

# Data Dictionary: Multinational attitudes towards artificial intelligence in healthcare and diagnostics among hospital patients

## Column Names

Column Name	Description
Institution	The name of the participating institution
City	The city where the participating institution is located.
Country	The country where the participating institution is located.
Discipline	The specific department where the questionnaire was distributed.
Language of Questionnaire	The language in which the questionnaire was administered.
Global North/South	Indicator of whether the participating institution is in the Global North or South.
Continent	The continent where the participating institution is located.
Patient ID	Unique identifier for each questionnaire, numerically increasing.
Gender	The self-identified gender of the patient. Options: 'male', 'female', 'diverse'.
Age	The patient's age in years (numeric).
Education	The highest level of education attained by the patient. Options: 'Elementary School', 'Middle School', 'High School', 'University'.*
Smartphone Usage	Indicates if the patient used a smartphone in the last week.
PC/Laptop Usage	Indicates if the patient used a PC or laptop in the last week.
Game Console Usage	Indicates if the patient used a game console in the last week.
Tablet Usage	Indicates if the patient used a tablet PC in the last week.
E-Reader Usage	Indicates if the patient used an e-reader (e.g., Kindle) in the last week.
Smartwatch Usage	Indicates if the patient used a smartwatch in the last week.
Health Status	The patient's self-reported health status. Options: 'Very Poor', 'Poor', 'Sufficient', 'Good', 'Very Good'
AI Knowledge	The patient's self-reported knowledge about AI. Options: 'No Knowledge', 'Little Knowledge', 'Good Knowledge', 'Expert'.
Q1-Q20	Specific question items (refer to the questionnaire details below).

\*Note: Educational systems and names of educational stages vary between countries. The questionnaire was adapted accordingly in each country to closely match this four-tier educational system.

Missing data is marked with NA in the entire dataset.

## Questions

### Q1: What are your general views on the use of artificial intelligence (AI) in medicine?

Levels:

- 1: "Extremely negative"
- 2: "Rather negative"
- 3: "Neutral"

- 4: "Rather positive"
- 5: "Extremely positive"

**Q2: Artificial intelligence (AI) should be increasingly used in the healthcare sector.**

Levels:

- 1: "Completely disagree"
- 2: "Tend to disagree"
- 3: "Neutral"
- 4: "Tend to agree"
- 5: "Agree completely"

**Q3: How much confidence do you have that AI can improve healthcare?**

Levels:

- 1: "Very little"
- 2: "Little"
- 3: "Medium"
- 4: "Much"
- 5: "Very much"

**Q4: How much do you trust an AI to provide reliable information about your health?**

Levels:

- 1: "Very little"
- 2: "Little"
- 3: "Medium"
- 4: "Much"
- 5: "Very much"

**Q5: How much do you trust an AI to provide accurate information about your diagnosis?**

Levels:

- 1: "Very little"
- 2: "Little"
- 3: "Medium"
- 4: "Much"
- 5: "Very much"

**Q6: How much do you trust an AI to provide accurate information about your response to therapy?**

Levels:

- 1: "Very little"
- 2: "Little"
- 3: "Medium"
- 4: "Much"
- 5: "Very much"

**Q7: Which of the following statements about a potential application of AI in medicine do you most likely agree with?**

Levels:

- 1: "Use also for severe diseases"
- 2: "Use also for moderately severe diseases"
- 3: "Use only for minor illnesses"
- 4: "No use of AI independent of the disease"

**Q8: I would trust a highly accurate AI to make a vital decision for me.**

Levels:

- 1: "Completely disagree"
- 2: "Tend to disagree"
- 3: "Neutral"

- 4: "Tend to agree"
- 5: "Agree completely"

**Q9: How would you rate it if a certified AI software analyzes X-ray images?**

Levels:

- 1: "Extremely negative"
- 2: "Rather negative"
- 3: "Neutral"
- 4: "Rather positive"
- 5: "Extremely positive"

**Q10: How would you rate it if a certified AI software diagnoses cancer?**

Levels:

- 1: "Extremely negative"
- 2: "Rather negative"
- 3: "Neutral"
- 4: "Rather positive"
- 5: "Extremely positive"

**Q11: How would you rate it if a certified AI software would be available to doctors as a second opinion?**

Levels:

- 1: "Extremely negative"
- 2: "Rather negative"
- 3: "Neutral"
- 4: "Rather positive"
- 5: "Extremely positive"

**Q12: Suppose an AI makes a diagnosis. What would you prefer?**

Levels:

- 1: "A higher accuracy, the decision path however, is not comprehensible."
- 2: "A high degree of accuracy, the decision path is clearly comprehensible."

**Q13: Suppose an AI makes a diagnosis. What would you prefer?**

Levels:

- 1: "The AI almost never gives a false alarm, but sometimes misses a diagnosis."
- 2: "The AI gives a false alarm about as often as it misses a diagnosis."
- 3: "The AI misses almost no diagnosis, but often gives a false alarm."

**Q14: Suppose an AI has about the same accuracy as doctors. Which situation for a diagnosis would you prefer?**

Levels:

- 1: "Physicians make the diagnosis alone." 2: "AI & physicians make the diagnosis together. Doctors make the final decision."
- 3: "AI & physicians make the diagnosis together. Both have equal authority."
- 4: "AI & physicians make the diagnosis together. The AI makes the final decision." 5: "AI makes the diagnosis alone."

**Q15: What do you think of healthcare facilities (clinics, practices) using AI software to aid in diagnosis?**

Levels:

- 1: "Extremely negative"
- 2: "Rather negative"
- 3: "Neutral"
- 4: "Rather positive"
- 5: "Extremely positive"

**Q16: Would you prefer to visit healthcare facilities that use AI software?**

Levels:

- 1: "Always prefer facilities without AI."
- 2: "Tend to prefer facilities without AI."
- 3: "Rather prefer facilities with AI."
- 4: "Always prefer facilities with AI."

**Q17: How concerned are you about AI compromising the protection of your personal data?**

Levels:

- 1: "Very worried"
- 2: "Somewhat concerned"
- 3: "Neutral"
- 4: "Rather unconcerned"
- 5: "Unconcerned"

**Q18: How concerned are you that the use of AI will reduce the contact between physicians and patients?**

Levels:

- 1: "Very worried"
- 2: "Somewhat concerned"
- 3: "Neutral"
- 4: "Rather unconcerned"
- 5: "Unconcerned"

**Q19: How concerned are you that AI could replace doctors in the future?**

Levels:

- 1: "Very worried"
- 2: "Somewhat concerned"
- 3: "Neutral"
- 4: "Rather unconcerned"
- 5: "Unconcerned"

**Q20: How concerned are you that the use of AI will lead to higher healthcare costs?**

Levels:

- 1: "Very worried"
- 2: "Somewhat concerned"
- 3: "Neutral"
- 4: "Rather unconcerned"
- 5: "Unconcerned"