

THE DOCTOR-PATIENT RELATIONSHIP IN THE GENERATIVE AI ERA

Five reasons why the time to act for
pharma is now

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Introduction

Chances are, this isn't the first piece on Generative AI in healthcare that you've encountered. If you're feeling overwhelmed by the ubiquity of this topic in your feed, you are not alone. In this perspective article, we take stock of an under-discussed yet disruptive consequence of this technology in healthcare: its impact on a cornerstone of care, that is, the doctor-patient relationship. This is being reshaped by unprecedented access to free, human-like, and seemingly authoritative healthcare advice.



In [Exploring the Changing AI Landscape](#), Ipsos highlighted how the breakthrough of “supercharged” Large Language Models (LLMs), such as OpenAI’s ChatGPT, will have seismic implications on our lives, enhancing the capabilities of those who utilise it effectively. In the realm of healthcare, this translates to patients now having easy access to a wealth of medical advice never seen before, fundamentally transforming how they acquire, comprehend, and act upon medical information. This development, which will be further driven by the impending release of Google’s Med-PaLM 2 (designed to provide high-quality answers to medical questions), will have more far-reaching effects than the traditional ‘Dr Google’.

With the medical profession already grappling with immense shortages and escalating stress levels, AI-powered chatbots can streamline administrative activities and support patient services. However, the influx of patients equipped with advice from these LLMs, which may or may not be accurate or relevant, is likely to put an additional burden on physicians who will need to help patients address misconceptions in the information gathered – while still making swift and effective clinical decisions in time-constrained consultations. [A recent JAMA study](#) even suggested that ChatGPT may outperform actual physicians in terms of empathy and advice, comparing real doctors’ and ChatGPT’s responses to actual medical queries in an online forum.

Pharmaceutical companies have a crucial role to play in mitigating risks and seizing opportunities in this significant paradigm shift. While doctors are far from becoming obsolete, patients are becoming more empowered and possibly more confident and influential in health decisions than ever before, both within and outside of the consultation room.

There is a window of opportunity for pharmaceutical companies. The medical community remains largely unprepared, while patients are using this technology not only to check symptoms but also to seek information about treatments. To avoid being left behind, companies must proactively shape how patients and doctors navigate this transformation. This comes with significant challenges, but companies that get it right stand to gain huge rewards. It’s not a question of ‘if’ this change will occur, but ‘when’ – and that ‘when’ is now.

In the remainder of this article, we present five key reasons why immediate and proactive action on the part of pharma will ultimately benefit all stakeholders. Our recommendations are supported by the results of a recent online perceptual survey among 283 US HCPs (including cardiologists, dermatologists, endocrinologists, haematologists, neurologists, obstetrician-gynaecologists, oncologists, PCPs, and pharmacists), conducted by Medefield on behalf of Ipsos, and the multi-year knowledge gathered through Ipsos’s Digital Doctor, the industry’s longest-running tracker of digital HCP behaviours and attitudes, covering 20 markets.

FIVE REASONS WHY THE TIME TO ACT FOR PHARMA IS NOW

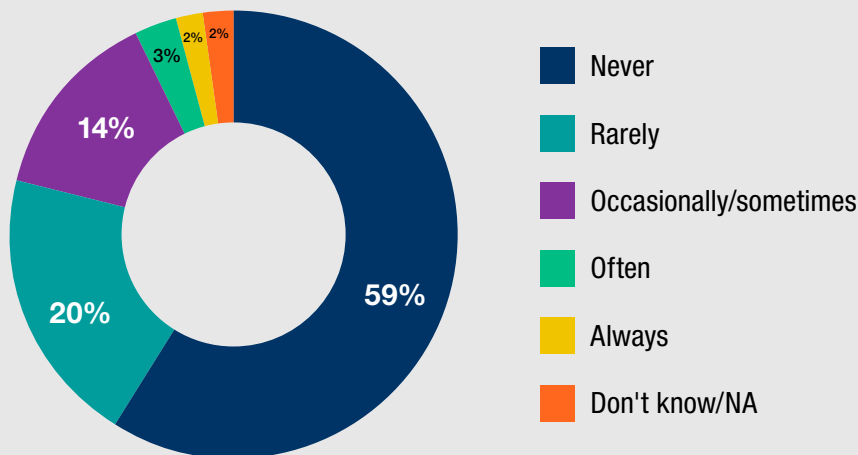
1. For patients, the Generative AI era has already begun

