Connected Healthcare

To gain insight into the challenges of connected care, Inetum invited various stakeholders from the sector to the discussion table: Agoria, Armonea, AZ Klina, AZ Sint-Maarten, i-mens, Domus Medica, Pharma.be, Ghent University, UZ Brussel, Wit-Gele Kruis and Zorgnet-Icuro.

Three speakers highlighted a specific topic, each of which served as a starting point for a debate.

The participants

Bram De Caluwé, data manager, AZ Klina
Karen Crabbé, Economic & Health Data Advisor, pharma.be
Aksel De Meester, Head of Data, i-mens
Thomas De Wispelaere, staff member data management, White and Yellow Cross
Thomas Dubois, Data Strategy Consultant, i-mens
Karlien Erauw, Senior Expert eHealth & ICT Standardisation, Agoria
Bart Helsen, IT manager, UZ Brussel
Peter Raeymaekers, Advisor technology, Zorgnet-Icuro
Wil Rijnen, Responsible domain ICT & eHealth, Domus Medica
Emmanuel Stockman, Medical director, Armonea
Dominique Vandijck, Professor of Health Economics, Universiteit Gent
Maarten Walravens, Deputy chief medical officer, AZ Sint-Maarten
Tim Weltens, staff member ICT & Innovation, White and Yellow Cross

Healthcare faces a challenge

Worldwide, not everyone has access to healthcare yet. According to the World Health Organization, there is still a long way to go to achieve that goal. At the same time, it will be a major challenge to keep the healthcare system workable and affordable as more people gain access to it. In Belgium, the main challenge for healthcare is the growing prevalence of chronic diseases and the ageing population. To continue providing an appropriate response, collecting data is essential: primary data (patient health data available to care providers) as well as data for secondary use (health data serving as a resource for scientific research, for example). At the same time, there is a need for greater collaboration, through multidisciplinary and integrated care, to improve citizens' health. This could even include out-of-the-box collaborations between healthcare organisations and, for example, fitness centres. Furthermore, it is important that healthcare views the citizen as a 'person', not merely as a 'patient'. The individual must remain central and not the data, processes or systems. The sector must work in service of 'health', rather than merely 'healthcare'.

EHDS for electronic exchange

The European Union's EHDS Regulation (European Health Data Space) aims to establish a common framework for the use and exchange of electronic health data within the EU. The regulation requires the sector to exchange electronic patient records, prescriptions and information on medication dispensing in a standardised format that complies with European norms by 2029. A second deadline will follow in 2031 with a broader scope of application.

Agoria: where is the roadmap?

"The publication creates a healthy sense of urgency," says Karlien Erauw, Senior Expert eHealth & ICT Standardisation at Agoria. "In less than four years, the regulation will actually come into force." The entire Belgian healthcare sector will need to mobilise to meet these requirements. "There are certainly many challenges, but also much to look forward to. However, as of today there is no detailed roadmap for EHDS in Belgium." Yet there is an urgent need for one, as interoperability is crucial for the future of our healthcare and health system. Not only to comply with the EHDS, but also to evolve towards preventive healthcare through multidisciplinary and integrated care. "The initiative lies with the NIHDI, the regions, the FPS Public Health and the eHealth platform. But together with primary care providers, hospitals and their software suppliers, we have been waiting in vain for a year for Belgium's eHealth Action Plan 2025–2027."

Citizen as indispensable link

The government has three health objectives, such as longer lives in good health, which have been translated into eight priority healthcare goals. "The first transversal objective for healthcare is better collection and exchange of data," says Karlien Erauw. "This effort also contributes to awareness-raising, screening and prevention." But to achieve this data objective, an ecosystem and interoperability are essential. "Technology can and must play a clear role in this: namely to ease the burden on care provision itself."

However, in practice, technology is not always easy to implement. It involves a far-reaching transformation. The citizen is also an indispensable link in this process. "Compare it to the evolution we have seen in the banking sector," says Karlien Erauw. "Today, citizens manage a large part of their banking themselves through an app. In healthcare, we are evolving in the same direction. We will all have to play an active role and take much greater responsibility for our own health, including in terms of prevention." However, achieving this requires a truly people-centred approach, based on a policy supported by a clear strategy.

The sector is forced to wait

For now, the sector must wait for the European standards for EHDS data exchanges, which will not be available until March 2027. Karlien Erauw explains: “From Belgium, we are already closely monitoring this in order to align with the European standards.” “But it is not just about the standards themselves,” adds Maarten Walravens, deputy chief medical officer at AZ Sint-Maarten in Mechelen, “it is also about the feasibility of the regulation: we must provide the necessary financial resources and ensure we have the right profiles.” After all, the profiles that a hospital needs today are no longer the same as those required ten years ago.

