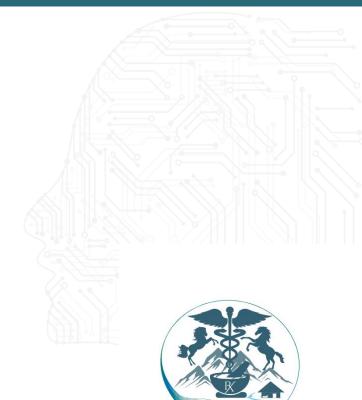


Ensuring Quality and Safety in Al-Driven Health Practices

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The Roles of Regulators in Shaping the Future of Healthcare



ANNUAL CONFERENCE

ASSOCIATION OF MEDICAL COUNCILS OF AFRICA

REGULATION IN THE ERA OF ARTIFICIAL INTELLIGENCE

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Definitions

Artificial intelligence

It refers to the capacity given to machines by humans to memorize and learn from experience, to think and create, to speak, to judge and make decisions, an umbrella term to describe the application of machine learning algorithms and other cognitive technologies in medical settings.

Quality

The degree of excellence of something, a higher degree of it.

Safe, effective, person-centred, timely, efficient and equitable.

Safety

A state of being safe; freedom from the occurrence or risk of injury, danger or loss





Introduction

- Importance of AI in healthcare
- 1. Disease diagnosis
- 2. Telemedicine
- 3. Electronic health records
- 4. Drug interactions
- Rapid advancements and adoption rates
- Potential benefits and risks







Regulatory Framework Overview

- Current regulatory landscape in healthcare
- Gaps in addressing Al-driven practices
- Need for specific guidelines and standards









Challenges in Al-Driven Health Practices

- Lack of transparency in algorithms
 Algorithmic bias.
- Data privacy and security concerns
- Compromise the protection of patients' rights, such as the right to informed consent and the right to medical data protection
- Ethical considerations in decision-making
- Data collection; a lot of data has to collected for us to be able to use AI (a robust AI, for improvement of a system and for informed decision making)
- Bias; Al decisions are based on the data it receives as input, companies (hospitals) can wrongly code patients algorithms for financial gain rather than providing optimal care.





Ensuring Quality Standards

Definition of quality in AI applications

Trusted data, right expertise to address the unique needs of healthcare.

Importance of accuracy, reliability, and efficacy

Al systems can analyze patterns in a patient's medical history and current health data to predict potential health risks.

- Case studies of successful regulatory interventions
- 1. Addressing social risk factors
- 2. Reducing strokes
- 3. Improving diabetes care
- 4. Enhancing routine care





Ensuring Safety Standards

- Risks associated with AI errors in healthcare
- Examples of past incidents and their impact
- Strategies for mitigating safety risks





Roles of Regulators

- Establishing clear guidelines and standards
- Collaborating with industry experts and stakeholders
- Monitoring compliance and enforcement measures





Ethical Considerations

- Fairness and bias in AI algorithms
- Ensuring inclusivity and equity in healthcare access
- Addressing concerns about AI replacing human judgment







International Collaborations

- Harmonizing standards across borders
- Sharing best practices and lessons learned
- Building global trust in Al-driven healthcare innovations





Conclusion

- Recap of the importance of regulatory oversight
- Call to action for stakeholders and policymakers
- Vision for a safe, effective, and ethical Al-driven healthcare future





Thank You



