

Ethical Use of Artificial Intelligence in Health Professions Education: AMEE Guide No.158
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Several ethical considerations in the use of artificial intelligence (AI) in health professions education (HPE):

1. Excessive Data Gathering

The use of AI in HPE increases significantly the scope of data collection. Data that was previously considered as noise may now be found relevant. Apophenia, finding bogus relationships between random items, may occur with excessive data gathering.

2. Anonymity and Privacy

The collection of vast amounts of student data along with open science practices increases risks to student anonymity and privacy as widespread data integration may make re-identification possible.

3. Consent and Data Ownership, and Security

Incorporating AI in education raises the need for affirming students' rights to control their personal and academic data and measures to protect from database breaches.

4. Bias and Transparency

Demographic disparities or inherent stereotypes incorporated in AI algorithms can perpetuate biases. In addition, algorithm transparency is not always guaranteed as "black boxes" exists (ie the input and output are known but the decision-making process is not known to users or even to the developers).

5. Responsibility and Autonomy

Although AI can make predictions, reliance on AI recommendations can compromise the autonomy of educators and students.

6. Beneficence

Relevant to student data ownership, HPE institutions should acknowledge and retribute the students for providing data that drive course improvements and subsequent increase in institutional revenue (akin to social media using personal data to drive corporate revenue).

Action items for HPE institutions:

1. Creation of education ethics committee

Like Research Ethics Boards, education ethics boards will oversee the ethical use of student data in AI-enhanced education.

2. Education of research ethics committee about AI

Members of the research ethics committee must be educated on the ramifications and impact of AI on research, to ensure they can make informed decisions and take appropriate actions.

3. Appointment of a Chief AI Ethics Officer

Education institutions should appoint a Chief AI Ethics Officer to oversee AI ethics and help guide policies relating to use of AI in education and research.