

BONUS

Policy Guideline: Ethical AI Use in Healthcare

As artificial intelligence (AI) becomes more integrated into medical decision-making, it is essential to establish clear ethical guidelines that protect patients, ensure fairness, and build public trust.

1. Patient Consent Protocols

Patients must be fully informed about how AI is used in their care. The following steps should be followed:

Informed Consent: Before using any AI-based diagnostic or treatment tool, patients must receive clear, plain-language information about:

- How the AI works

- What data will be collected and used

- Who has access to the data

- The role of AI in diagnosis or treatment decisions

Right to Opt-Out: Patients must have the right to decline AI-assisted care without compromising the quality of alternative care they receive.

Data Usage Agreements: Explicit patient consent must be obtained before using their health data to train or improve AI systems.

2. Bias Mitigation Strategies

Bias in AI can lead to unequal treatment outcomes across different populations. To prevent this:

Diverse Training Data: Ensure training datasets reflect diversity in age, gender, ethnicity, and socioeconomic backgrounds to reduce underrepresentation.

Pre-deployment Audits: Conduct bias testing before deploying AI tools. Use fairness metrics such as:

- Disparate impact

- Equal opportunity difference

- False positive rate disparity

Continuous Monitoring: Regularly audit AI performance across demographic

groups during real-world use to detect emerging biases.

Bias Correction Techniques: Apply fairness-aware machine learning methods like reweighing, adversarial debiasing, or post-processing adjustments.

3. Transparency Requirements

Transparency is key to accountability and trust in AI-driven healthcare.

Explainable AI Models: Where possible, use models that provide interpretable results so clinicians understand how decisions are made.

Public Reporting: Share details on:

Model training data sources

Performance accuracy across subgroups

Limitations and potential risks

Clinician Awareness: Doctors and nurses must be trained to interpret AI outputs and understand their limitations.

Regulatory Oversight: Encourage regulatory bodies to require transparency reports and third-party validation for all high-risk AI systems in healthcare.

Summary

This guideline ensures that AI in healthcare is developed and used ethically, with respect for patient rights, fairness, and openness. By embedding these principles into practice, we can create AI tools that are not only effective but also trustworthy and inclusive.