2024

IMPACT Sum-Up

17 Interviews

6 Impact Stories

Technology & Data

Welcome from Philipp Jan Flach

The only constant in life is change...

It is a cliché. But when it comes to European healthcare, there is no greater truth. And 2024 has been no exception to that. Even when we consider the fact that European healthcare is by no means a monolith.

In fact, at a first glance, when looking at European healthcare, we might be dazzled by all the differences between the national systems. But if we look at the challenges facing those systems, we see that these are in essence the same.

Each European country is striving to guard the quality and accessibility of healthcare in the face of growing demand, increasing complexity of patients, rising costs of innovative treatments and a sharply decreasing healthcare workforce. It seems like an almost impossible task to balance these different demands. But one element will need to be part of every solution set: systems will need to increase productivity. Hospitals, primary care practices, doctors – they all need to find ways to treat more patients with the same or even a reduced budget and staff.

> “One spoiler: whatever the approach to healthcare systems‘ challenges, they all rely heavily on digital data.”

In this magazine you will read some fascinating stories from Finland, Germany, the UK and the Netherlands. One spoiler: whatever the approach to healthcare systems' challenges, they all rely heavily on digital data.

Data to allow for automation of certain healthcare tasks. Data to verify that resources were spent where they were supposed to be spent. Data to understand where inefficiencies are hiding within the complex organisations that pay for and deliver healthcare.

Data that facilitates a regional supply chain of healthcare for patient-centred care. Data that allows for large scale real-world data research to facilitate faster conclusions about the effectiveness of treatments. And data to better understand what care matters most for patients and their quality of life.

Another universal truth about change: it is hard. Especially when the change involves massive and complex systems, with many different stakeholders that all have their own agenda and their own emotions.

We must not forget that with change processes of this magnitude, often comes a -sometimes completely justified - sense of insecurity and feeling of powerlessness, which can have a serious impact on the pace of change.

Creating order and a sense of direction in the chaos of change is one of the most valuable things one can do. I think data analytics does this by definition, and I think this is a major driver of the talented and hard-working people that work at LOGEX.

We want to support our customers through change to arrive stronger on the other side of the transformation, ready to provide better healthcare, to even more patients.

Philipp Jan Flach, CEO



CONTENTS



Introduction
2 Welcome from Philipp Jan Flach
5 We are LOGEX
6 Insights from Merten Slominsky

In Focus - Germany
8 Reshaping German Healthcare
10 Data vs Gut Feeling
12 Stabilising Success in Paediatrics

In Focus - UK
13 Data's Hidden Value for the NHS
15 Evolving Delivery with PLICS

In Focus - Finland
16 Finland's Pivotal Moment
18 Integration at Speed
20 Making the Most of a Tight Budget in Pirkanmaa

In Focus – The Netherlands
21 Delivering a New Promise
23 Empowering Mental Health Services

Technology & Data
25 Unlocking the Potential of Real-World Data
27 Insights for More Effective Breast Cancer Care
28 Paving the Way for Better Lung Cancer Care
30 A Fully Connected Europe?
32 Real Solutions in Healthcare Data Integration
34 Thinking Through AI
36 Technical Excellence from Czech Republic
37 Digital Future
38 Improving Treatment Journey of Breast Cancer Patients

39 What's Next






We are LOGEX

It's no secret what healthcare's biggest challenge in 2025 will be.

Surging demand, shrinking resources, and professionals caught in the squeeze, making difficult choices that affect real lives daily.

All alongside messy, incomplete and fragmented data that's a hindrance, rather than a help. There is a real need for an expert partner who can turn that complexity into clarity.

That's LOGEX.

We're not just another healthcare tech company – we're the partner that healthcare providers use to turn one of their most valuable, yet untapped assets into something more useful and strategic: Raw financial and patient data evolves into golden, meaningful insights, making tough decisions not only easier, but smarter.

We turn data into better healthcare

Our tools help providers quickly dive deep into the numbers to uncover the stories that matter: which treatments work best, how patients really feel, and where resources can make the biggest impact.

Whether you're tracking real-world treatment outcomes, strengthening patient relationships through digital engagement, or navigating the financial maze of costing, budgeting and forecasting delivery, we're in your corner.

With LOGEX, you're joining a community of over 1,300 healthcare providers who use our tooling and insights to make life better for 40 million+ patients.
And with our industry-leading security and privacy standards, you can trust us to handle your data like it's our own.

We are LOGEX – We help you deliver better healthcare, one insight at a time.

MedTech Meets Data: Insights from Merten Slominsky

This year, LOGEX welcomed Merten Slominsky as its new Chief Revenue Officer (CRO). Echoing Philipp Jan's vision, Merten believes data analytics is a powerful tool for optimising healthcare. Journalist Kasia Kalinowska at MedTech Pulse spoke to him about his vision for LOGEX and future MedTech initiatives.

Can you explain your job to a five-year-old?

I would say: Hospitals exist to treat people who are ill or injured. To do so, they rely on medications, treatments, tests, and even operations. Coordinating all of this can be very difficult. It’s not easy for one person or team to know everything that is going on and to decide which treatment is best for a patient.

This is where LOGEX comes in. We make hospitals smarter. Our programs provide a clear overview, making it easier to see where mistakes are happening.

What excites you most about your job?

Being able to work and contribute to an area with innovation, change and making a difference to the most important value chain that exists: healthcare.

Data analysis in this context is almost magical when you get to grips with it. By analysing data, you can suddenly see things that you couldn't see before. Sometimes it only takes a few clicks, and you see patterns and have answers to the question: Why does an operation or a patient journey work absolutely smoothly in one department and not in another? Why do some hospitals spend twice as much money for the same clinical outcome?

Data analysis also helps you to look further ahead, anticipate developments and plan strategically. This is enormously important for safe and high-quality care - especially in times when resources and staff are scarce.

The fact that we can do this and thus help people, medical staff and patients across Europe, is very exciting.

Which trend will change the future of medicine?

A quick glance at LOGEX's work, for example in the Netherlands and Finland, where healthcare has been highly digitalised for years, shows me the vast possibilities of digitisation and data analytics. It is truly exhilarating to see how we are perfectly positioned to lead this digital transition in the right direction in my native Germany. Not just to become more digital, but to leverage data for insights that make care delivery more efficient and improve the quality of outcomes.

Additionally, there is a strong push to unify the way we capture and encode healthcare data across Europe, for example through the European Health Data Space (EHDS) program. This will significantly improve benchmarking capabilities across Europe.

Combined with advancements in AI, this will greatly enhance our ability to identify subtle patterns in patients and care pathways.

This will bring us closer to optimal healthcare and allow for the fastest delivery of that care, much faster than we ever anticipated. As a result, healthcare will become more personalised while also being easier and quicker to provide.

> “It is truly exhilarating to see how we are perfectly positioned to lead this digital transition.”

Which MedTech initiatives or startups deserve more attention?

There are many impressive solutions out there, from AI-assisted diagnostics to nanomedicine, bioprinting, and remote or self-diagnostics–some of which are truly spectacular.

Then, there are healthcare solutions that are more administrative and financial in nature–not exactly premium clickbait material at first glance. These include modern accounting programs, process optimisation tools, and benchmarking solutions for hospitals, for example.

