



# AI in Healthcare

**There are (still many) practical obstacles between  
dream and action**

Healthcare has AI on its radar. There is great interest in the many possibilities the technology offers, but there are still a lot of questions and challenges surrounding it. In practice today, there are mainly a few people who are taking the initiative and experimenting with it. In addition to the initial tests that often take place within a medical department or even with a specific doctor, certain support services, such as IT, HR or Legal, may also look at the opportunities associated with AI. However, they also note that in practice there is often still a lack of framework for concretely working with AI applications. That governance is absolutely necessary, although the availability of the right, accurate data is an equal requisite for success. Without such data, you should not even think about starting with AI.

To gain insight into how the healthcare industry views AI today, Inetum and Microsoft invited several industry actors to a roundtable: Familiehulp, i-mens, UZ Gent, UZA and ZAS.

## Need for framework

Right at the start of the discussion, it came up: AI is still basically a big stretch of vacant land. To make faster progress, more **framework** would clearly make a difference. The framework development may be accelerated under the influence of NIS2. This new network and information security directive will automatically influence greater focus on data management and handling, but to fully embrace AI also requires a shift in mindset within healthcare organizations. The obligations associated with NIS2 – and the consequent need for more data governance – can reinforce that shift.

There is also a realization that this will require major efforts in the area of change management, which will also entail challenges around data governance, i.e., the proper management and use of data. No matter how you spin it, data and AI are two sides of the same coin.

## First things first: data

That observation immediately raises new questions: Do you have to have the **whole data part in order** before you can start with AI, thereby risking missing out on opportunities? Or is it acceptable to already experiment with AI and then provide a solution to the associated data issue as you go? There's something to be said for both views. Imagine a doctor who, from a particular gut feeling, unleashes AI on a data set and thus manages to confirm his gut feeling from the analysis of that data.

Now, what if different doctors do this type of exercise independently of each other? In that case, there are many advantages to be gained from an overlying structure, as everyone knows what it takes to start a project and how to do so in a well-structured way. This avoids doctors or departments – independently of one another – running into the same difficulties and trying to solve the same practical challenges. One possible answer is the development of a **data office**, where data specialists help to deal with the AI-related questions that arise in the business.

But what if setting up such a data office – a difficult exercise in itself – can't meet the urgent need for support quickly enough? A much more accessible solution would be to organize **workshops** around data and AI, for example, to create clarity about data ownership. Hospitals sometimes choose to present the questions surrounding AI to their **advisory boards** and then feed the answers back to departments and doctors. For example, startups sometimes approach doctors with AI solutions to problems that actually don't exist. An advisory board can evaluate such proposals and ensure that the focus is on the real challenges and problems. The AI solutions then chosen actually contribute to operational excellence, budget optimizing and solving resource scarcity.

## Assistance with data entry

Apart from the theory and consensus on best practices, there is of course **everyday reality**, where hospitals do not always have the **resources** to effectively implement every good idea for an AI project. This is why there is an interest in investing more in **collaboration** between hospitals and other healthcare actors, in data exchanges, for example. In practice, however, it doesn't turn out to be so easy. Even if 80–85% of the data input, for example in the electronic health record, is correctly coded and validated, it still proves to be a major challenge in practice to get doctors to maintain the agreed structure, or to record a new diagnosis in the record immediately and with the correct code.

However, this foundation – **the correct input of data** – forms the basis of everything that follows, such as data exchange and analysis. Yet doctors still do not see it as their job to guarantee that the data is entered correctly, and it proves very difficult to motivate them to do so. Admittedly, a medical file almost always contains some information that cannot just be tucked behind a code or structure in another way. Could a tool that provides suggestions via GenAI play a role here? Quite possibly. A good user interface could lead to efficiency gains here, although a human is still needed to validate and confirm every automated entry.

### MICROSOFT COPILOT

## AI completely reinvents healthcare

Satya Nadella, CEO of Microsoft, leaves no room for doubt. AI is the top priority for his company today, with healthcare as its most pressing application area. AI has the potential to make a difference in healthcare in many areas, not only by increasing employee productivity, thus improving care, but also by increasing efficiency and reducing costs. Microsoft's conclusion is clear: AI is completely reinventing healthcare.