The online survey amongst US doctors regarding Generative AI and its impact on doctor-patient relationships reveals that 41% of the HCPs surveyed are aware that their patients have already utilised technology, such as ChatGPT and Med-PaLM, for medical-related purposes in the past three months.

While this figure includes patients who have used it sparingly, the actual prevalence of this phenomenon is likely underreported, given that patients may not always disclose their use of Generative AI prior to their visit.

FIGURE 1: Level of Patient Usage of Generative AI (HCP perceptions)

% surveyed HCPs stating frequency their patients have used Generative AI (e.g., ChatGPT, Med-PaLM) in the last three months



Source: Data collected online from 283 HCPs (Ob/Gyns, n =89; General/Family Doctors, n = 53; Dermatologists, n= 38; Cardiologists, n =31; Endocrinologists, n = 25; Neurologists, n = 25; Oncologists, n = 10; Pharmacists, n = 8; Haematologists, n =4) in the US between May – June 2023 by Medefield on behalf of Ipsos. © Medefield

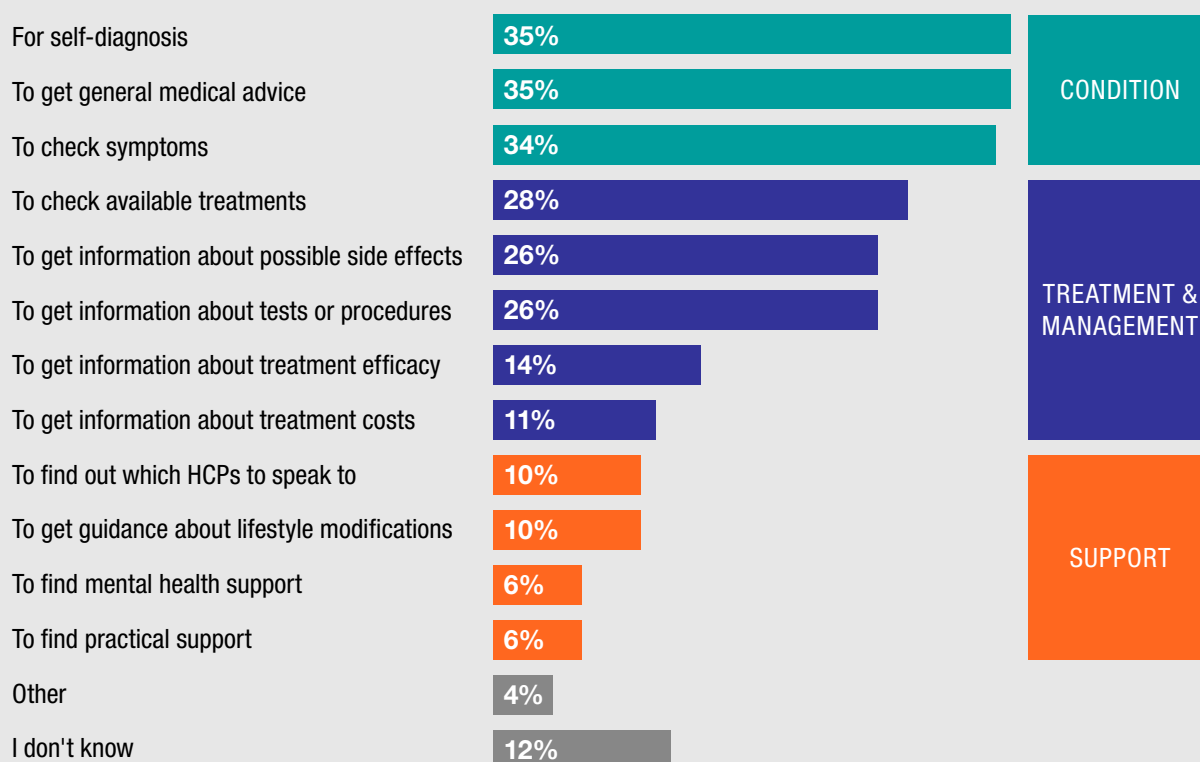
Looking ahead, we anticipate a significant surge in the number of patients engaging with LLM chatbots in the coming months. In part, this growth will be fuelled by the potential integration of these technologies into healthcare platforms like Babylon or patient services provided by medical centres.