However, at the end of the day, it is precisely these tools that form the foundation for successful hospital management and the best possible healthcare delivery. I believe this aspect is often somewhat underestimated in the public image, but we are working to ensure it doesn't stay that way.

Where would you put a million dollars?

All my faith is in the combination of real-world healthcare data and AI. We will work on getting everyone on board sharing their aggregated data for the goal of optimising healthcare.

What's the best advice you've ever received?

Do what you say you do. And do everything you do with energy and passion.

MEDTECH PULSE

Source: medtechpulse.com

In Focus - Germany

Reshaping German Healthcare

From fragmented overcapacity to integrated excellence: A € 9 billion challenge.

Germany's healthcare system stands at a crossroad. We spoke with Mark Zluhan, who leads M&A for LOGEX, about the radical changes reshaping German healthcare and why 2025 could be a pivotal year for the sector.

The German market appears to be facing a perfect storm. What's driving this?

We're looking at a distressed market situation, with many regions in Germany having the opposite problem to most of Europe. We have significant overcapacity across a healthcare system that has developed organically over the last 75 years.

But 80% of German hospitals are now operating at a loss, up from 40% a few years ago, with losses reaching € 9 billion last year. The government is stepping in and actively driving consolidation.

Tell us more about the reform plans.

Of Germany's 1,800 hospitals, roughly 1,000 have fewer than 200 beds. While some are specialised clinics, many are basic care facilities offering limited services. Patients are often hospitalised unnecessarily because out-patient care structures are not available 24/7.

The Federal Minister of Healthcare, has proposed a "revolution" for the German hospital sector. We have the highest number of beds per capita in the whole of the EU, so the reforms aim to reduce overcapacity with expectations that 500-600 smaller hospitals may close, merge or will be turned into out-patient centres.

The reform also aims to change the reimbursement system. They plan to add a non-volume driven reimbursement of retention cost as a third part of hospital financing.

Amidst all of this, there's massive uncertainty about how the roll out will work and what the impact will be.

How is technology playing a role in this transformation?

Germany has committed significant resources to digitalisation, with a € 4.3 billion fund running through 2023 - 2024. The initiative includes strong incentives with hospitals failing to reach certain digitalisation levels facing a 2% reduction in reimbursements.

So we're seeing real movement. Projects funded via the Hospital Future Act (KHZG) will be implemented over the next few years, driving significant change in how hospitals operate and deliver care.

What's your advice to healthcare leaders navigating these changes?

For urban hospitals, the focus should be on specialisation, growth in areas of profitable medical portfolio, productivity and process improvements. In cities like Hamburg, with 36 hospitals often providing similar services, you need to differentiate through specialisation and efficiency. Technology will help providers become leading in particular treatments as well as efficient in more general care.

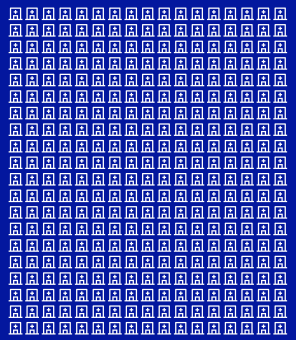
For rural facilities, the strategy has different nuances. With 50-60% of outpatient care physicians expected to retire in the next 5-6 years, rural hospitals must focus on building 'intersectoral care structures'. This means integrating networks encompassing hospitals, outpatient centres and nursing care with all aspects of patient pathways working in harmony in ways that they just haven't so far.

So finally, what are some causes for optimism?

Increased specialisation makes sense for increased quality of care.

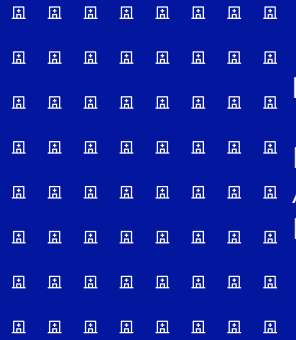
For complex conditions, patients are better off travelling to a specialised centre than visiting a rural hospital that might see only a few cases per year. Especially if digital solutions allow these centres to monitor patients remotely with telemedicine and access real-time patient data from other care providers that patients are interacting with. It's this kind of integrated and streamlined system that we're hopefully moving towards.

Capacity Comparison: Same Size, Different Density



North Rhine-Westphalia

Population	**18m**
Area	34,000km²
Hospitals	**340**



Netherlands

Population	**18m**
Area	42,000km²
Hospitals	**80**

One area, similar in population and size to the Netherlands, has **4x** the number of hospitals.

Operating on Data Instead of on Gut Feelings

by Enno Bialas

As in most countries, healthcare weighs heavily on the national budget of Germany. More people are getting older, with more complex health issues, often combined within one patient (1). Making and keeping people healthy is becoming more expensive. If we stay on our current trajectory, healthcare costs will only continue to rise.

However, Germany as a country has a shared value of wanting to take the best possible care of its population. Very few are willing to sacrifice the quality of healthcare to save money. Nevertheless, most Germans do expect this to happen (2). When looking at the titles of Germany's recent laws to reform healthcare, this fear is understandable. One example is "Regulation for the implementation of additional measures for the financial security of hospitals". This law appears to focus on the costs of treatment rather than the quality of the outcomes.

One of the measures the German government is attempting to lower the cost of care, is to shift from inpatient care to outpatient care for many healthcare procedures. This means that patients do not necessarily stay in the hospitals overnight but are sent back home for their recovery. This would bring hospital care more in line with other European healthcare systems. Additionally, it would allow Germany to reduce the number of hospital beds, which would be good, given the shortage of nursing staff and financial resources

> “Assumptions and perceptions are not reliable sources for policy decisions.”

This shift towards more outpatient care has been a consideration for over 30 years without it making much progress. This is most likely due to the assumption that it would lead to a lower quality of care. But does more efficient use of resources necessarily result in lower quality of care? Not always. One example is when doctors prescribe large containers of drugs, even though the patient only needs the medication for three days. The rest of the container gets thrown out, as an already opened container cannot be handed out to another patient for safety reasons. Most people regard this as an inefficient use of costly resources that does not benefit the patient in any way.

It is not easy to determine steps that save money but that don't negatively affect the quality of the patient's clinical outcomes. But it is certainly not impossible. It is important to measure the right things and compare results

to earlier or other related findings. Returning to the example of outpatient care, many argue that it is inferior to inpatient care and that clinical outcomes will suffer. But this is a hypothesis that should be examined with actual data.

Two years ago, we were involved in a European comparative study of the treatment of breast cancer. One major finding in this study was the different approaches to mastectomies in various countries. While most countries performed this surgery as an inpatient procedure, it was different in the UK, where almost all mastectomies were performed as outpatient procedures. The surgery is scheduled for the morning, and if there are no complications, patients are allowed to go home at the end of the day. This study showed that there were no inferior clinical outcomes for UK patients, and, their patient reported outcome measurements (PROMs) were also not worse compared to other countries. It turns out that generally speaking, people feel better in their own home, sleeping in their own bed and eating their own food.

