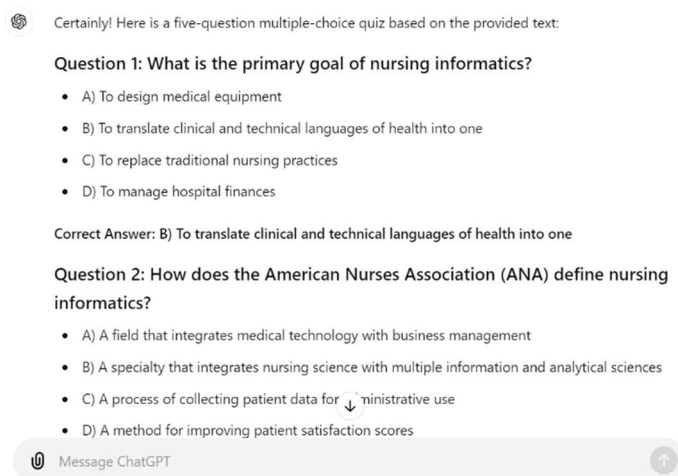


Fig. 10. Quiz created by ChatGPT

Tips for Using AI to Generate Case Studies, Quizzes, or Lectures

- 1) Define clear objectives.
- 2) Provide detailed context.
- 3) Specify question types.

References

- ChatGPT for Teachers: How to use AI in 2024? March 3, 2024. Available at <https://team-gpt.com/blog/chatgpt-for-teachers/>
- Microsoft Copilot <https://www.bing.com/chat?form=NTPCHB>
- OpenAI. ChatGPT. <https://chatgpt.com/>



Co-funded by
the European Union

Funded by the European Union. The views and opinions expressed are solely those of the author(s) and do not necessarily represent those of the European Education and Culture Executive Agency (EACEA). Neither the European Union or EACEA can be held responsible for them.