### Microsoft sees three axes of AI use:

1. transformation through new apps, for example, to support administration, detect fraud, and manage claims;
2. support through Microsoft Copilot, helping doctors, nurses and other staff to increase their productivity; and
3. responsible AI, founded on Microsoft's own core AI values.





## A universal data platform

AI may be able to increase **reliability** here. In practice, doctors may not always go through a patient's entire file, but may limit themselves to the latest referral notes from colleagues, for example. AI support would just enable a summary of the entire patient history, albeit with an immediate caveat. Sometimes a diagnosis is uncertain, or a patient goes to another doctor or hospital for a second opinion. This shows that not all data can be forced into a binary straitjacket. At the same time, trust is essential in the healthcare context. This implies that the data used must always be accurate.

In that context, would it make sense to develop a kind of **single source of the truth** per patient, across hospital boundaries, a kind of universal data platform where all patient data comes together? The roundtable participants were not immediately enthusiastic. In reality, it sounds like there is no demand for such a platform, which after all would go against the spirit of eHealth. At the same time, the Belgian Health Data Agency does intend to bring data together, but sees itself more in the role of a data broker. The participants cited practical concerns, such as the complexity of setting up and managing such a data platform, in addition to the scarcity of data profiles in today's job market.

However, the main **objection** to such a universal data platform is related to the complexity of the Belgian healthcare landscape. In Belgium, a federated approach was adopted, significantly driven from the government. A strong commercial approach, as in the US – where centralization would be less of a problem – therefore does not fit with the way we look at health data in Belgium. It will be interesting to see how the EU will further shape the way we handle health data and how it will evolve. After all, healthcare is fundamental to our society, with data as an essential raw material for it. The sector is therefore looking for levers to make smarter use of existing, often unstructured, health data. Here AI and GenAI represent both an opportunity and a threat.

Apart from that, there are also **other concerns**. Clinicians would like to know all of the information that exists about a patient, but do not want to be required to simply copy it. Still, it would be useful to have some sort of general summary of each patient, i.e., an overview of basic data, along with a history. This could potentially be a significant efficiency gain, as it could eliminate a lot of rework. At the same time, the participants in the discussion noted that previous projects in this direction did not always lead to the desired results.