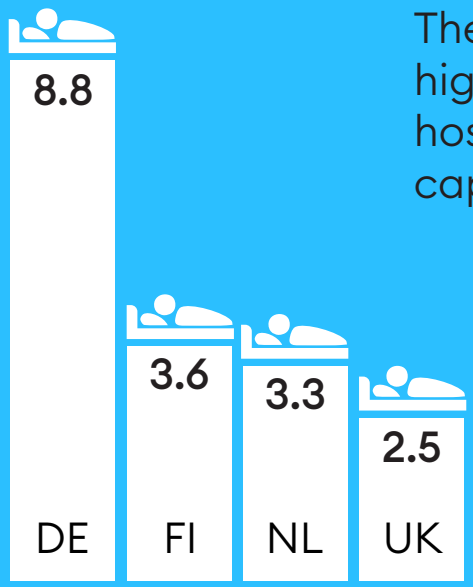
Although these results focus on just one procedure, they do show that assumptions and perceptions are not reliable sources for policy decisions. Healthcare needs data-based decision making, opting for the delivery of care backed by evidence.

[1] https://www.aerzteblatt.de/archiv/239610/Hueftgelenkersatz-Operieren-wir-zu-viel

[2] Medizinische Versorgung: Befürchtungen wegen des Kostendrucks | Statista

German overcapacity is driving the need to reduce costs

The nation has the highest number of hospital beds per capita in Europe.



Beds per 1,000 population
Source: OECD Health Statistics

Impact stories

Securing Critical Funding for Children's Care

Challenge

Under the Hospital Care Relief Act (KHPflEG), German hospitals have received additional funds for child and adolescent care in 2023 and 2024. However, they must provide certified evidence the received funds were used for this particular care. Without this proof, they risk repayment demands, resulting in a loss of essential revenue.

GFO Kliniken Niederrhein struggled to provide the required detailed cost evidence for the complex paediatric care they provided. Existing accounting methods were not reflecting the cost situation adequately.

Solution

To address this challenge, GFO Kliniken Niederrhein partnered with LOGEX to implement a case-based accounting system specifically for paediatric care. LOGEX has adapted its regular Costing solution for this purpose and offers it under the name QlikView. This solution features a comprehensive data view for paediatric costs, including ICU expenses and complex, indirect costs. It supports accurate reporting and financial planning. Additionally, it allows for customisable analysis, enabling in-depth, case-level performance and cost analysis.

Impact

With the help of LOGEX QlikView, GFO Kliniken Niederrhein was able to generate a detailed cost statement, proving the appropriate use of the received funds for paediatric care. The statement promptly received certification form the auditor, meeting the requirements set by the law.

Using QlikView significantly reduced the time spent on manual data processing, enabling the team to tackle other tasks. It improved transparency by offering detailed insights, allowing the organisation to accurately present the financial effects for paediatric care.

LOGEX's intuitive financial analytics solutions support future analysis needs and provide a strong foundation for ongoing performance optimisation.

> “The cost calculation with LOGEX has helped us to validly map our paediatric care costs in a short time and thus secure additional revenue. The cooperation with LOGEX was always very service-orientated and therefore a decisive success factor in the implementation of this solution.”

Andreas Pfadt
Controller at GFO Kliniken Niederrhein

Want to learn more? Click here.

In Focus - UK

Data's Hidden Value for the NHS

The NHS at a Crossroads: Harnessing Data to Transform Healthcare

The UK's National Health Service (NHS) sits on what might be the country's largest data repository outside the Ministry of Defense. We spoke with Gary Ferguson, Head of Sales at LOGEX UK, about the disconnect between data collection and utilisation in the NHS, and how breaking down barriers and changing practices could solve long-standing issues in delivery.

After 20 years of mandatory cost collection, why aren't healthcare leaders getting more value from their data?

When costing was first introduced in the UK, it was really exciting. Hospitals could actually work out their exact costs – how much a hip replacement costs, whether they were making or losing money on procedures like dialysis etc. This new data got people asking good questions and making changes.
But when it became mandated, the market stagnated. Everyone got their system, produced the reports required by the government and it became a box-ticking exercise.

What has that led to?

This kind of cultural inertia can get costly. In one example of work we did with a client, our analysis revealed that two hospitals in the same region of the UK had dramatically different unit costs for treating abdominal pain.

One hospital was admitting patients to general surgery wards for tests and observations, while the other treated them in the Accident & Emergency department (A&E). The cost differential was significant – but more importantly, it highlighted potential improvements in patient care. Think about it... with the exact same symptoms, which would you rather experience as a patient? Being admitted for four days, with the associated risks of hospital -acquired infections, or being treated and discharged efficiently through A&E?

By surfacing these cost and practice variations, LOGEX tools can enable strategic discussions about both financial efficiency and clinical outcomes, but it takes leaders to show interest and give time to doing that kind of digging for understanding and improvement.

What needs to change to unlock the full potential of healthcare data?

I think we're seeing great things across the sector, we just need to be even braver in three key things. 1. Keep dropping the walls – we all know that greater transparency and collaboration between organisations benefits everyone. 2. Really sweating the data assets you've invested in – the sector is data rich but information poor. With targeted investments leaders can get enormous returns on better use of the data available to them. 3. Suspending previous assumptions about technology – embracing the transformative potential of tools like AI and Financial Modelling is what's needed to move the NHS significantly forward against the challenges it's facing.

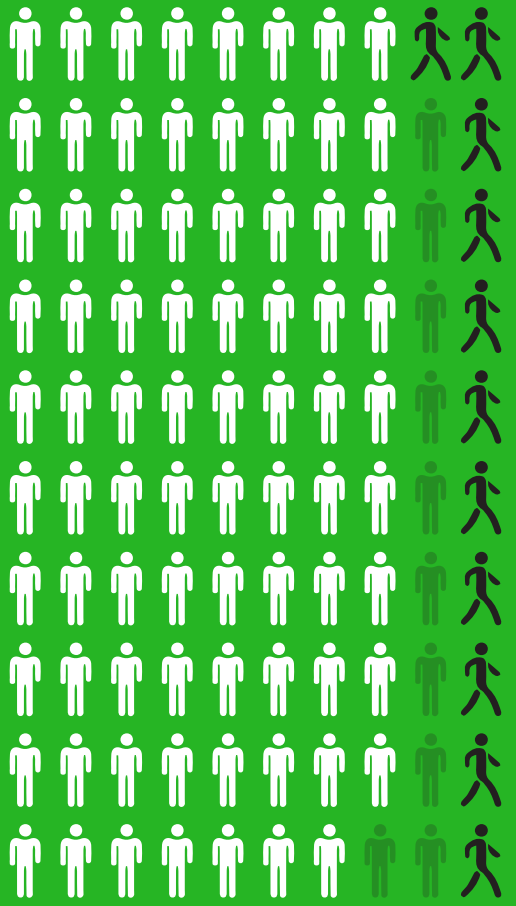
The NHS is incredible, functioning as 200+ different companies all with the same logo. But that complexity shouldn't necessarily equate to a slow pace of change. There isn't one big thing that will make healthcare radically more efficient – it's ultimately about making hundreds of small improvements, year after year across clinical processes, operational delivery and patient experience.

