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TAKING STOCK

Rammya Mathew: Could artificial intelligence be the key to transforming general practice?

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In the recent budget Jeremy Hunt, chancellor of the exchequer, announced £3.4bn of additional capital investment for the NHS, with emphasis on using this to improve technology and enable digital transformation across the health service. There's clearly an ambition to increase automation and to use machine learning and artificial intelligence (AI) to improve diagnosis and personalise treatments. The hope is that this will substantially increase productivity in an ailing NHS.

I've been considering what automation will look like in general practice. I don't see our role as GPs being taken over by bots any time soon, not only because the technology isn't sufficiently developed but because general practice is almost entirely relational. Patients come to see us because they want to feel heard and cared for, and they trust us as their family doctor. I think that this will continue to be the case even if machines can theoretically beat us on intelligence.

But I also recognise that triage in general practice has become more complex in recent years and could potentially be improved with AI support. Our reception teams have to determine who needs an appointment face to face and who can receive care over the phone; who can see any doctor and who needs to see their own named doctor; who needs a longer appointment than the standard 10 minutes; and, indeed, who needs to see a GP at all. Effective triage is becoming even more important as the general practice workforce adapts to include a wider variety of healthcare professionals—most of whom have a narrower scope of practice than GPs and can't see and assess all patients.

At present I hear a lot of frustration from patients when they believe that they've been wrongly assigned to see a healthcare professional who's not a GP, as this can lead to duplicate appointments and delays in care. Our reception teams do a stellar job given the circumstances, but they're often triaging using crude and oversimplified rules, and patients don't always end up being allocated the most appropriate clinician.

We urgently need a more sophisticated approach to triage if we're to improve efficiency in general practice, fully utilise the wider team, and direct the appropriate patients to other services such as Pharmacy First or the minor ailments scheme, which otherwise risk being underused. The healthcare system is complex, and helping patients get care from the right place and from the right person is something we've failed to achieve so far: you only have to look at emergency department attendances to see this.[1]

Even if we can teach a machine to triage better than administrative staff, doctors, and patients themselves, we still need to foster trust in emerging technology, and this can be done only through a process of co-production that's transparent and inclusive.[2] I believe that this is our best shot at improving productivity in frontline services. Implemented alongside workforce expansion, I'm hopeful that it will finally allow us to stop pitting access against continuity of care—instead addressing both these issues simultaneously, to positively transform patient experience in general practice.

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1 Ismail SA, Gibbons DC, Gnani S. Reducing inappropriate accident and emergency department attendances: a systematic review of primary care service interventions. *Br J Gen Pract* 2013;63:-20. doi: 10.3399/bjgp13X675395. https://bjgp.org/content/63/617/e813. pmid: 24351497

2 Rosen R. How is technology changing clinician-patient relationships? *BMJ* 2024;384:. https://www.bmj.com/content/384/bmj.q574. doi: 10.1136/bmj.q574 pmid: 38458641