



AI and value-driven healthcare

To gain insight into how healthcare views AI today, Inetum and Microsoft invited various stakeholders from the sector to the discussion table: AZ Klina, AZ Sint-Maarten, i-mens, UZA, UZ Brussel, UZ Gent, White and Yellow Cross and Zorgnet-Icuro.

The participants

Patrick De Boever, Director Valorization & Research, UZA
Bram De Caluwé, Data Manager, AZ Klina
Thomas Dubois, Data Strategy Consultant, i-mens
Bart Helsen, IT Manager, UZ Brussel
Kurt Maes, ICT Solutions Manager, UZA
Peter Raeymaekers, Advisor Technology, Zorgnet-Icuro
Mathias Syx, Technical Lead Data Science Institute, UZ Gent
Katya Van Driessche, DPO, UZ Gent
Maarten Walravens, Deputy Chief Medical Officer, AZ Sint-Maarten
Tim Weltens, Staff member ICT & Innovation, White and Yellow Cross Flanders

‘Value-driven healthcare’ will be a key focus within the sector in the coming years. The further development of an ecosystem of care providers aligns closely with this vision. For every partner in that ecosystem – hospitals, general practitioners, residential care centers, home nursing services, and so on – it is crucial to look beyond the traditional boundaries of their own area of operation. Adding to this evolution is the introduction of artificial intelligence, which can play a significant role in the overall narrative. The debate revealed that while AI is on everyone’s agenda, there are still obstacles to overcome.

Many players within the healthcare sector are actively exploring what AI could mean for their activities. Others are already experimenting. However, for the next phase – in which an organization scales up a concrete AI application – the Belgian healthcare sector is not yet ready. Research firm Gartner also warns against excessive optimism. “In 2025, companies will halt 30% of their proofs of concept with generative AI,” they state. According to the participants in the debate, this is an underestimate, and one in two experiments is likely to fail. The reasons are not surprising: poor data quality, insufficient risk management, high costs, and low adoption. But one reason stands out: the uncertainty surrounding the delivered value.

However, it is precisely that value that AI is all about. Characteristic of the healthcare sector is that patient care is the ultimate goal, but there are also many supporting processes involved. In other words, the use of AI can make a difference both in a care process and in a supporting process. In practice, we see that the application of AI within an administrative process is ethically less sensitive, which results in fewer barriers for pilot projects.

At the same time, there is the risk that ideas remain too vague. A somewhat abstract wish – like “we want to do ‘something’ with AI” – only increases the risk of a disappointing outcome. “This is already the first challenge,” says Patrick De Boever, Director Valorization & Research at UZA. “What exactly do we mean by AI? That idea needs to be clarified, while also experimenting, questioning the organization, and starting to develop a roadmap.”

Ideas from practice

In this context, many ideas around AI come from the doctors and healthcare providers themselves. When it comes to using AI in supporting processes, time savings usually emerge as the main benefit, but the situation is different in direct care. “Here, the focus is not so much on time savings,” says Katya Van Driessche, DPO at UZ Gent. “A doctor will be more interested in AI if it helps them make a better diagnosis. If AI manages to detect breast cancer very accurately in medical images, then you have a case.” The fact that this technology can do so faster than a human still results in time savings. In this way, AI also contributes to solving the growing number of tests and the associated data volumes.

The technology often allows more to be done with the same team. “A great example is the use of generative AI in the context of diabetes,” says Bart Helsen, IT Manager at UZ Brussel. When the doctor makes the diagnosis, a lot of information is provided to the patient. Often, questions then arise from the partner, children, or other family members. “With generative AI, you can create a nice summary of the conversation between the doctor and the patient, which the patient can easily share with their family.” The examples demonstrate how concrete ideas are emerging from healthcare itself.



Philosophical dilemma

There is little fear or uncertainty in this regard, precisely because the benefit in the given examples is clear. The structural staff shortage in the sector also plays a role. “When healthcare providers hear that AI can take over the administrative side of their job, many people might think: yes, please!” says Kurt Maes, ICT Solutions Manager at UZA. This is an understandable reaction, as the automation AI offers allows healthcare providers to focus on the core of their job. “But we must also add a caveat,” says Bram De Caluwé, Data Manager at AZ Klina. “There is a danger that the pendulum swings too far in the other direction: that a job becomes mentally overwhelming once AI has taken over all the simple tasks.”

Here, too, it is important to find the right balance. Furthermore, the introduction of AI also has a philosophical component. If AI results in time savings, what do we do with the time that is freed up? Do we fill it up to further increase our productivity? Or does it create more room for leisure time? In a society that rightly places more emphasis on mental well-being and the prevention of burnout, we must dare to ask that question as well. AI is so disruptive that it is clearly about more than just technology. The arrival of AI therefore requires an adapted policy framework, with the appropriate guidance.