The growing NHS staff deficit in 2024

For every **100 roles** in the NHS

11 will leave in the next 12 months

10 are vacant



Impact stories

Leveraging Data Integration and PLICS for Better Healthcare

About Pennine Care

Pennine Care NHS Foundation Trust delivers exceptional mental health, learning disability, and autism services across Greater Manchester. Operating in 88 locations, it serves the boroughs of Glossop, Stockport, Tameside, Oldham, Rochdale, and Bury, with an annual income exceeding £275 million.

Challenge

Recognising the richness of data in Patient Level Information and Costing Systems (PLICS), the executive team aimed to assess the organisation's capacity and capability to maximise the use of this data. Understanding productivity fluctuations post-COVID is a key objective for NHS England, and PLICS data can help identify improvement opportunities. They decided that a strategic report with evidence-based recommendations and a clear PLICS roadmap were essential.

Solution

Jaime Diack, Head of Finance Systems and Process Redesign, recognised LOGEX's expertise in embedding PLICS within NHS trusts and commissioned a report. LOGEX consultants collaborated with Pennine Care's costing team and stakeholders, analysing key documents like the Digital Strategy to create a detailed, actionable plan tailored to the Trust's needs.
LOGEX delivered a comprehensive report featuring an executive summary, background on PLICS, capacity assessments, key recommendations, a detailed roadmap, and identified assumptions and risks. Appendices included analyses and examples for interpreting costing data, all aligned with the Trust's strategies for clarity.

Impact

With LOGEX's analysis, Pennine Care now understands the key constraints to embedding PLICS data and has a clear framework to address these problems, enhancing productivity and patient care. The detailed roadmap outlines critical areas such as digital strategy, data ownership, and collaboration, elevating the costing team's profile and driving progress.
This strategic clarity has elevated the costing team's profile and kickstarted significant progress in improving PLICS data.

> “The LOGEX PLICS report provided a realistic assessment of our readiness and a comprehensive roadmap to embed PLICS deeply. The consultant‘s engagement with a wide range of staff resulted in practical and relevant recommendations tailored to our Trust‘s infrastructure and needs. We are already using it to transform our PLICS.”

Jaime Diack
Head of Finance Systems and Process Redesign,
Pennine Care NHS Foundation Trust

Want to learn more? Click here.

In Focus - Finland

Solving a 23-piece Healthcare Puzzle

A pivotal moment in Finnish Healthcare.

The Nordics - and Finland in particular - are rightly seen as a leading light in global healthcare, frequently towards the top of global rankings for health outcomes. However, they are not immune to the pressures of ageing populations and cost pressures on public finances.

We spoke to Rami Kujanpaa, CEO of LOGEX Finland about the story of 2024 and what lies ahead for the region.

What are some headlines from Finland's healthcare sector from the last 12 months?

The Finnish system is undergoing a colossal change. In 2023, the country embarked on a massive reform, consolidating its healthcare structure into 23 "wellbeing services counties". This overhaul, while ambitious, has exposed significant struggles that are reshaping the landscape of Finnish healthcare.

There are several themes that have led to a huge deficit in the Finnish health budget, publicly reported at € 1.3bn in 2023 and on course for the same in 2024. But there is one in particular that has been caused by the reform itself: The 23 new organisations that are being built from scratch are all having to invest in infrastructure, personnel and change programmes to align with the government requests.

“This is the moment for everyone to level up collaboration and explore fresh thinking.”

Rami Kujanpaa
CEO of LOGEX Finland

What role has LOGEX been playing in order to help?

We are a well-established partner of Finnish healthcare. LOGEX Costing, already implemented in 12 counties, is enabling organisations to understand patient-level cost structures, which is crucial for real-world decision making on how money should best be spent.

In addition, 6 regions are leveraging our solutions and services to transform raw data - including but also beyond financial - into more efficient care delivery.

For instance, one region used our tool to compare patient visits per doctor across different locations. The analysis revealed significant variations - some doctors seeing 12 patients per day, while others only 5 or 6. That's the kind of work that drives process change and resource reallocation.

We can also get sophisticated with analytics incorporating geographic information systems (GIS), allowing regions to visualise health trends spatially. We've helped districts map areas with high concentrations of patients with chronic conditions against the balanced levels of care. This helped the provider target interventions, improve care and reduce long-term costs.

Looking across the sector, what should leaders be doing as they look ahead?

Public sector leaders are looking to the private sector for inspiration, as private providers have demonstrated they can deliver quality care with great efficiency. They have lower costs, fewer back-office staff, streamlined processes and they make better use of IT and data.

And it should not stop at looking at each other for inspiration. This is the moment for everyone to level up collaboration and explore fresh thinking. I have no doubt that we are going to see further change in Finland, most likely with increased consolidation in how healthcare is organised. This will mean that organisational structures, procurement processes, and management approaches all have to keep evolving to keep us with high standards of care, but within a viable cost envelope.

All of this points to a path with more data analysis. Without the software that makes it possible, hospitals are still sitting on mounds of data that they still have no ability to properly interrogate and inform decisions on. In this period of transformation, data-driven decision-making can make the difference between achieving a surplus or swimming in a deficit. LOGEX stands ready to support healthcare providers in navigating these challenges, turning data into better healthcare for all.

Integration at Speed: Delivering Finland‘s Bold Reform

How are Finnish healthcare providers meeting the challenge of becoming much more joined up, faster than ever? We spoke to Laura Niiniviita and Laura Aho to go a bit deeper.

The Finnish healthcare landscape is undergoing unprecedented change. What's driving this evolution?

"We're seeing a complete restructuring of how healthcare is delivered," explains Laura Aho, Account Executive at LOGEX. "The responsibility for care previously delivered across 300 independent municipalities is being transferred into 23 wellbeing services counties. This creates an urgent need for consolidated financial oversight and control within each county."

The scale of this reorganisation is remarkable. In one example, the healthcare services across Pirkanmaa's 23 separate municipalities - collectively serving over 500,000 people - have all had to be consolidated at pace.

How complex are these organisational mergers?

> “Most of our customers are newly formed counties that have merged multiple organisations together, often start without even basic cost visibility. When politicians ask about elderly care costs or service comparisons, many simply don‘t know the answers. This becomes critical when making outsourcing decisions worth tens of millions of euros.”

"What's particularly challenging is that each municipality formerly had its own way of coding and tracking costs," says Laura Niiniviita, Solution Manager at LOGEX.

"It's not just about combining different systems - we're harmonising different languages of data, different processes, and different organisational cultures into one coherent approach."

How are organisations managing to adapt so quickly?

"The pace of change has been extraordinary!" says Laura Niiniviita.

"In Pirkanmaa - the county we mentioned earlier - LOGEX has unifyied data from 23 different organisations, systems and processes into a single cohesive view healthcare cost system for the newly formed county. The initial implementation was complete in just 6-9 months and this is pretty typical now in similar work we've done across 5 counties."

"Success depends heavily on having the right people involved," Niiniviita emphasises. "When customers have capable teams who understand both the technology and healthcare context, we can progress incredibly fast. A typical project involves just 6-10 LOGEX specialists working closely with the customer team to deliver these complex transitions."

The team also emphasises the importance of ongoing education and support.

"As organisations wrestle with staff turnover and responsibilities are shifting often, we regularly conduct training sessions to ensure teams can maximise the value of their cost data," explains Niiniviita. "When we discover effective practices in one region, we make sure to share these insights across all our customers."

