VIEWS AND REVIEWS

PRIMARY COLOUR

Helen Salisbury: Prestidigitation

Helen Salisbury GP

Oxford

This week Matt Hancock, secretary of state for health and social care, welcomed the introduction of the Medicines and Medical Devices Bill, tweeting a *Daily Express* headline that proclaimed, “NHS red tape slashed to boost patient care.” While I’d hate to be branded a Luddite, I admit to scepticism when it comes to medicine’s digital revolution. In the rush to approve new devices and apps, who defines what is red tape and what is due diligence?

Some patients are keen to take control of their health and to avoid bothering their GP, especially as they’re constantly reminded about how hard it is to get an appointment. So, it seems logical and responsible to use all available tools, which might include an online symptom checker or a smartphone app to analyse a photo of a funny looking mole.

This would be sensible if the technology was good enough, but we have steadily accumulating evidence that the algorithms aren’t yet up to the job. October 2019 saw a flurry of comments about a symptom checker app that had concluded that a 60 year old man with chest pain was having a heart attack but that a 60 year old woman with identical symptoms was having a panic attack.¹ Multiple examples of bizarre and unlikely conclusions have been demonstrated, including lower leg pain and breathlessness being diagnosed as a Charcot’s joint and asthma. Recently, *The BMJ* published a systematic review of AI based skin checking apps currently available to the public, which found that they were dangerously inaccurate² and inadequately regulated.³

AI may seem like magic: you feed data and results into a black box and it spots previously unseen patterns, allowing it to make predictions from new information. Although in the future we may come to rely on such technical achievements, what’s

currently available seems to have been rushed to the market with inadequate testing or regulation. The datasets used in machine learning pose a particular problem, with a well recognised risk of AI compounding racial bias and prejudice.⁴

My concern is that the current digital offer is not real wizardry but something more akin to prestidigitation—a conjuring trick. The word suggests that the art of stage magic lies in the speed with which you can move your digits, but in reality it’s all about misdirecting attention. Perhaps we could ask Matt Hancock to stop trying to distract us with new technology and to concentrate on the real and deadly problems facing our NHS. While ever increasing numbers of seriously ill patients languish on trolleys in emergency departments,⁵ where is Hancock’s promised plan for social care? Has he even planted the magic nurse and GP tree?

Competing interests: See www.bmj.com/about-bmj/freelance-contributors.

Provenance and peer review: Commissioned; not externally peer reviewed.

- 1 Das S. It’s hysteria, not a heart attack, GP app Babylon tells women. *Sunday Times* 2019 Oct 13. <https://www.thetimes.co.uk/article/its-hysteria-not-a-heart-attack-gp-app-tells-women-gm2vxbqk>.
- 2 Freeman K, Dinnes J, Chuchu N, et al. Algorithm based smartphone apps to assess risk of skin cancer in adults: systematic review of diagnostic accuracy studies. *BMJ* 2020;368:m127. 10.1136/bmj.m127 32041693
- 3 Morley J, Floridi L, Goldacre B. The poor performance of apps assessing skin cancer risk. *BMJ* 2020;368:m428. 10.1136/bmj.m428 32048610
- 4 Noor P. Can we trust AI not to further embed racial bias and prejudice? *BMJ* 2020;368:m363. 10.1136/bmj.m363 32051165
- 5 Davies J, Morris J. Combined performance summary: December 2019-January 2020. Nuffield Trust. 13 Feb 2020. <https://www.nuffieldtrust.org.uk/news-item/combined-performance-summary-december-2019-january-2020>.

Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to <http://group.bmj.com/group/rights-licensing/permissions>