Healthcare in the Age of Artificial Intelligence

AI-assisted surgeries, patient monitoring systems, drug discovery and development, medical imaging, and many other trends in healthcare are a result of the successful intersection between the AI and medical setting. Da Vinci Surgical System, IBM's Watson Health, and Google's DeepMind Health enable humans to make appropriate decisions when diagnosing or operating on an individual. These systems make natural language or pattern recognition-based decisions. AI has evolved to support and assist humans in the various domains of healthcare but it is not capable to take over humans. Systemic biases, IT data privacy, and security, black-box decision-making are major risks involved. Currently, no framework or harmonized standards are established that regulate the use of AI in medical devices. Furthermore, AI can only assist in making decisions and rely heavily on data sets and patient data available. These data sets are categorized into corpora which would be used by tools like 'Watson health' to make decisions about medication or patient condition. There are no predefined rules for feature extraction of the aggregated corpora. Unique protocols for drug naming and feature extraction should be done. Hence, it could be concluded that AI can only make a beneficiary contribution in treating patients and improving healthcare.