What early benefits are organisations seeing?

"The immediate impact is visibility," says Niiniviita. "Organisations are becoming more cost-aware out of necessity. Unlike before, they can't simply request more funding when budgets run over. They need to understand their cost structures and make data-driven decisions."

"Also, many organisations are already moving beyond basic cost visibility. Helsinki University Hospital is combining cost data with patient information to analyse treatment pathways and identify opportunities for more efficient care delivery. Others are using the insights to better understand population health needs and optimise service delivery by diverting resources to where they're most needed."

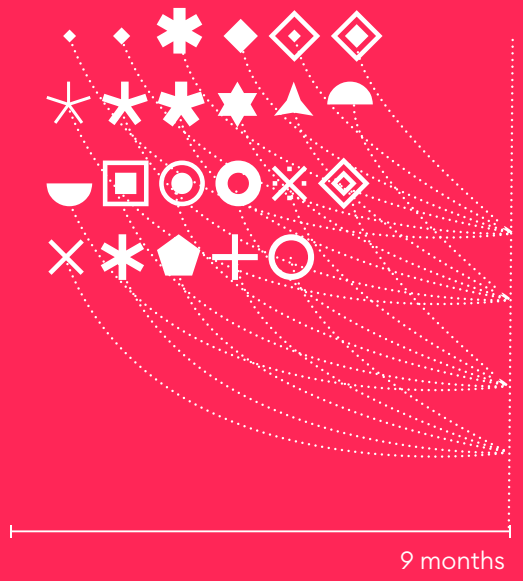
What advice do you have for healthcare leaders navigating this reform?

"First, get control of your basic service and cost data," Niiniviita emphasises. "You need to understand what services you're providing and their true costs. This is fundamental to responsible management of taxpayer resources."

Laura Aho adds: "But don‘t wait for perfect data - it doesn't exist. Start now with what you have then iterate and improve month on month. The future is in combining different data sources - cost, patient, and population data - to drive better planning and resource allocation. With better digital services, smarter resources - both human and AI - and partners like LOGEX who know the landscape in depth, genuine transformation really is possible."

The Finnish consolidation into counties is happening at pace

Data, processes and systems across **23** different organisations



9 months

Unified into **one** cohesive view in less than **9** months

Impact stories

Making the Most of a Tight Budget: Pirkanmaa's Approach to Smarter Cost Management

Mikko Hannola, Head of Financial Services at Pirkanmaa Wellbeing Services County, has been working with the LOGEX team since the early 2000s. This year, we collaborated to implement a cost calculation solution in this newly created Wellbeing Services County.

Challenge

Wellbeing services counties face significant financial challenges. Understanding costs at a detailed level is essential, particularly as they are required to provide services within the constraint of their available budget. Besides for their own planning and pricing purposes, the wellbeing services counties also need information to accurately report their finances to various authorities, such as the Ministry of Finance. These reports require consistent data across counties to enable comparison.

Solution

After implementing the LOGEX Costing solution, Pirkanmaa is now able to answer questions about production costs, cost optimisation, and outsourcing decisions, with ease. Cost information is essential for rational decision-making. Without it, leaders might focus too much on individual expenses, like a single medicine or device, which may only account for a small portion of total costs.
Cost calculation also plays a key role in pricing. Wellbeing counties use this data to price their services and compare costs with outsourced services. This is relevant as the ageing population and workforce shortages in Finland are putting significant pressure on public healthcare. To address this, many services are outsourced to private providers, representing substantial expense. For instance, this amounts to € 1.5 billion annually in Pirkanmaa, including materials.

Impact

LOGEX's Costing solution's ability to adapt to different units, even with varying product structures, is a big advantage of this solution. One other strength is its focus on healthcare-specific needs. Currently, LOGEX is the only provider capable of offering patient- and client-specific cost calculations for wellbeing services counties. By continuing to refine our approach, LOGEX aims to provide patient level ie. PLICS calculations to Pirkanmaa Wellbeing County. This will enable deeper analysis, such as understanding the financial impact of structural changes, for example if elderly people start using more emergency services or wards due to the changes in their services.

> “LOGEX understands the specifics of healthcare and accounting, which makes communication easy- we speak the same language.”

Mikko Hannola
Head of Financial Services at
Pirkanmaa Wellbeing Services County

Want to learn more? Click here.

In Focus - The Netherlands

Delivering on the Dutch Appropriate Care Promise

The Simulation Solution: How to deliver on the mandate for Appropriate Care in the Netherlands

Probably the biggest recent story in Dutch healthcare is the challenge of implementing the ambitious new Integral Care Agreement (IZA). It pushes the whole healthcare sector – not just hospitals – to move towards prevention, digitisation and regional collaboration, in an effort to create a future-proof ecosystem.

We spoke to Barend Buutfeld - Principal in LOGEX Financial Solutions - about what this looks like in practice, and what leaders should do in 2025 and beyond to meet the challenge of delivering 'appropriate care' for Dutch citizens.

Tell us about the 'appropriate care' challenge and what it means for healthcare providers?

Appropriate care (or 'Passende Zorg') is more than just an objective, it's a mandate for everyone in healthcare to participate in minimising over-treatment and focus on scientifically proven, effective care.

The goal isn't just that individual providers do a great job... it is for the whole healthcare system to optimize the value of care delivered to the patient.

So, two years in... where are we on the journey?

Well, providers have made great strides in increasing the visibility, the transparency and the usefulness of their data... the next steps are these insights becoming much more joined up inside regions.

Once providers have a good handle on their own information, it's also much easier to share and get over the historic fragmentation that has held the system back. You can't judge what appropriate care is if you can't see what's happening across your own organisation AND throughout the whole patient pathway where it involves others. And if you can't see it or judge it, then you definitely can't improve it!

So, what is happening to get there?

There's lots of great practice, but here's two short stories. One of our customers - Elisabeth-TweeSteden Ziekenhuis – is constantly working on delivering care more appropriately. They recently spoke at an event where they described how using our financial analytics tools and benchmarking work helped them rebalance the capacities of their clinics. The end-outcome was they were able to redesign the clinic and save over 60 beds in their future capacity plan. The insight we generated from their data pinpointed exactly where they needed to have discussions with specialists, trial solutions and tweak guidelines to stack up savings.

The second, which I think is really powerful and just coming into its own is our simulation work. In Friesland for instance, we recently supported two hospitals in better understanding the financial implications of merging their organisations into one. This is key to delivering more efficient and integral treatment pathways, but also affecting the hospitals' income. We helped simulate these effects in detail, a successful collaboration that we've now extended into a multi-year partnership as they prepare to finalise the merger. I think these kinds of insights are going to be more and more crucial as organisations build momentum and minimise risk by answering their "what if...?" questions.

Absolutely. Finally, what would be some headline advice you'd offer leaders in the sector given everything that lies ahead?

