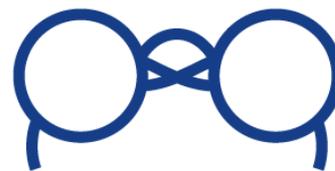


In focus

Healthy London Partnership



Thinking on its own: AI in the NHS

31 January 2018 – Source: Reform

Reform has released a new report on the current and future applications of artificial intelligence (AI) in the NHS. [*Thinking on its own: AI in the NHS*](#) offers insight into possible applications for AI in the NHS and barriers to its use.

Summary

The report sets out recommendations for a policy framework for the regulation of AI application and to monitor its use. It bases its view on responses garnered from interviews with around 35 industry experts. There are 16 specific recommendations, in three areas. Reform says these would tackle the various challenges surrounding the application and uptake of AI in the healthcare landscape.

Key challenges identified

1. Improving buy-in

It is vital to overcome concerns of data security and data sharing between NHS and external organisations and build public confidence in the use of AI applications.

2. Data quality and consistency

AI algorithms depend on the accuracy and fairness of the data they are being fed. The NHS must ensure that the data collected is based on open standards, that it is formatted consistently and to a high quality and there is secure access to relevant users.

3. Ethical and legal concerns

The NHS must develop a robust ethical and legal framework to regulate the use of AI and its inherent biases. It should develop an engagement platform for the various agencies involved to reap the long-term benefit of the use of NHS data in AI development.

There are specific recommendations set out involving NHS England, The National Institute for Health and Care Excellence (NICE), Medicines and Healthcare Products Regulatory Agency (MHRA), NHS digital policy frameworks and reviews to address the challenges.

Potential for AI in the NHS

AI in the NHS could support the three gaps outlined in the [NHS Five Year Forward View](#).

Health and wellbeing gap

AI could predict individuals at risk of illness and allow the NHS to target treatment more effectively:

- Health promotion: use of external apps and wearables to feed into AI.
- Prevention: better links in comorbidities to deliver preventative interventions.

Care and quality gap

AI could standardise high-quality care and reduce variation in the quality of decision making while offering personalised care universally:

- Augmenting cognitive capacities: Improved access to relevant research/guidance.
- Improved diagnostics: greater accuracy of interpretation through AI.
- Treatment: tailored and precise treatment options through smart applications.

Efficiency and funding gap

AI could address system inefficiencies, reduce costs and improve outcomes:

- Right intervention at the right time: AI applications and triage for trauma patients.
- Freeing up administrative time through automation: AI could free up staff time.
- Chronic disease management and self-care: Service transformation through integrated use of AI.



Read the full report on Reform's website:

<http://www.reform.uk/publication/thinking-on-its-own-ai-in-the-nhs>