



AI in clinical practice: Achieving customer buy-in

Dr. Anne-Sophie Lenoir
Director DACH, Branding Science

Health-related Artificial Intelligence (AI) has the potential to transform clinical practice, improve patient outcomes, save costs, and free up clinician time for direct patient care. However, there are concerns that AI could be perceived as replacing or displacing healthcare professionals (HCPs). In this paper, I discuss how healthcare companies can overcome barriers to adoption.

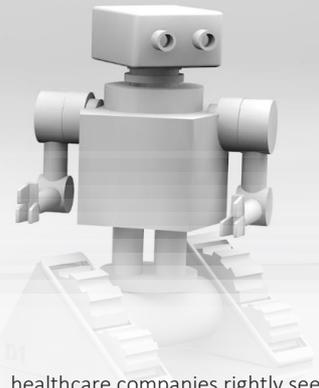
An unprecedented opportunity

Artificial intelligence has the potential to fundamentally change how healthcare is delivered, simplifying the lives of doctors, patients, nurses, and hospital administrators in a myriad of ways, and allowing healthcare professionals to spend more time with their patients.

- **Diagnosis & treatment selection:** AI provides an opportunity to put the data generated through tests, measurements, and medical imaging to good use to support efficient and accurate diagnosis, enable early detection of conditions such as cancer, and facilitate timely and individualised treatment. AI tools have been shown to be effective in assisting HCPs including radiologists and pathologists during the diagnostic process – making the promise of reducing misdiagnoses one of AI's most exciting clinical applications.
- **Surgery:** Robot-assisted surgery is becoming ever more popular: robots assist doctors performing a range of complex procedures, provide a magnified view or greater precision, enable minimally invasive operations, and leverage analytics to improve future surgeries. AI can also support surgeon training.
- **Monitoring:** Together with electronic health records and advances in telehealth, AI monitoring software can be used to notify doctors when a patient's health deteriorates, while also empowering more patients to monitor and manage their disease.
- **Patient experience:** AI technology can be leveraged to automate administrative processes, optimise patient flow through the system, and ensure patients are directed to the right HCP at the right time. An efficient, streamlined patient experience can ensure a better use of resources, free up patient time for other pursuits, and enable HCPs to treat more patients.

These applications are part of a broader shift to harness artificial intelligence in healthcare – one that can change the way HCPs approach clinical problem-solving and even pave the way for a more equal access to care.

For more information or inquiries about our work in the MedTech and Diagnostics spaces, please contact Anne-Sophie Lenoir (anne-sophie.lenoir@branding-science.com)



Barriers to adoption

Despite this potential, healthcare companies rightly see several potential challenges in HCPs' and patients' response to the growing role of AI in clinical practice.

These include a lack of trust among HCPs and patients, in part due to concerns around the appropriateness of clinical evaluation methods, but also around unintended algorithmic bias. Some HCPs fear that disrupting traditional approaches to management could increase patient anxiety. In some cases, there may be a misconception that AI could displace – or replace – HCPs.

Inadequate funding and reimbursement and a lack of interoperability between solutions are other issues that can prevent widespread access and adoption.

Overcoming challenges to deliver clinical impact

Healthcare companies can support their customers during this transition in several ways to help them make the most of these opportunities:

- **Robust clinical evaluation** is essential, as is using metrics intuitive to HCPs that go beyond technical accuracy to include e.g., quality of care and patient outcomes. Thoughtful and appropriate **regulation**, including regarding data protection, will also be key to building confidence among professionals.
- AI should be positioned as an **augmenting factor** to support complex decision-making, facilitate automation of mundane tasks, and reduce time spent pouring over test results and records – ultimately enriching the work of HCPs and enabling them to spend more time with patients. Clinicians and AI each have unique strengths that complement each other - they cannot replace each other.
- Healthcare companies should remain vigilant to **mitigate risks of unintended algorithmic bias** and accidental confounds which could affect outcomes and care, as well as carry legal risks.
- Frontline staff will require new skills to work effectively with AI: **training** should be provided to ensure HCPs can successfully interact with the technology.

AI can enable more precise and personalised care across the patient journey as well as increased efficiency of care delivery: this "healthcare of the future" is one manufacturers and HCPs can only build together.