It's understandable that Dutch healthcare has been improving at the level of individual organisations as that's the system we built over the course of nearly a century. But to meet the challenge of where we are headed, it will take leaders across the sector being willing to optimise for their region and the population they serve. This will mean "stepping over your shadow" we'd say in Dutch... basically, becoming much more transparent in pooling information and quickly making changes based on intelligent insights. We simply won't be able to deliver cost-effective, appropriate care without this kind of collaboration. Technology will be 50% of that picture, with real leaders driving action and change being the other 50%.

> “If you can’t see it what’s happening in your organisation, then you definitely can’t improve it!”

Barend Buutfeld
Principal in LOGEX Financial Solutions

Transparency is key if we want to build up courage to explore different ways of working. Our simulation capability, analysing patient, process and financial data-sets is going to be a game-changer for helping providers and systems change at pace without it being a huge risk to the healthcare providers the Dutch population depends upon. The LOGEX motto **"Decisions you can stand by, impact you can measure"** is as important as ever to make this transition work.

Impact stories

Empowering Mental Health Services Through Strategic Budgeting with LOGEX

Challenge

GGZ Delfland, a comprehensive mental health organisation in the Haaglanden and Rijnmond region of the Netherlands, delivers a wide range of care services–from short-term treatments to intensive, long-term support–operating in multiple healthcare systems. Despite its commitment to providing timely, high-quality care by enhancing cooperation within the healthcare chain and implementing technology for greater efficiency, GGZ Delfland faced challenges familiar to many in the mental healthcare sector. These included managing long waiting lists, rising operational costs, and the complexities introduced by the reorganisation of the claims system (Zorgprestatiemodel). Balancing the available treatment capacity with costs and revenue became an urgent priority.

Solution

To navigate these challenges effectively, GGZ Delfland partnered with LOGEX to implement an integral budgeting approach designed to balance capacity, costs, and revenue. Working closely with LOGEX, GGZ Delfland adopted LOGEX Budgeting, which allowed the organisation's Business Control team to implement a structured framework that department managers could refine based on their unique needs. This model translated budgeted staffing levels into both costs and available productive hours, delivering a direct and comprehensive view of how adjustments would impact overall outcomes.

Impact

LOGEX Budgeting helped GGZ Delfland gain essential insights and control over its resources through a bottom-up budget approach, ensuring the right people are in the right roles at the right time. LOGEX enabled the organisation to directly map this information to personnel costs and productive hours, helping them manage staffing efficiently. Through a detailed view of each employee's workload across various funding streams, GGZ Delfland now has a full picture of how time and resources are allocated, in one central platform. This approach has empowers GGZ Delfland's team to stay in control of a complex budgeting process involving multiple stakeholders, ensuring the organisation remains agile and responsive to the needs of its community.

> “LOGEX Budgeting allowed us to move from Excel-based process to a professional online platform within one year, managing all information in one central place, involving internal stakeholders, and streamline the budgeting process. What’s more: LOGEX invested in key features that are important to us as a Mental Healthcare Provider, to make better decisions based on factual information.”

Arent van der Heide
Director Finance & Information

Want to learn more? Click here.


Technology & Data

Unlocking the Potential of Real-World Data

Over the last years, there has been a significant increase in the use of real-world data (RWD) in medical research in the effort of creating real-world evidence (RWE)[1]. RWE provides crucial insights into treatment performance outside controlled settings in clinical practice, in real patients. Sarah Blackburn, Senior Business Development Manager at LOGEX, shares her perspective on this shift from her 20+ year career in the RWE field.

Sarah, how would you describe the change happening in RWE in European healthcare over the last few years?

Prior to COVID-19, real-world data (RWD) played a limited role in healthcare decision-making, as clinicians favoured randomised controlled trials (RCTs) and focused on prospective studies. However, the pandemic marked a significant shift, particularly during the vaccine rollout. Millions of vaccinations were administered, with the effects on patients monitored in real-time. This increased visibility helped both clinicians and patients recognise the value of RWE, elevating its status closer to that of RCTs. This led to more scientists running studies with RWD and more patients and clinicians agreeing to partake in these studies.

Despite this large increase of interest in RWE, what hurdles still remain concerning this field?

Challenges persist, particularly concerning the inconsistency in data capture across European healthcare systems. A lack of standardisation between countries means that the same measurement can be recorded using various methods or formats. For instance, weight is measured in stones in the UK, while it is recorded in kilograms elsewhere. Additionally, data from diverse sources, such as free text, must be converted into standard formats for analysis. These variations create barriers to data analysing and comparing. Solving these issues manually is far too time-consuming and error prone. They require workable technical solutions.

> “Today, Real-World Evidence is essential for improving cost-effective patient care and enhancing clinical outcomes.”

Sarah Blackburn
Senior Business Development Manager at LOGEX

What do those solutions look like?

As you will be able to read elsewhere in this magazine, for one of our projects we have been able to essentially build a large translation machine that converts local data to the OMOP model. We also make use of Natural Language Processing (NLP), an AI capability that can turn free text into absolute data. We always work closely with the data departments and leading clinicians at the hospitals that participate to make sure our standardisation processes lead to valid results.

Are we seeing any promising results from the increased use of RWE?

Today, RWE is essential for improving cost-effective patient care and enhancing clinical outcomes. For example, LOGEX participated in a recent study published in Lung Cancer, showing that lower dosages for lung cancer patients lead to better cost-effectiveness and the same clinical outcomes for patients, reducing the severity of side-effects and enabling more patients to be treated with the same resources. By reflecting real-world outcomes, RWE supports data-driven decisions that improve patient care and strengthen the healthcare system.

[1] https://pmc.ncbi.nlm.nih.gov/articles/PMC9815890/

Impact stories

Insights for more Effective Breast Cancer Care

The Dutch Medication Audit (DMA), supported by the Dutch Institute of Clinical Auditing (DICA), the Dutch Society of Hospital Pharmacists (NVZA), and the Dutch Healthcare Insurers (ZN), aims to enhance insights into the use of expensive medicines and provide optimisation recommendations. The project features comprehensive data analyses and reflection sessions for participating hospitals, with support from MRDM and LOGEX.

Challenge

To achieve DMA's objectives, a complete overview of medications per patient is essential, derived from the electronic prescription system (EVS). However, Dutch hospitals lack a uniform EVS, leading to varied systems across departments. This complicates understanding patient care pathways, medication dosages, and clinical outcomes.

Solution

To enable comprehensive data analysis, various data sources must be linked to accurately map patient care pathways and clinical outcomes. The DMA utilises previously collected data, which minimises the effort required from hospitals for participation, despite the time investment necessary due to the lack of a uniform prescription system.

DMA alleviates much of this burden by allowing hospitals to share their raw data with MRDM, which manages linking, validation, and dataset selection. LOGEX's specialists then conduct detailed filtering analyses.

A notable research question explored whether proton pump inhibitors (PPIs), which are commonly prescribed for patients struggling with severe heartburn symptoms, affects the prescribing behaviour (especially dosing) and effectiveness of CKD4/6 inhibitors, which is a commonly used therapy in hormone-sensitive, metastatic breast cancer.

Results

The round table session engaged 24 hospitals in structured discussions, sharing analyses and research results. Notably, real-world data revealed no differences in overall survival between patients using CKD4/6 inhibitors with or without PPIs, suggesting that concerns about PPIs reducing cancer treatment effectiveness are unfounded.