“Waiting is by no means necessary,” Karlien Erauw emphasises. “There are certainly quick wins that we can already pursue.” What matters most is that the entire sector can make progress. However, confidence in this is not particularly high. “Launching this without a framework simply will not work,” says Maarten Walravens. “The same applies financially. As a hospital, you have a specific budget per bed, distributed across various statutory duties, such as hospital hygiene or multidisciplinary oncology consultations. Why is there not a similar allocation for data management?”

Priority for the most critical cases

“It is essential that the various actors within the sector do not continue to think solely from within their own silos,” says Emmanuel Stockman, medical director at Armonea. “We must work towards a transmural data flow. At the same time, we must not limit ourselves to the data alone. It is equally about the processes and the collaboration that come with it.” A first possible step could be to streamline the most critical use cases. “I am thinking, for example, of the transfer from home care to hospital, or from hospital to residential care centre,” continues Emmanuel Stockman. “Every year, there are 47,000 avoidable hospital admissions in our country due to incorrect medication use. Better collaboration, and better data flow, could yield enormous benefits here.”

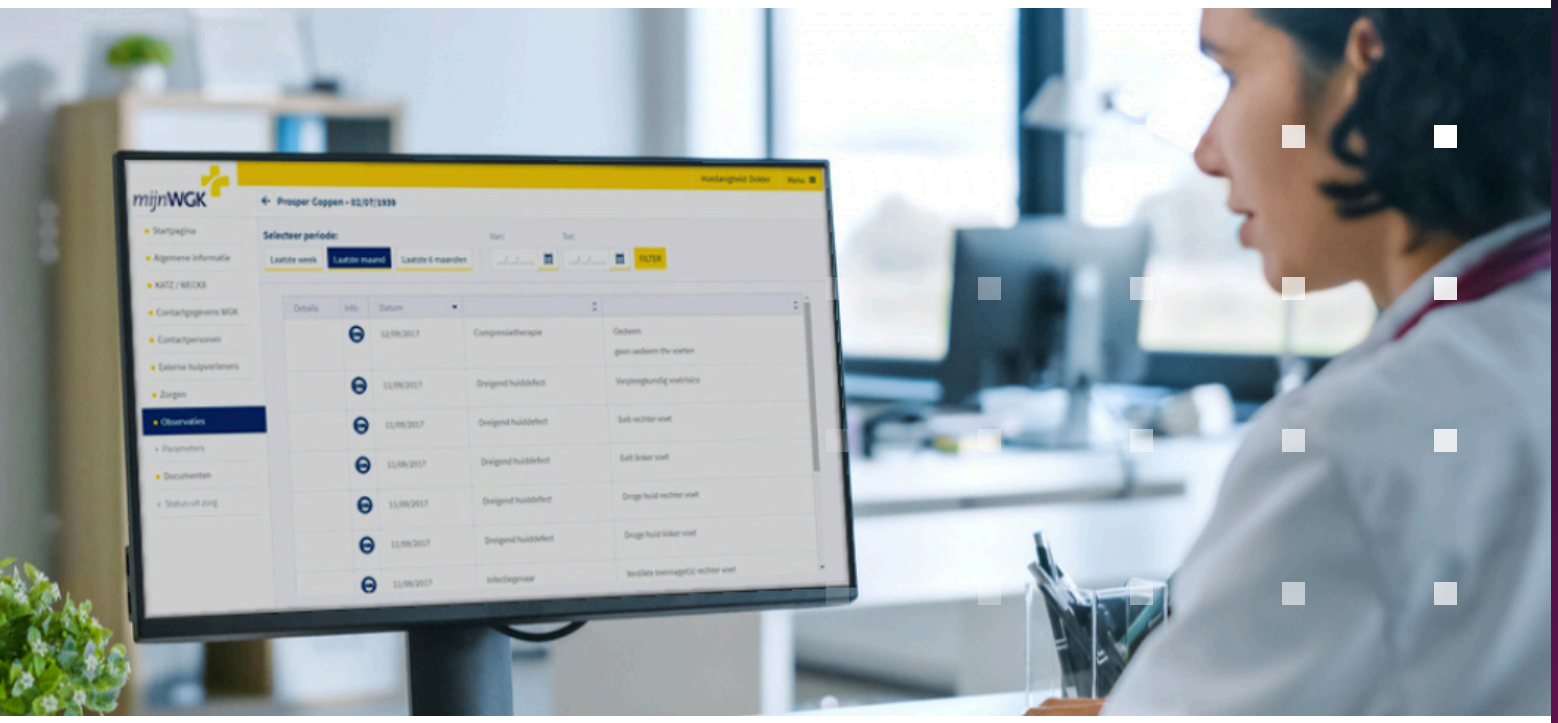
This is a valid analysis, agrees Bram De Caluwé, data manager at AZ Klina in Brasschaat. “But time and again we encounter the issue of standards. What I find lacking is a government that takes a firm stance and clearly defines how the sector must operate.” In this context, it is important that all stakeholders are genuinely committed. Yet in practice, this is often where the problem lies. “Take the transfer from a residential care centre to a hospital,” says Peter Raeymaekers, technology advisor at Zorgnet-Icuro. “As soon as one involved party fails to cooperate, the sharing of information stops immediately. So yes, a government that clearly sets out how collaboration should proceed could help resolve this.”

