

Surely AI couldn't be the key to patient-centred care. Could it ...?

Thoughts from James Crawford, business transformation practitioner, written for Katalyst Communications.



I recently presented the opportunities of AI to a diverse group of NHS, healthcare and industry colleagues in the UK. We explored how Generative AI could be useful in health and social care and started to talk through the implications for patients, families and organisations. Tackling long-standing challenges and making the system more accessible to patients is a preoccupation for us all. So how could AI help us to deliver better, more patient-centred services?

AI in patient communication and support

AI can provide attentive and expert guidance, drawing on its huge body of knowledge and best practices. When presented in natural language processing (such as ChatGPT or Google Bard), people can access care and information much more easily, and cost-effectively.

For example, online chatbots can provide patients with better and more timely information about their conditions, treatments and hospital visits. They can request personalised information at any time of the day or night to help put their mind at ease, at little additional cost to the provider. Patients expect this in other sectors, and healthcare does not need to be the poor relation.

Back in the clinic, AI can increase human interaction. Taking notes during a patient consultation has been likened to writing a flight log while landing a plane.

With AI transcribing the conversation and looking up the latest guidance, treatments and side-effects, the clinician can give their full attention to the patient. At the click of a mouse, patient notes are updated, referral letters drafted and a summary emailed to the patient even before they leave the room.

Automated language services can help communicate more effectively with different communities. We no longer have to wait hours for a translator. Online tools can translate texts, recordings and videos in real time. It can even facilitate direct conversations in different languages. A nurse can talk to a patient over the phone in English and the patient will hear the words in French, Urdu/Hindi or any one of a dozen languages. Healthcare is rapidly becoming more inclusive!

AI can also produce images from a text prompt. For example, a patient struggling to understand how to use a medical device can ask the AI to draw a picture, cartoon, or create a short video demonstrating its use. This content would be unique to each user, reflecting their condition, advice received, and the specific equipment.

AI can generate poems, song lyrics and even create new soundtracks, though we have yet to find a practical use for a singing doctor. On the other hand, who knows? Maybe that would be a good way of communicating with the growing number of Elvis impersonators.

AI in diagnostics and a shift to more local care

The miniaturisation of equipment will play a key role too.

New intelligent diagnostic tools are enabling a wide range of services to be delivered locally to the patient. This new technology is an important catalyst as we seek to shift care from central hospitals back to community centres and closer to the recipients.

The technology now offers immediate results via low-cost, portable devices. Blood analysers can test for dozens of pathogens and conditions in minutes. A GP nurse appointment could become far more effective, with a dramatic reduction in lead times for the patient. In future, a single drop of blood could produce a dashboard of 100 dials and a plain English risk assessment. With personal diet and health advice.

A personal front end to healthcare services

Another innovation is the custom 'GPT', similar to an app from an App Store, which takes our natural language (typed or spoken) as input. This could be used to draw on FAQs from a website, information from clinical information sites or data from a patient appointment system.

A chatbot could be created for patients to confirm appointments, enquire about procedures, be briefed on test results or gather information about the community centre they will visit. It could provide details about a clinic's location, parking and disabled access by engaging in natural conversations through text or a voice call.

A further example might involve a GPT linked to an outbound telephone call scheduler. The AI, using a natural voice, would call the user daily to check on their medication adherence, provide reminders, ask questions, and offer advice on side effects.

This could be achieved by securely linking to prescription notes and even incorporating auto-translation for conversations in multiple languages. Adherence information could then be relayed to the doctor, with the patient's permission, allowing for more effective monitoring of the prescription's efficacy and any deterioration in their condition.

A third example is a specialist GPT coupled with medical notes and a rigorously tested body of knowledge related to psychiatric help. These provide a chatbot available 24/7 for people experiencing mental health issues. It could be lifesaving to offer immediate access to good advice, a sympathetic ear, and triage or escalation options, especially when traditional appointments can be days or weeks away. There are already many on the market. Patient feedback so far scores the bots high on both knowledge and empathy. That is something we didn't expect two years ago!

Ensuring access to such technology for all patients, regardless of their condition or location, could dramatically impact health and well-being.

The AI journey

Technology is a catalyst for the journey to improved healthcare. It begins with a desire to serve the patient well, awareness of the latest tech and a curiosity to ask the questions that unlock new patient-centred models of care.

Hopefully, AI will provide new impetus for improvement in patient care, colleague support, service user engagement, and overall community welfare. This will redefine our processes, accelerate pathways, reduce waiting times and usher in new ways of working. It will ultimately transform health and social care over the next 10 to 15 years.

Addressing vital areas such as patient confidentiality, data security, the quality of clinical advice, and the interaction of AI with human clinicians is crucial. The principles of responsible and ethical AI are paramount. We should draw on established project and change management processes to tackle these challenges.

Embracing these technologies and ideas can help shift from disease treatment to prevention and from centralised hospital care to more localised community centre care.

The opportunity is here!

The future holds great potential. The advent of AI and the miniaturisation of equipment presents a significant opportunity to make this a reality. It is a promising way forward for an overstretched health service, with demand continuing to build.

It will require an open-minded and effective collaboration between tech companies, healthcare providers, commissioners, social care, policymakers and patient groups.

The challenge of change remains, though! We need to pay close attention to engaging our colleagues to build their confidence and allay fears.

Co-creating the new processes that involve AI is critical to achieving acceptance and a successful implementation. Colleagues, patients and other stakeholders must all be involved. Get it right, and we will put people back at the centre of the service, with data processing happening in the background.

AI helping to create a patient-centred, local National Health Service? We must surely make the most of this opportunity!

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#AI, #ResponsibleAI, #AIstrategy, #AItraining, #BusinessTransformation