Impact

This project shows how sharing data and jointly discussing the outcomes of data analyses can contribute to increasing knowledge about treatments. With that knowledge, evidence-based decisions can be made that improve patient care.

Want to learn more? Click here.

Data & Discussion: Paving the Way to Better Lung Cancer Care

Lung cancer is the leading cause of cancer death worldwide, affecting 1 in 16 people over their lifetime (1). Tragically, it also has one of the lowest survival rates, with only 27 out of 100 people expected to survive for at least five years after diagnosis (2). While developing new treatments can take decades, we can make significant progress today by evaluating existing therapies in real-world settings. By analysing how current treatments perform outside of clinical trials, we can ensure that patients receive the best possible care immediately. Esther Dronkers, Programme Lead at LOGEX, discusses how this research is shaping the future of non-small cell lung carcinoma (NSCLC) treatment, ensuring that patients have access to the most effective therapies available.

What is the name of the project?

The project, titled "The Effectiveness of Pemetrexed for NSCLC Patients," was presented as part of a round table session of the Dutch Medication Audit (DMA). This initiative, led by DICA, involved a collaboration where they took the lead, MRDM, involved a collaboration where DICA took the lead, MRDM handled data processing, and LOGEX provided data analytics and support.

What was the situation before the project?

For patients with metastatic non-small cell lung cancer (mNSCLC), the standard treatment traditionally consisted of pemetrexed combined with chemotherapy, followed by maintenance therapy with pemetrexed alone. Initially, pemetrexed was regarded as the most effective option for these patients.

However, the treatment landscape began to evolve in 2017, when the European Commission approved pembrolizumab (Keytruda), developed by Merck (known as MSD outside the U.S. and Canada), as a first-line therapy for mNSCLC patients whose tumors express high levels of PD-L1. The introduction of this immunotherapy opened new possibilities for patient care.

Following pembrolizumab's approval, a keynote study demonstrated that the combination of pembrolizumab and pemetrexed was more effective than pemetrexed alone. As a result, clinicians adopted this combination therapy in their treatment regimens, leading to the question: Is pemetrexed still necessary, or could pembrolizumab alone be sufficient?

To address this, the DICA proposed investigating whether a real-world study could compare maintenance treatments involving pemetrexed, pembrolizumab, and chemotherapy. Clinical practices varied, with some hospitals continuing with combination therapy after the initial four cycles, while others chose to administer only pembrolizumab. The treatments continued until the patient either passed away, experienced disease progression, or was unable to tolerate the toxicity.

How was the data gathered and analysed?

The data was collected through the DICA medicine quality registry, which provided insights into current treatment practices.

One aspect we examined in the data was the approach hospitals took during the maintenance stage. Some hospitals never administered pemetrexed, while others always did.

We also explored whether we could demonstrate that one treatment approach was superior to another. We compared patients who received only one treatment to those who received both. However, because pemetrexed can be harsh on patients, those in poorer condition (e.g., with comorbidities or advanced age) often did not start with pemetrexed, complicating direct comparisons between the two groups.

To address this, we compared the policies of the hospitals. We selected hospitals with the most extreme approaches (either always administering or never administering pemetrexed) to determine if there was a difference in patient survival between the two groups. Within this initial study, we could not find a significant difference between the groups.

To strengthen the analysis, we re-examined the two patient groups. The data suggested that patients who did not receive pemetrexed had outcomes similar to those who did. However, further research is needed to confirm these findings and assess the broader implications of discontinuing pemetrexed as a maintenance treatment.

Why is this research significant?

During the roundtable session, we discussed that pemetrexed may not always be necessary as a maintenance treatment for mNSCLC patients. One oncologist mentioned that, based on the findings, he would now feel more confident stopping pemetrexed earlier than he typically would. This underscores the relevance of the DMA, roundtable discussions, and Real-World Data (RWD) in supporting evidence-based adjustments to clinical practice.

The analyses will continue, and we are working towards a peer-reviewed publication to further explore and validate these insights.

[1] Lung Cancer Research Foundation. (2024, 09 26). Lung Cancer Facts 2023. Retrieved from Lung Cancer Research Foundation: https://www.lungcancerresearchfoundation.org/lung-cancer-facts/#:~:text=1%20IN%2016%20PEOPLE%20will,and%201%20in%2017%20women.&text=Approximately%20127%2C070%20AMERICAN%20LIVES%20are%20lost%20annually.

[2] Modglin, L. (2024, 07 15). Lung Cancer Survival Rates by Age: Key Insights. Retrieved from Patient Power: https://www.patientpower.info/lung-cancer/lung-cancer-survival-rates-by-age

> “One oncologist mentioned that he would now feel more confident stopping pemetrexed earlier than he typically would.”

Esther Dronkers
Programme Lead at LOGEX

Connecting Europe to Optimise the Delivery and Outcomes of Healthcare

Although the last decades have seen huge steps forward with technology and digitalisation, we are still a long way from what could be possible: an integrated, pan-European system with seamless data being used to improve patient care.

We spoke with Andrew Woodward, LOGEX's CTO, to understand how close we are to this vision and explore technology's role in creating a more deeply connected European healthcare ecosystem.

How was data-based technology first used in healthcare and what impact did it have?

Initially, healthcare tech was about digital filing - storing patient records electronically instead of in paper folders. The purpose was efficient record-keeping.

There was no real strategy to make data interoperable or usable beyond individual patient cases, it was all about simply storing information for clinical reference.

But as we progressed, we realised technology could do more than hold the information. If data could be shared across systems, then possibilities could be opened up for substantial research and care improvement goals.

I strongly feel that our task now is is to make data accessible Europe-wide: making it actionable, leveraging technology for the kind of analysis that enables better, more data-driven care.

What would a fully connected European healthcare system look like?

In an ideal scenario, we'd have the unified European Health Data Space (EHDS), a proposal currently moving through the Council of the European Union.

This would be a huge step towards all European patient data being stored in such a way where patients control access to their data, but providers across the continent could access the data in different ways and for different needs.

> “Our approach empowers healthcare providers to be more agile and responsive, drawing on accurate, unified data to deliver healthcare improvements.”

Andrew Woodward
CTO at LOGEX

At the same time, we could make progress against one of the main difficulties, which is unstandardised formats. However there is light on the horizon with global informatic standards like openEHR and HL7 FHIR, which facilitate data interoperability. If we can overcome the complications in unifying data across systems and countries, then we would enter a whole new era of insight and improvement - not just in operations, not just in cost management, not just in care, but ultimately in the clinical and health outcomes that we all want to see get better.

This is really driving up the focus on structuring new and better data to extract insights, but achieving complete interoperability will require dedicated effort and will call for compromises and tough decisions on things like what to do with legacy data.

What are the main obstacles slowing down progress?

Well, the barriers are significant. Countries have unique healthcare models, regulatory frameworks, and even technology ecosystems, all of which makes for fragmented data systems that don‘t naturally integrate.

Additionally, there are valid privacy and security concerns that add another layer of complexity. Data management standards vary across countries, and the fear of mishandling data or breaching GDPR compliance has led to a cautious approach to adopting cloud-based solutions despite their potential for increased security.

How is technology—and your team—addressing these challenges?

