AI selfie tool assesses cancer survival

LEVEL B1


Photo: Tasha Kostyuk / Unsplash

I. WARM-UP

1. What health clues can a face show, if any?
2. Would you trust AI to help your doctor? Why or why not?
3. Have you tried an app that guesses your age?

II. KEY VOCABULARY

estimate
to guess a number or amount using the best information you have

predict
to say what you think will happen in the future

survival
continuing to live after illness or danger

selfie
a photo of yourself that you take with your phone

radiotherapy
cancer treatment that uses radiation to kill cancer cells

algorithm
a set of rules a computer follows to solve a problem

risk
the chance that something bad may happen

complication
a new problem that makes an illness or treatment harder

III. READING

Doctors at Mass General Brigham in Massachusetts have built an artificial intelligence tool that can estimate a cancer patient's chances of survival from a single selfie. Researchers said it can predict biological age and survival, and could guide care.

The team developed two tools from one model trained on more than 40 million facial photos. FAHR-FaceAge estimates how old a patient looks and links that to survival. FAHR-FaceSurvival predicts survival directly from the photo.

The study reported that people treated with radiotherapy in the US who looked five or more years older had a 21% higher risk of dying over about four years; those who looked five or more years younger had a 17% lower risk.

Scientists added that one algorithm focused on lines near the mouth and forehead, while the other used the area below the eyes. Doctors said the tool might help plan treatment and predict complications after major surgery.

Reading text adapted from reporting by **The Guardian***: "New AI tool can predict cancer survival by...". Original article linked at theenglishwire.com.*

IV. COMPREHENSION QUESTIONS

1. Who developed the AI tool, and where is this organisation based?

2. What are the names of the two tools in the system?

3. How many facial photographs were used to train the model?

4. What did the study find about patients who looked older or younger?

5. How might the tool help doctors, according to the study?

V. DISCUSSION

1. Would you share a selfie for a health test? Why or why not?

2. What benefits and risks do you see with AI in hospitals?

3. Should doctors rely on AI or use it only as support?

4. How would you feel about age estimates based on your face?

VI. GRAMMAR FOCUS

Reported speech

Use a reporting verb (say/said, report) + that + clause to tell what someone said, without quotes. With a past reporting verb, the tense often moves back. For example: "Researchers say it can predict age" becomes "Researchers said it could predict age".

"The team said **FAHR-FaceSurvival predicted survival from one photo.***"*

"Doctors said **the tool might help plan treatment.***"*

VII. GRAMMAR EXERCISE

Complete each sentence in reported speech: put the words in brackets one tense back.

1. Researchers said it (can guide) ___ care. _____
2. The team added that one algorithm (focuses) ___ on mouth lines. _____
3. The team said that the other (uses) ___ the area below the eyes. _____
4. The study said older-looking patients (have) ___ a higher risk. _____
5. They said the model (was trained) ___ on over 40 million photos. _____

Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


Photo: Tasha Kostyuk / Unsplash

I. LESSON GUIDE

- Timing: 8–10 minutes warm-up, 8–10 minutes vocabulary, 12–15 minutes reading and comprehension together, 8–10 minutes grammar, 10–12 minutes discussion.
- Pre-teach or check: selfie, estimate, predict, survival, radiotherapy, algorithm, risk, complication. Highlight the names FAHR-FaceAge and FAHR-FaceSurvival.
- Run the reading in two passes: first skim for who, what, where, and key numbers (40 million; 21%; 17%); then scan for how the two tools differ and how doctors might use them. The topic involves cancer and death; start discussion in pairs and allow students to comment on the news rather than personal experiences.
- Differentiation: stronger students summarise the study's findings in 60–70 words; others match facts to headings (who built it, what it does, key numbers, possible uses).

II. DISCUSSION FACILITATION TIPS

1. Start with a quick show of hands, then pair students to compare reasons before sharing.
2. Board two columns: benefits and risks. Push for concrete examples from the text and life.
3. Set up a mini-debate in pairs: one argues for reliance, the other for support only, then swap.
4. Elicit feelings first, then ask for one practical concern or benefit this could bring.

III. EXTENSION ACTIVITIES

Writing: In pairs, write a 70-word patient leaflet explaining what FAHR-FaceAge and FAHR-FaceSurvival do.

Role-play: In pairs, a doctor explains the tool to a patient deciding on surgery; perform a 2-minute dialogue.

IV. ANSWER KEY OVERVIEW

Comprehension questions: short factual answers from the text.

Grammar exercise: Reported speech

Discussion: open-ended. Accept any reasonable ideas supported by examples and reasoning.

Answer Key

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IV. COMPREHENSION QUESTIONS

1. Who developed the AI tool, and where is this organisation based?
   Experts at Mass General Brigham in Massachusetts developed it.
2. What are the names of the two tools in the system?
   FAHR-FaceAge and FAHR-FaceSurvival.
3. How many facial photographs were used to train the model?
   More than 40 million photographs.
4. What did the study find about patients who looked older or younger?
   Looking five years older meant a 21% higher risk; five years younger, a 17% lower risk.
5. How might the tool help doctors, according to the study?
   By planning treatment and predicting risks and complications.

V. DISCUSSION

Open answers. Accept any reasonable ideas supported by examples and reasoning.

VI. GRAMMAR FOCUS

Key point: Use a reporting verb (say/said, report) + that + clause to tell what someone said, without quotes. With a past reporting verb, the tense often moves back. For example: "Researchers say it can predict age" becomes "Researchers said it could predict age". (Example 1 constructed.)

"The team said **FAHR-FaceSurvival predicted survival from one photo.**"

"Doctors said **the tool might help plan treatment.**"

VII. GRAMMAR EXERCISE

Complete each sentence in reported speech: put the words in brackets one tense back.

1. Researchers said it ___ care. **could guide**
2. The team added that one algorithm ___ on mouth lines. **focused**
3. The team said that the other ___ the area below the eyes. **used**
4. The study said older-looking patients ___ a higher risk. **had**
5. They said the model ___ on over 40 million photos. **had been trained**