2. Beyond Dr Google: Patients are accessing human-like ‘digital advisors’

The same group of HCPs indicated that Generative AI is far more than a mere symptom checker, a role traditionally filled by “Dr Google”. While symptom checking and self-diagnosis top the list of stated uses of Generative AI by patients, some of the HCPs with patients using this technology report a more comprehensive and profound use, such as gathering information about treatment availability (28%) and their side effects (26%), efficacy (14%), and costs (11%), as well as understanding tests or procedures (26%).

FIGURE 2: Objectives of Patients’ Use of Generative AI (HCP perceptions)

% surveyed HCPs citing objectives of Generative AI use among their patients



Source: Data collected online from 283 HCPs (Ob/Gyns, n = 89; General/Family Doctors, n = 53; Dermatologists, n = 38; Cardiologists, n = 31; Endocrinologists, n = 25; Neurologists, n = 25; Oncologists, n = 10; Pharmacists, n = 8; Haematologists, n = 4) in the US between May – June 2023 by Medefield on behalf of Ipsos. Base of this analysis are HCPs citing their patients have used Generative AI rarely/occasionally/often/always (n=115)
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The use of Generative AI by patients should not come as a surprise. As noted in the aforementioned JAMA article, ChatGPT scored 9.8 times higher than physicians in the prevalence of empathetic responses and 3.6 times higher in the prevalence of high-quality responses.

What is more surprising and potentially riskier is its use in retrieving information about treatments. [The Conversation](#) posed the same cancer-related questions to ChatGPT and “Dr Google”. When asked about the side effects of a specific cancer drug – “*Does pembrolizumab cause fever and should I go to the hospital?*” – ChatGPT provided five different responses each time it was queried. While all responses recommended seeking professional medical advice, not all conveyed the urgency or clearly defined how potentially serious this side effect was. One response even stated that fever was not a common side effect but did not explicitly say it could occur. This risk may be further amplified, considering that ChatGPT is trained on data only up to 2021.

The free and human-like insights provided by chatbots may also have deeper implications. Patients may struggle to distinguish truth from fabricated facts (‘hallucinations’ are an intrinsic limitation of these models) and, satisfied with the advice received, may delay or entirely avoid contacting their healthcare professional (HCP). The patients themselves may fuel this misinformation loop as they inadvertently feed incorrect or misplaced information into the algorithm, which will later be shared with other patients. [Digital Doctor 2023](#) – an ongoing Ipsos study among 3,248 HCPs – recently discovered that, despite the evident benefits of patient empowerment, most HCPs surveyed expressed concern that connected health devices and tools could potentially lead patients to misinterpret data or self-diagnose without physician supervision. These developments have clear implications for the pharmaceutical industry, individual health, and the broader healthcare system.