The importance of communication

Often, this guidance is still lacking. “People are naturally resistant to change,” says Maarten Walravens, Deputy Chief Medical Officer at AZ Sint-Maarten. “Proper (long-term) guidance is therefore absolutely necessary. We must not equate ‘implementation’ with ‘adoption.’ We often fall short in reassuring the employee.” Change leads to a period of uncertainty. “Employees wonder if they will still be able to keep up. We should have more dialogue around that.” Communication is also essential when introducing AI, as it turns out.

It is important to present the application as a solution to a concrete issue, not as a threatening change. “We intentionally provide support to give such projects a higher chance of success,” says Tim Weltens, Staff member ICT & Innovation at White and Yellow Cross Flanders. “An important part of the process – even with an AI application – is to ensure that the use cases gain visibility within the organization.” Employees are well aware of the practical problems of their job. When they hear that the organization is providing a solution, they are naturally interested. But first, they need to know that the solution exists.

Equally important is to maintain the right pace and avoid making overly ambitious leaps. Communication is also crucial because the end user often doesn’t have the complete picture. This makes it difficult to convince them to pay attention to data quality. Here too, AI support can make a difference. “The quality of consultation letters today is often suboptimal because doctors have to process a large amount of information from the patient and the tests into a report in a short amount of time,” says Maarten Walravens. “This can be solved with a concrete application. You record the consultation, AI provides speech-to-text, and generative AI creates a summary.” This makes the advantage of AI very tangible in this case.

Setting priorities

An interesting point from the stories of the participants in the debate is that the examples of AI applications they mention start from practical situations. A concrete question triggers the use of AI, rather than the availability of the technology itself. However, an important nuance is that we should not view AI as a miracle solution. AI is not necessarily the best solution for every problem.

By organically mapping the needs of employees, it is possible to come up with a correct list of priorities. The trick is to choose the right projects in an objective way. One possible approach is to survey the employees and identify the top three frustrations of each team. This prevents investing in an AI solution for something employees don’t view as their biggest problem.

“The validation and evaluation of these priorities is certainly not straightforward,” says Peter Raeymaekers, Advisor Technology at Zorgnet-Icuro. “In a sector struggling with a staffing shortage, the centralization of services often offers an advantage. We should approach this more from a sector-wide perspective, rather than each organization on its own.” Staff planning is an example of a challenge the entire sector faces. Here, an AI application could add value to all organisations in the sector. “What’s important is that the whole sector would support such a solution,” says Kurt Maes. “We have not succeeded in having the entire sector work with one EPR (Electronic Patient Record). We must avoid fragmentation in AI as well.”

How do you determine the value of an AI project?

The key question remains: what is the true value of an AI project? Frameworks that guide organizations to answer this question include both qualitative and quantitative components, such as:

- Technical feasibility
- Competitive advantage
- Ethical and legal impact
- Value for the customer

For the quantitative assessment, a cost-benefit analysis can provide a concrete idea of the project. Importantly, the indirect benefits that may arise from an AI project are rarely addressed in such an analysis. Yet, they can have a significant impact.

This exercise is often not an easy one. The benefits of an AI project are not always easily measurable in an objective way. However, making an estimate is crucial to discuss the project objectively, without emotion or ego taking over. Additionally, it is challenging to initiate a project without some indication of its potential outcomes beforehand.

Framework for AI

To avoid an organization getting lost in stand-alone AI projects, whether initiated independently by the business or not, a framework can help maintain overview. In a large environment – such as a hospital or a home care organization – such a framework provides extra support, especially when there is already a portfolio of hundreds of potential projects on the table. A framework helps to sharpen the priorities. Projects that do not meet the essential focus points of the framework are removed from the list – or sent back to the drawing board.

In practice, a potential tension may arise between the Project Management Office of the business and that of IT. The business may consider a project a priority, but progress may be slow if IT does not have the necessary support for it. This is often the reality in the healthcare sector: projects have the best chance of success when they develop at the pace of the organization. Individual initiatives from the business trying to move faster than IT, for example, may have a lower chance of success.

Long-term vision

A well-founded long-term vision is therefore indispensable in the context of AI. “Today, we primarily look at where we want to be in 2030 with integrated care,” says Thomas Dubois, Data Strategy Consultant at i-mens. “How will we work across silos? What challenges exist regarding data sharing with primary care?” This is where AI also enters the agenda, often from a supporting perspective. “I think about the use of speech technology in home care, where there is a lot of contact with non-native speakers. But data quality and data governance are challenges in this area.”

This example clearly demonstrates how AI will inevitably carve out its place in the healthcare sector in the coming years. However, for very concrete applications to emerge, a lot of groundwork is still required. A survey of the panel on plans for 2025 confirms this analysis. AI in healthcare in 2025 can be summarized in a few key words: policy, framework, governance.