Technology suppliers must also be on board

That is precisely what the EHDS aims to enforce. Every application containing patient data will need to comply with a European certification. This certification will, among other things, mandate logging and interoperability. “However, it is not yet entirely clear which software will be covered,” says Tim Weltens, staff officer ICT & Innovation at Wit-Gele Kruis. “Hospitals and primary care providers are of course included. But further along the chain? Which wellbeing apps are included and which are not?”

Software providers will therefore need to fully commit to ensuring interoperability and to structuring and exchanging health data. They still have a long road ahead. “We often feel that everyone is doing everything possible to avoid being interoperable,” says Peter Raeymaekers. “Far too many systems are still in use that are not interoperable, which keeps the cash register ringing for the suppliers.” At the same time, the healthcare sector struggles to set clear priorities. The BMUC (Belgian Meaningful Use Criteria) seemed like a promising start but has yet to deliver tangible results in practice.

“We are waiting for a royal decree on BMUC that never materialises,” says Peter Raeymaekers. “This only increases the backlog, making it even harder to resolve in the long term.” One possible solution could be to deliberately aim for disruption. “It is not that it cannot be done,” says Maarten Walravens. “People arrange their entire holiday in an app — flights, hotels, and so on. Yet in healthcare we are still sending PDFs by email. Perhaps, in the evolution ahead of us, we should simply skip a few steps.”



Wit-Gele Kruis: capturing and sharing data

Wit-Gele Kruis has extensive experience with the internal sharing of patient data. During their home visits, home nurses capture data using a tablet. Thanks to this data, colleagues are immediately informed during subsequent visits about what has already happened with a patient or what still needs to be done. “However, sending data to a physician or hospital was not possible,” says Tim Weltens, staff officer ICT & Innovation at Wit-Gele Kruis.

Nevertheless, Wit-Gele Kruis found a way to share data easily, already ten years ago. “In the physician’s patient record, there is a button that allows them to open our file with a single click,” explains Tim Weltens. “We observe that physicians primarily open the file to gain insight into the patient’s medication use and network, such as the contact details of informal caregivers.” Patients often have a paper medication schedule at home, for example, received upon discharge from the hospital. If the nurse takes a photo of this and adds it to the file, this information becomes immediately available to the general practitioner as well.

The solution has approximately 100,000 users per year. “The goal is simple,” says Tim Weltens. “We provide the right information at the right time and place.” The button linking to Wit-Gele Kruis is now integrated into all general practitioner software packages, hospital systems, and connected to the hub via CoZo. However, physicians do not add information themselves to the WGK file. A discharge letter following a hospital stay, for example, would be very valuable to the home nurse when starting the care process once the patient is back home or in a residential care centre.

Seeking new workflows

In practice, information is needed at hospital discharge to ensure continuity of care. “That is why we send an unvalidated report to the general practitioner twenty-four hours after discharge,” says Bart Helsen, IT manager at UZ Brussel. Sharing information with the patient at that moment is not always straightforward, or even desirable. “Sometimes there is information the patient should not yet see,” explains Peter Raeymaekers, “for example, because the bad news conversation with the physician has not yet taken place.”

One possible solution is to work with both a provisional and a validated discharge letter. “In practice, the physician is occupied all day with surgeries and consultations,” says Maarten Walravens. “The physician then takes time in the evening to review and validate the discharge letters that have been prepared by an assistant. It is important that a workflow, such as drafting and validating discharge letters, aligns with how physicians organise their work.”

