The promise of AI: transforming health systems from reactive to predictive, preventative and high performing

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Data and digital technology are increasing the potential for AI to transform all sectors, including health. AI offers unprecedented opportunities to redesign health systems from being reactive, to being predictive, preventative and better able to deliver coordinated care. It offers potential to over come health system weaknesses, including shortages of professionals. Although the impact of AI is only beginning, success stories already suggest it can greatly improve healthcare. However, a number of challenges threaten successful initiatives. For example, AI must incorporate into existing systems instead of creating parallel systems, and use person-centered designs and local context. At the same time, significant investment is required to curate available data or integrate unstructured data. Moreover, because most algorithms rely on retrospective data- not validated in real-world settings- some suggest AI is more hype than science. In addition, stakeholders must develop clear rules on data privacy, ethics, security, safety, fairness, transparency and accountability. Moreover, regulatory systems must adapt to deal with the auto-didactic evolutionary nature of AI algorithms. Digitalization has already begun revolutionizing health sectors in low- and middle-income countries. Now, increasing mobile phone penetration, broadband coverage and the digitalization of health information is setting the stage for AI to expand in low income settings.