CASE UZ Gent

Within the FRAIT project, doctors, IT specialists, and researchers at UZ Gent collaborate on cases involving AI usage, starting from concrete, practical questions. For example: Is it possible to provide a healthcare provider with only the relevant information from a patient’s discharge letter? This would save the provider time spent searching through the extensive details in such letters to find what specifically applies to them. Currently, the FRAIT team at UZ Gent is exploring what information an individual doctor needs from a patient to ensure the technology highlights the correct details in the discharge letter.

“We bring doctors, IT specialists, and researchers together to work with technology like Copilot,” says Mathias Syx, Technical Team Manager from the Data Science Institute at UZ Gent. “They learn, for instance, how to work with ‘prompts’, enabling them to ask the system the right questions. We’re also fine-tuning the model to ensure it delivers relevant output.” In collaboration with the hospital’s Data Protection Officer (DPO), the team developed several user profiles with corresponding discharge letter models. “This ensures that the discharge letter contains the right information tailored to a specific type of care profile.”

Increasing accuracy

Initially, the project focuses on technological development, where the team is already making clear progress. “In a second phase, evaluating the achieved results is crucial,” explains Mathias Syx. “This includes assessing the accuracy of the output. Is it nuanced enough?” For instance, there needs to be a clear distinction between a suspicion (e.g., ‘suspected lung cancer’) and a confirmed diagnosis (e.g., ‘lung cancer’). “At the same time, we are very vigilant about hallucinations.” To refine the model, thirty healthcare providers from hospitals and general practices will evaluate and follow up on 150 discharge letters. “The goal is to determine whether it’s possible to create a correct summary of a discharge letter using generative AI.” The information for the summaries originates from the patient’s medical discharge letter stored in the EPR. The idea is to use generative AI to produce a summary tailored to the needs of the receiving general practitioner (GP). “For example, one GP may primarily want an overview of the patient’s medications, while another may be more interested in the task list for home care.”

Work in progress

In the next step, UZ Gent aims to develop a playbook outlining the approach the team has followed. The goal is to share the accumulated experience with other hospitals and healthcare providers. It is important to note that this remains a work in progress. “For instance, not all legal requirements regarding the discharge letter have been integrated into the system yet,” says Mathias Syx. “We address this by delivering the original medical discharge letter alongside the AI-generated summary to the GP. This ensures that the contents of the summary can always be cross-checked against the original.”

Two-Way Communication

A discharge letter tailored to a specific healthcare provider is something that, for example, home nursing services could greatly benefit from. Ideally, home nursing would have access to all relevant information about medication and care at the moment the patient leaves the hospital. In practice, however, this is often limited to a prescription for medication, with other information – depending on the hospital – arriving only one or several days later, when home nursing has already started.

Equally, an efficient flow of information in the opposite direction would be highly valuable. For instance, information about a resident of a nursing home could be passed on to the attending physician upon the patient’s admission to the hospital. If the file is particularly extensive, generative AI could also play a role in summarizing the information into a more practical and actionable format. Organizations like the White and Yellow Cross make patient information centrally available, but in practice, not all healthcare providers – such as the emergency department of a hospital receiving the patient – have immediate access to it. Thus, barriers to seamless information flow persist.



Challenges in healthcare: automation as the key solution

Healthcare faces a long list of challenges. There is a structural shortage of personnel, putting additional pressure on healthcare professionals, resulting in rising absenteeism. Patients have increasing expectations, expecting medical apps to be just as easy to use and intuitive as the other apps they use daily. Healthcare workers themselves also expect such apps, further driving the pressure for innovation. Moreover, the sector is dealing with ever-increasing costs, including for IT. At the same time, the volume of data within healthcare continues to grow. However, in practice, this vast treasure trove of data often remains underutilized.

Automation offers solutions to all these challenges, although in very diverse ways. The focus is on finding efficiency in all possible processes involved in healthcare: administration, logistics, communication, and more. AI can help in this regard. In fact, the sector is already actively experimenting with it.

Buy or Build

For an organization looking to implement AI, it is essential to approach this in a well-structured way. The AI roadmap can be approached in various ways. An organization can choose to deploy ready-made, existing applications. Alternatively, it can develop tailored solutions designed for a specific use case within a specific organization. The classic “buy versus build” decision applies to AI as well.

For example, a hospital might choose to use the AI functionality provided by the vendor of its EPR system. However, the hospital may prefer to move faster, even outside the EPR system, by deploying its own RPA solution, for instance, to collect data. The same applies to support services like finance and HR, which could utilize standard Copilot functionality within M365 or opt for custom RPA solutions.

Microsoft is already taking the lead by adding healthcare-specific functionalities to Copilot. These include Health Care Agent Services that organizations can integrate into their own systems. Reliable and transparent data sources are crucial for building trust in AI. However, as with any new technological development, the general advice remains the same: conduct an initial assessment to determine the added value a new technology can bring to your organization.