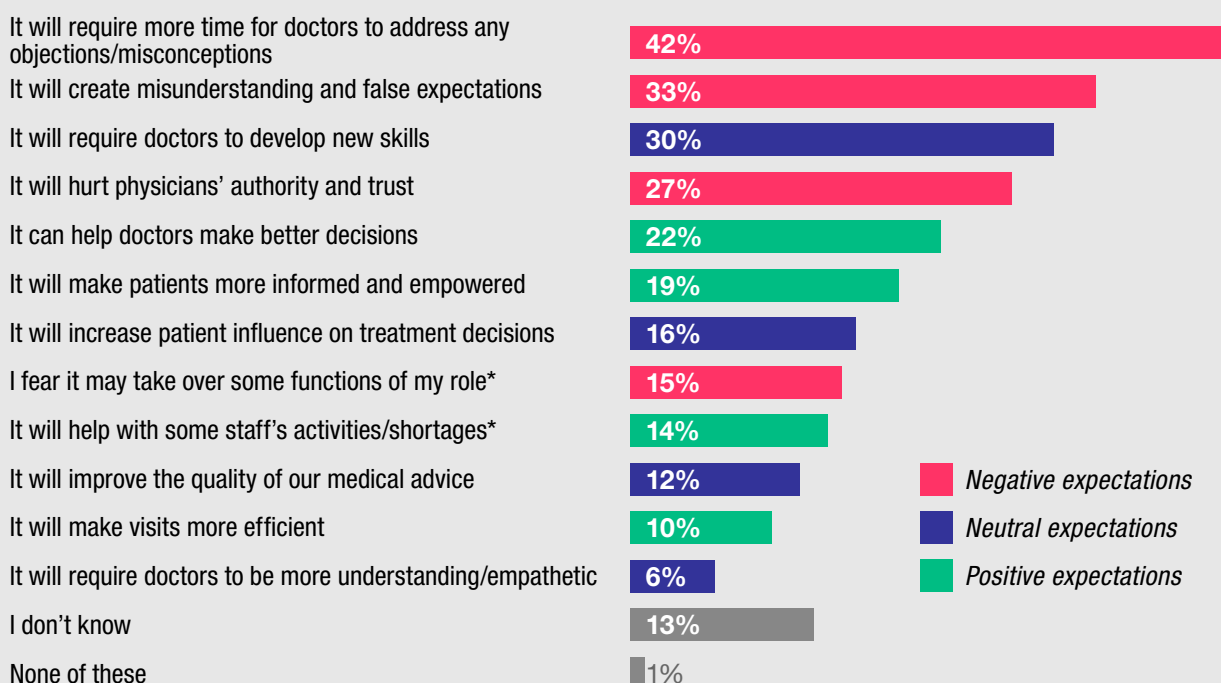
3. Beleaguered HCPs fear their existing challenges will increase

Asked how they expect all of this to impact doctor-patient interactions, the HCPs who participated in the US survey demonstrate a clear cry for assistance. According to their responses, the use of Generative AI by patients risks exacerbating their existing challenges in multiple ways:

- **Requiring more time** for doctors to address any misconceptions created by Generative AI – according to 42% of surveyed HCPs
- **Requiring them to learn new skills** – according to 30% of surveyed HCPs
- **Eroding their authority and trust** – according to 27% of surveyed HCPs

FIGURE 3: Expected Impact of Generative AI on Doctor-Patient Interactions

% surveyed HCPs citing expected impact of Generative AI on doctor-patient interactions in the future



Source: Data collected online from 283 HCPs (Ob/Gyns, n = 89; General/Family Doctors, n = 53; Dermatologists, n = 38; Cardiologists, n = 31; Endocrinologists, n = 25; Neurologists, n = 25; Oncologists, n = 10; Pharmacists, n = 8; Haematologists, n = 4) in the US between May – June 2023 by Medefield on behalf of Ipsos. * denotes option added during fieldwork and asked to a base of n = 72 HCPs. © Medefield

A more positive impact of Generative AI on doctor-patient interactions is possible. Potential benefits, like improved decision-making, better patient empowerment, and increased efficiency, must come to the forefront. However, for this to happen, HCPs' call for help must be listened to by pharma companies and by healthcare and political systems in general.