## It won't happen overnight

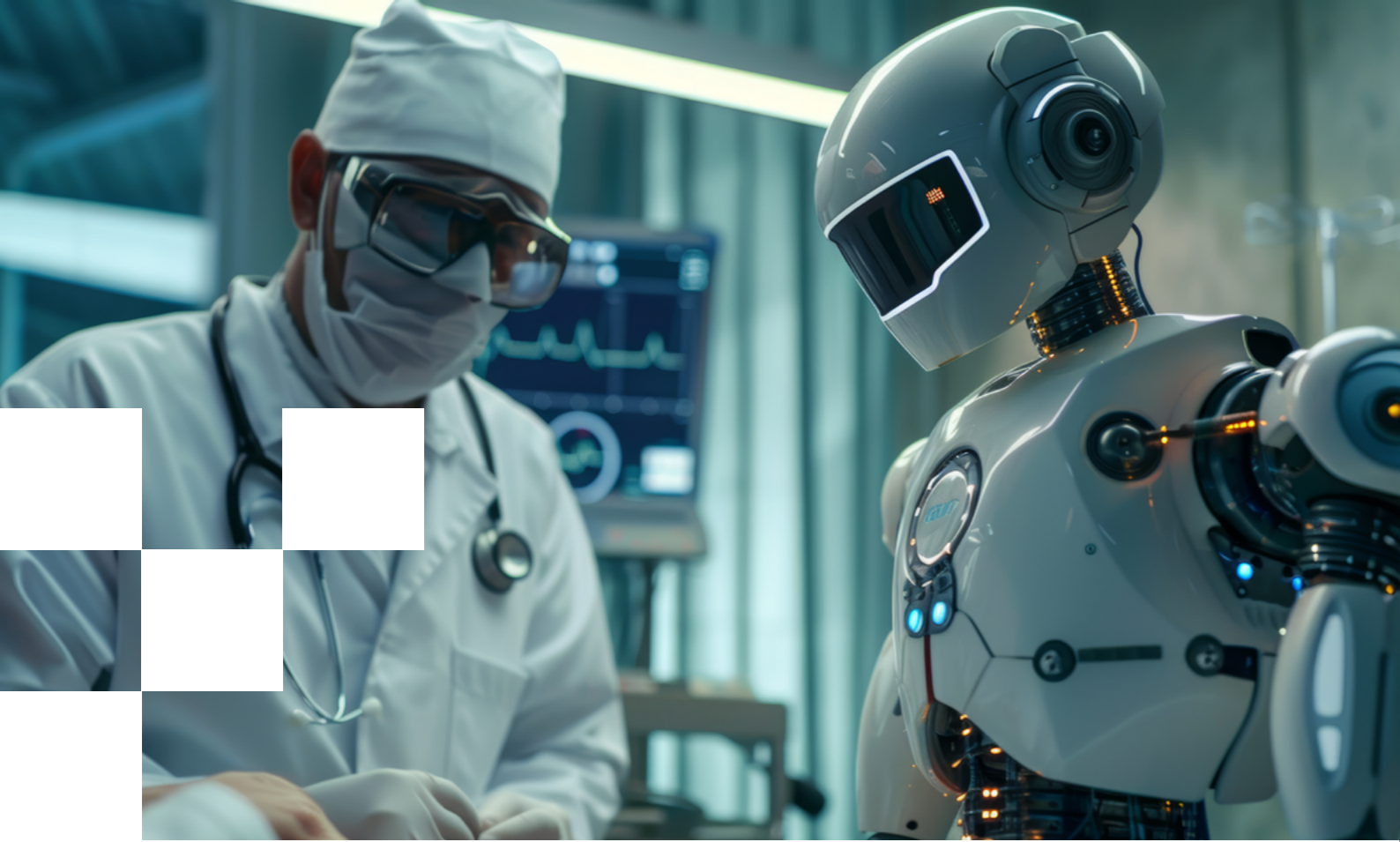
In practice – not only in hospitals, but also in home care or home and care centers, for example – data **fragmentation** remains a major challenge. Data on a single patient is still too often scattered across multiple databases, with all the associated challenges of data quality and data management, among other things.

Even with the right people and resources, setting up an overarching data platform remains a difficult exercise. The more legacy an organization accumulates, the more complex it is to create such a platform, yet the participants did not want to let go of the idea entirely. It could well present an advantage, because reporting across the various existing datasets is not proving very easy today. Reporting on data from the electronic patient record is feasible, but as other databases join the story, that feasibility quickly diminishes. The message brokers needed to link all these different solutions together are expected to arrive eventually. In the meantime, potential business cases necessarily remain on hold.



## Human validation still needed

This thought exercise once again reveals how the debate about AI keeps bringing us back to the basics: **data structure, quality and management**. To use AI to analyze that data and look for connections, there obviously needs to be clarity about the data. Very often it is the case that there is no doubt about a blood group, as there is no doubt about many diagnoses, but in the medical world, not everything is black and white. This also remains the case when using AI; critical thinking remains necessary. When an AI application suggests something, it is often difficult for humans to keep other options open. Efficiency and time savings should not be the sole focus. It remains the doctor's job to listen to the patient, regardless of what an AI application suggests.



