



Ethical Considerations for AI in Medicine

Key points to ensure ethical and equitable use
of AI technologies in healthcare



Privacy and Confidentiality

Data Security: Ensure secure storage and transmission of patient data to protect against unauthorized access and breaches.

Informed Consent: Patients should be aware that their data may be used for AI purposes and give consent for its use.



Bias and Fairness

Algorithmic Bias: AI systems can inherit biases from training data, leading to unequal treatment. Ensure datasets are representative and algorithms are tested for bias.

Equitable Access: Ensure AI technologies are accessible to all segments of the population and do not exacerbate healthcare disparities.

Accountability and Liability

Responsibility: Determine who is responsible when an AI system makes an error – developers, healthcare providers, or institutions.

Regulation and Oversight: Establish regulatory frameworks to ensure AI systems are developed and used responsibly, with regular audits and evaluations.





Patient Autonomy

Decision-Making: AI should support, not replace, clinical decision-making. Patients should make informed choices about their care.

Human Oversight: Ensure healthcare professionals retain the final say in clinical decisions, with AI as a supportive tool.



Beneficence and Non-Maleficence

Clinical Validation: AI systems should be validated through clinical trials to ensure they provide accurate and beneficial recommendations.

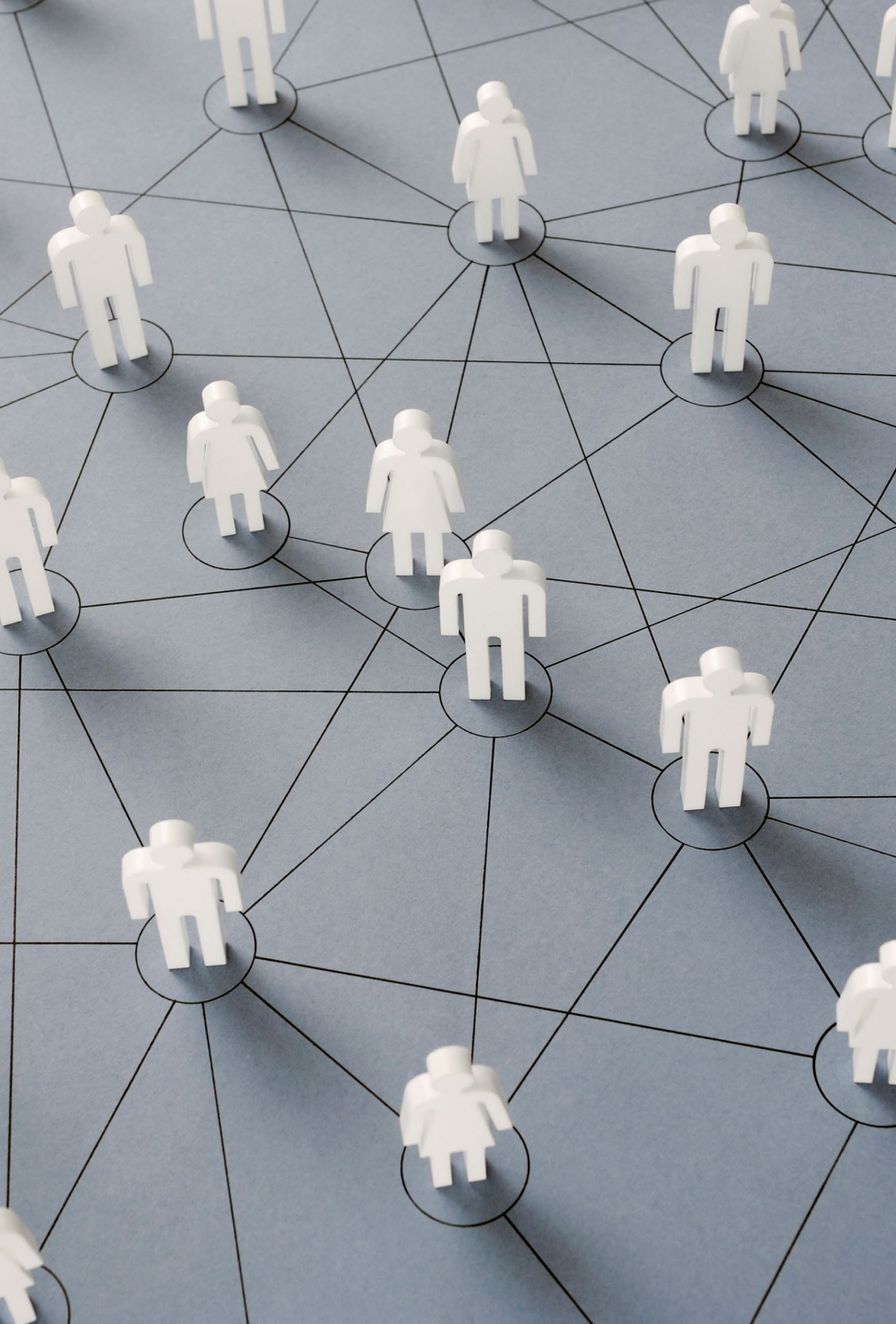
Harm Prevention: Monitor for potential adverse effects of AI applications and mitigate any harm that may arise.



Professional Integrity and Trust

Maintaining Trust: Over reliance on AI may erode the trust between patients and healthcare providers.

Professional Training: Educate healthcare providers about AI technologies to integrate them effectively and address ethical concerns.



Economic and Social Impact

Job Displacement: Address the potential impact of AI on healthcare jobs and ensure a just transition for affected workers.

Cost and Resource Allocation: Balance the costs of implementing AI technologies with their potential benefits, ensuring efficient and equitable resource use.

Group discussion

1. Privacy and Confidentiality: data security and informed consent
2. Bias and Fairness: algorithmic bias and equitable access
3. Accountability and Liability: responsibility and regulation
4. Patient Autonomy: decision-making and oversight
5. Beneficence and Non-Maleficence: clinical validation and harm prevention
6. Professional Integrity and Trust: maintaining trust and professional training
7. Economic and Social Impact: job displacement and resource allocation

Questions to discuss:

- Which point is the most important for your situation? And Why?
- What can you do to avoid ethical conflicts and improve the situation?