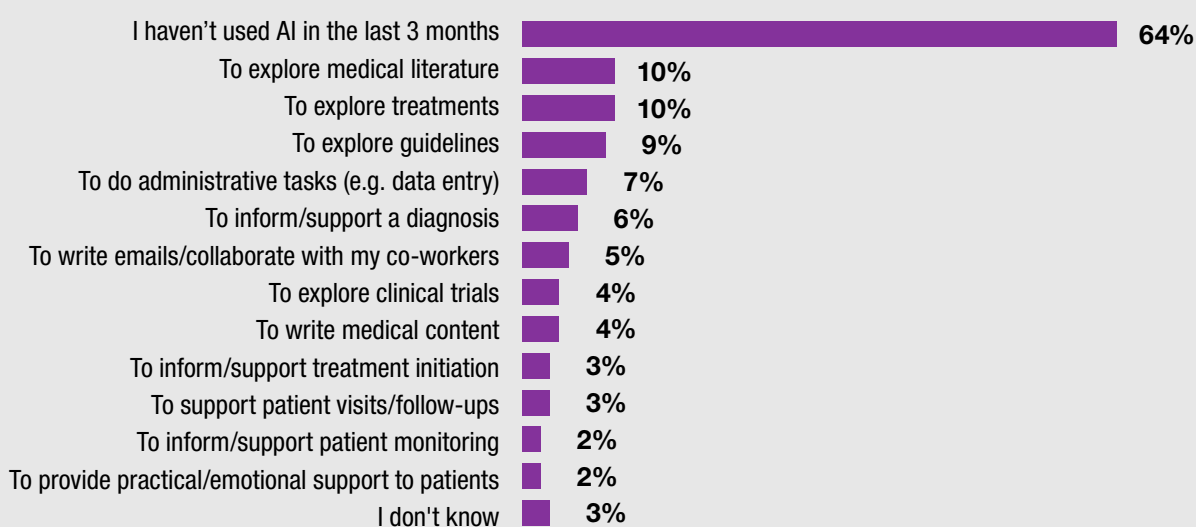


4. HCPs see the benefits of AI – but they need guidance here

Our 2023 Digital Doctor study revealed a promising trend: HCPs are warming up to AI. Specifically, the survey found that 40% of participating HCPs in the 20 markets surveyed are excited about AI's role in healthcare, and a similar proportion believe it can automate repetitive tasks and enhance diagnostic efficiency and accuracy. However, only 35% feel they 'know a lot' about it. The more recent US HCP survey, from which we have been drawing insights so far, reinforces this finding: while some of the HCPs are gaining personal experience with AI across various applications, most have not used it extensively in the past three months.

FIGURE 4: HCP Usage of Generative AI in Last 3 Months

% surveyed HCPs citing usage and application of Generative AI in the last three months




Source: Data collected online from 283 HCPs (Ob/Gyns, n = 89; General/Family Doctors, n = 53; Dermatologists, n = 38; Cardiologists, n = 31; Endocrinologists, n = 25; Neurologists, n = 25; Oncologists, n = 10; Pharmacists, n = 8; Haematologists, n = 4) in the US between May – June 2023 by Medefield on behalf of Ipsos. © Medefield

These findings present an ideal opportunity for pharma companies to assist HCPs in building confidence with AI technology. By doing so, HCPs are more likely to view the benefits of Generative AI used by patients and see themselves as facilitators of improved doctor-patient interactions, rather than as victims of technological advancement.