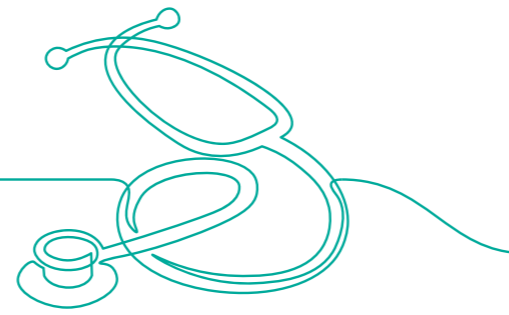
### Sharing experiences

It is clear from the conversation that **data exchange** – essential in the context of research, etc. – is often still a **barrier**. Could AI perhaps be part of the answer? What if AI provides a solution that allows all parties involved to keep their data at the source, while still being able to exchange it? This could potentially address the reality of organizations today too often working with very different technologies. Imagine, for example, a hospital that uses an electronic patient record that is slightly different from that of another institution.

These choices have long since been made. At the same time, it is never too late to integrate. AI can also possibly play an important **facilitating role** in this. In any case, those on the panel agreed that it would not be a bad thing if organizations learned more from each other, which explains their motivation for participating in the conversation in the first place. Importantly, organizations should not just share success stories, but also dare to talk about failed experiments.

In that regard, the industry is also advocating for **more openness** with regard to the approval and financial support of AI projects, such as FPS Public Health’s Data Capabilities track. It should be noted here that it would perhaps be more interesting to pool the available funds rather than scatter them among smaller projects. Perhaps it would also be valuable to know not only which projects have been selected, but also which fell out of the running and why.

And there is more. Patients not only expect a doctor to listen to them, but also expect the doctor and hospital to handle their patient data properly and securely. Any discussion of data also highlights the role of the **Data Protection Officer (DPO)**, who ensures that the organization applies the laws that protect an individual’s personal data. Many Organizations see the DPO as a necessary evil, as someone who – for example in the context of data use for AI – will by definition apply the brakes. A more positive approach is to see the DPO as a partner who helps to find a solution that enables progress in a correct way. For example, the DPO will favor automation where possible, but will never give the green light to automated diagnoses without validation by a human.



### Remote healthcare

In the context of AI, healthcare sees many possible applications concerning **telemonitoring**, the remote (automated) collection and analysis of data. Many hospitals now have experience with telemonitoring, with the obvious **advantage** that patients enter readings into an application themselves and do not have to travel to the hospital to do so. In the next step, readings are collected automatically and the result is analyzed. The hospital uses this approach as a control mechanism. As soon as a reading deviates, the patient is asked to come to the hospital for further follow-up.

When the first telemonitoring applications entered the market, they were still more or less in a gray area. Today, hospitals have already developed the right processes for this, coordinating with DPOs.

### GenAI Booster

To get started with AI in an effective, thoughtful way you need a **roadmap**: not just for IT or data, but for the entire organization. Inetum’s **GenAI Booster program** helps organizations take the right steps, in the right order.

It all starts with a **hands-on workshop** aimed at mapping out the organization’s challenges and objectives. What experience has the organization already had? What does the organization want to achieve?

In the next step, Inetum’s experts help create a concrete **AI business case canvas**. Which cases are given priority? What tasks are involved? How do these cases get a place in the IT landscape? But also: what impact do they have on the organization? What is changing in the processes? What will change for the employees? What is needed to further increase the benefits of the cases while reducing their drawbacks?

The exercise will result in a **concrete roadmap**, with associated ROI calculation to sharpen the business cases even more. The Booster program thus provides a clear view of the most interesting scenarios for the organization, which allows for **appropriate prioritizing**.

**GenAI Use Case Canvas** | inetum

Business Value		Data & Technology	
<b>Business Challenge</b>	<b>Value Proposition</b>	<b>Data</b>	<b>GenAI Technology</b>
<b>Value Measurement</b>	<b>Infrastructure &amp; Integration</b>	<b>Human AI</b>	<b>Responsible AI</b>
<b>People &amp; Processes</b>	<b>Human - AI Collaboration</b>	<b>Ethical Considerations</b>	<b>Regulatory Considerations</b>
<b>Skills &amp; Knowledge</b>			



## Want to learn more?

Would you like to discuss this topic further with us? Would you like to take part in a roundtable with peers in the industry to exchange ideas on certain topics?

Let us know! Our experts will partner with you.

**CONTACT US**



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