“At the same time, it would be beneficial to distinguish between the medical content and care instructions, for example regarding wound care and medication,” says Tim Weltens. “Once the patient leaves the hospital, home nursing requires those care instructions.” However, the patient may also have a role to play here. The question is whether the patient is sufficiently involved. Are patients familiar with the Collaborative Care Platform (CoZo), a digital collaboration platform where patients, care providers, and care institutions can exchange medical data? The answer is no. Moreover, the focus on more prevention contradicts the hospital’s current profit model.

Follow the money

“Each stakeholder views care from their own perspective,” says professor Dominique Vandijck, professor of health economics at Ghent University and co-CEO of the non-profit Stop Darmkanker. “We must try to rise above that.” Prevention is essential in this regard. “Today, we still operate too much from the concept of sickness care, not healthcare. Our hospitals are filled for just over half with avoidable patients. And no, the government cannot solve everything. But in this case, the gap between how things are and how they could be is very large.”

That is why professor Vandijck states clearly: follow the money. “The current funding model rewards quantity, not quality. The advantage is that patients in our country receive care quickly. But for physicians, there is no incentive to provide higher quality. The reward should go to the physician who keeps people healthy.” At the same time, the hospital is only part of the bigger picture. “A reallocation of resources is necessary. The cost of an avoidable hospital admission leads to a perverse funding of substandard quality.” However, the sector will not solve this alone. “Education, for example, must also be involved,” continues professor Vandijck. “This way, we make prevention an investment rather than merely a cost.”

BELFHINDA: collaboration between hospitals and pharmaceutical companies

Pharma.be is the general association of the Belgian pharmaceutical industry, representing nearly 130 companies. “Our members approach hospitals and other healthcare providers to collect data,” says Karen Crabbé, Economic & Health Data Advisor at Pharma.be. “They use this data to conduct research aimed at developing and improving medication. The registration of high-quality data is essential to deliver sound research.”

A prime example of this is BELFHINDA, a collaborative project on lung cancer involving nine hospitals and nine pharmaceutical companies. These hospitals already cooperate within FHIN (Federated Health Innovation Network). The pharmaceutical companies have Pharma.be as their point of contact. Clear governance has been established around the collaboration, whereby hospitals provide data to the pharmaceutical companies specifically in the context of lung cancer.

Substantively, the project investigates which data hospitals collect from lung cancer patients and assesses the quality level of that data. The research aims, among other things, to identify missing parameters needed to further improve care. The project avoids the need for a data broker between hospitals and pharmaceutical companies, as the data always remains within the hospital.

Need for a new consultation model

FHIN is a project initiated by the sector. To sustain the collaboration, participants are now formalizing its structure within a non-profit organisation (vzw). “The government could encourage hospitals to join this initiative or integrate the collaboration into existing legal frameworks,” says Maarten Walravens, “for example, by allowing hospitals with a recognized oncology care program to connect to such a consultation model. This would make even more information available within the collaboration.” Participants note that the government is notably absent here. “The government is not considering what the next step should be in terms of continuity,” says Bart Helsen. Yet, this is necessary. “We cannot keep setting up a new non-profit organisation for every initiative.”

“We do work based on government requests as well,” notes Karen Crabbé. “Our information partly forms the basis for certain government decisions, for example regarding reimbursement of specific care.” FHIN also publishes a report with the results of the research on data quality and availability.

According to Dominique Vandijck, initiatives like FHIN highlight a critical issue. “The sector looks to the government with great expectations,” he says, “but whenever the government acts, it always falls short. The sector will probably need to take more action itself. The existing consultation model no longer functions properly. A streamlining is necessary. The RIZIV, for example, has 70 consultation bodies, all governed through a politically composed board of directors. Many ideas get blocked there.”

Conclusion

The discussion clearly illustrates the sentiment within the sector. On the one hand, there is already significant progress in the transition toward connected care; on the other hand, there remains a strong need for clear frameworks — and for a certain acceleration. It is essential that a healthcare organization has a clear understanding of the existing landscape, both internally and externally, when taking the next step toward connected care.

This involves three indispensable pillars in which Inetum Consulting supports healthcare organizations: Enterprise Architecture, Program Management, and Change Management. As mentioned earlier, people must remain at the heart of any connected care model. At the same time, technological integration plays a crucial role. The importance of digital connectivity should therefore not be overlooked. Concretely, Inetum bases its approach on two foundations: WSO2 as the standard environment for developing interoperable applications, and Microsoft Azure Services for Healthcare as the platform.

Inetum
Bedrijvenlaan 4,
2800 Mechelen, Belgium
+32 2 801 55 55
www.inetum.com
info.belgium@inetum.com

inetum