5. Pharma has a unique window of opportunity to shape the impact of AI

With Generative AI already a reality for some patients and HCPs, pharma companies must act swiftly to capitalise on the opportunities this structural shift presents, while mitigating the associated risks. Pharma companies can shape the impact of this technology on doctor-patient interactions by enhancing healthcare advice at two critical junctures:



Upstream:
Ensure patients access more valuable and trustworthy online information

- **Accuracy:** Make sure information about conditions and treatments is clear, concise, up-to-date, and supported by “real-life” keywords and phrases. This requires understanding patients’ needs and practices when seeking advice from LLMs.
- **Consistency:** Disseminate the same information across a wide range of credible sources likely to be included in the AI’s training data. This requires an understanding of how AI training works.
- **Education:** As Ipsos’ [Conversations with AI](#) paper recently noted, a poorly crafted question can lead to a distorted perception of reality and misguided actions, while a well-crafted question can lead to accurate and insightful answers. Therefore, it is crucial not only to inform patients about the risks and limitations of these tools but also to provide them with a repository of hints and example prompts to maximise the quality of advice received. Partnering with patient associations and HCPs will be crucial here.



Downstream:
Equip HCPs to handle AI-powered information effectively.

- **Anticipate and provide training and resources** to handle patient objections, such as FAQs to ChatGPT with common misconceptions and answers to handle patient conversations.
- **Providing training on empathy** and how to deal with possible conflicts, ultimately considering that engaged patients are key to better personalised care.
- **Support HCPs in building familiarity and confidence** with AI, showcasing use cases and involving them in initiatives that help them understand how to benefit from this technology.



**PHARMACEUTICAL COMPANIES,
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Looking Forward

Generative AI is revolutionising the medical advice landscape, redefining the doctor-patient dynamic in ways previously unimaginable. This transformative technology can empower patients to seize greater control of their health while supporting HCPs in crucial tasks, including providing insights to improve diagnosis or better communicate with patients. However, it also ushers in a new set of formidable challenges, which demand careful consideration.

Patients, now equipped with an unprecedented degree of advice, potentially inaccurate, are placing unprepared HCPs under considerable stress. Furthermore, easy access to illusory, confident and authoritative content engendered by AI may inadvertently lead patients to postpone or circumvent necessary interactions with HCPs, or even to feed uncontrolled information to the algorithm, with huge consequences for patients as well as for regulators and industry players (think, for example, about the spread of confidential data or unchecked adverse events).

Pharmaceutical companies, having long harnessed AI to bolster their performance, from drug discovery to go-to-market strategies, are now on the cusp of a defining moment. They possess a historic opportunity to elevate health outcomes by guaranteeing that correct AI-driven health advice is found, discussed and implemented by HCPs and patients.

Given the swift pace of technological evolution and the inherent risk of misinformation, the need for proactive measures is urgent. This is, however, a high-risk and high-reward field for pharma, with considerable legal and operational challenges. Those who take the lead stand to reap the most significant benefits.

Ipsos will continue monitoring this evolving landscape across several therapeutic areas and countries through a new syndicated study and thought leadership research to support our clients in this space. Our aim is to provide a greater understanding of how the world is changing. Learning how people decide upon and interact with Generative AI, as patients and as healthcare professionals, will be our focus.

About the Research

The US HCP survey was a short perceptual survey conducted between May 29th and June 5th, 2023, among 238 HCPs in the US. Participating HCPs covered the following specialities: cardiologists, dermatologists, endocrinologists, haematologists, neurologists, obstetrician-gynaecologists, oncologists, PCPs, and pharmacists. Data referred to in this article were collected online. Sample sizes are provided alongside the relevant charts. The study was conducted by Medefield on behalf of Ipsos. Data copyright owned by Medefield.

Digital Doctor, running since 2015, provides a comprehensive overview of digital attitudes and behaviour among doctors worldwide. For Digital Doctor 2023, Ipsos conducted an online survey among 3,427 physicians across 20 markets using Sermo (fieldwork partner) from October 6th, 2022, to February 16th, 2023. Respondents included primary care physicians, paediatricians, oncologists and neurologists, recruited according to specific screening criteria. For detailed sampling information, please visit [Ipsos Digital Doctor 2023](#). Data copyright owned by Ipsos.

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