Our focus has been creating a solid data infrastructure, most notably through our Nightingale project. This platform standardised data ingestion, processing, and analysis, giving healthcare providers better tools for data management and interpretation with transparency at its core.

Doing so, we help them gain insights that improve care and reduce their dependence on us for every new analysis. This approach empowers providers to be more agile and responsive, drawing on accurate, unified data to deliver healthcare improvements.

So, do you really think the ambition is achievable?

Absolutely. If better technology is adopted year after year by providers everywhere, then we’ll see all these incremental solutions bridge the gaps and propel healthcare improvement across Europe.

By standardising and connecting healthcare data, we‘re moving toward a future where data doesn’t just support individual patient care, but improves the vitality of the entire European continent.

From Challenge to Change: Real Solutions in Healthcare Data Integration

Healthcare providers and researchers across Europe are actively working to overcome data standardisation challenges. LOGEX is at the forefront of this transformation, implementing practical solutions that are already making a difference. Here are three concrete examples of how we're helping to bridge the gaps in healthcare data sharing and analysis.

Creating Efficient Data Exchange Networks in the Netherlands

When Dutch healthcare providers faced challenges implementing the government's VIPP 5 programme for nationwide data exchange, LOGEX Patient Engagement stepped in with an innovative approach. Rather than having customer struggle with multiple competing technical solutions, we developed a streamlined proof-of-concept system that demonstrated remarkable results.

Working with eleven healthcare providers, including the MKA Group (the Netherlands' largest oral and maxillofacial surgery clinic), we established a secure infrastructure for exchanging essential patient data. This practical approach yielded impressive outcomes. The implementation timeline was reduced by three months, while participating customers saw their costs cut in half. All required security audits were completed successfully, and the system enabled seamless exchange of core healthcare datasets.

"Having successfully completed audits for Modules 1, 2, and 3 with no shortcomings, we are very proud of our team's achievement," says Jim Mercx, Finance & Control Manager at MKA Group. "We continue to pursue innovation and digitalisation with LOGEX Patient Engagement."

Breaking International Barriers in Psoriasis Research

The challenge of data standardisation becomes even more complex at an international level. The European Psoriasis Observatory project exemplifies how we're addressing this issue. With more than 15 different medicines available for advanced psoriasis treatment, understanding which care paths work best for specific patient groups requires analysis of data from multiple countries.

Our team developed an automated solution that transforms healthcare data from England, Sweden, and the Netherlands into a standardised format using the OMOP

> “LOGEX is at the forefront of overcoming data standardisation challenges.”

Common Data Model. This innovation has revolutionised how we process and analyse international healthcare data. Through automation of mapping and data transformation processes, we've achieved an 80% reduction in data processing time. The system enables standardised analysis of treatment effectiveness across countries, and perhaps most importantly, we've created a framework that can be adapted for other therapeutic areas.

"By creating this solution, using OMOP and SNOMED CT, and thus harmonising the data, our data scientists can now truly perform scalable analytics across multiple countries," explains Laurens Krüger, Senior Product Manager at LOGEX. "This enables them to focus on the value in the data in order to help patients get the best possible treatment in the future."

Supporting Quality Registry Evolution

As regulations evolve, so do the challenges of data management. In response to upcoming changes in the Dutch Healthcare Quality, Complaints, and Disputes Act (WKKGZ), we're actively helping quality registries and healthcare providers prepare for new requirements.

Our proactive approach begins with direct participation in pilot programmes to test new pseudonymisation requirements. We've developed updated data processing protocols that comply with new standards, while maintaining close collaboration with registry holders to meet review criteria. Throughout this process, we provide comprehensive support for healthcare providers in implementing source-level pseudonymisation, ensuring they can meet new regulatory demands without disrupting their essential work.

Driving Progress Through Practical Solutions

These examples demonstrate how technical innovation, combined with deep healthcare sector knowledge, can solve complex data challenges. Our practical, implementable solutions are transforming how healthcare providers and researchers work with data. They can now share information more efficiently and securely, while generating meaningful insights from international datasets. As regulatory requirements evolve, our solutions help organisations adapt quickly and effectively. Most importantly, these advances in data utilisation translate directly into improved patient care.

The path to fully integrated healthcare data may be complex, but through these initiatives, we're showing that progress is not just possible–it's already happening. As we continue to develop and implement solutions, we're moving closer to a future where healthcare data can seamlessly flow between providers, researchers, and nations, all while maintaining the highest standards of security and privacy.

Thinking through AI's Role in Tomorrow's Healthcare

by Wouter van Dijk

One of the main challenges that European healthcare will face by 2050 is ensuring the provision of high-quality care and support for patients in the face of demand and resource issues. To address these challenges, we must explore new ways to deliver care. Artificial Intelligence (AI) could play a significant role here, by using software tools that help humans make decisions based on data and insights far beyond what they could process on their own.

How AI could help

One major example of how AI might be able to help in a highly impactful way, is by facilitating the further development and use of Personalised Medicine (PM). PM recognises that each patient is unique. Rather than relying on standardised treatment plans, personalised medicine tailors care to an individual's genetic makeup, physiology, lifestyle, and environment. This can lead to better outcomes with fewer resources. But implementing personalised medicine can be costly and complicated–think genomic sequencing and big data analysis, which are out of reach for many healthcare systems.

AI could be a game-changer here. By combining AI with Real-World Data (RWD), such as electronic health records and clinical notes, we can make personalised medicine accessible and scalable. AI can help with turning a mountain of medical data into clear information in which patterns and correlations can be spotted easily. With AI's help, healthcare providers could develop tailored treatment plans for more patients without breaking the bank. Imagine a system that can monitor a patient's health data in real-time, adjusting treatments as needed to ensure the best possible outcomes–no human could process that much data on the fly.

The Reality Check: Data Quality is AI's Achilles Heel

However, as it stands today, AI systems are not infallible; they can occasionally produce flawed results. The accuracy of these systems is heavily contingent on the quality and diversity of the data they have been trained on. Using these systems when they are not fully ready is risky. When AI systems make errors, it can lead to incorrect follow-up decisions by clinicians who might otherwise have made accurate judgments without AI (Bernstein MH, 2023).

Bridging the Gap: RWD and AI Working Together

This is where real-world data (RWD) must play its part. RWD encompasses data collected from diverse sources, such as electronic health records (EHRs), patient registries, and even wearable devices. At the same time RWD provides AI models with the real-world context they need to make accurate predictions.

AI, in turn, has the power to increase the value of RWD by optimising the usability of the data. One clear example of this is Natural Language Processing, an AI application that can interpret spoken or written language and transform it into discrete, sortable and analysable data. This means that unstructured free text, that used to be either unusable, or extremely time-consuming to use in the context of data analysis, is now valuable data with a high degree of specificity. This application is already being used at LOGEX in our Real-World Evidence projects.

Clearing the remaining hurdles

Yet, there are still significant hurdles in using AI in healthcare. Practical ones, for instance around how to scale access to relevant RWD. But also the more philosophical ones around governance, liability, privacy and data security. These issues are in desperate need of clearance before AI can be applied on a serious scale in healthcare.

That being said, if we are able to tackle these challenges, AI-driven insights from RWD have the potential to unlock a future of healthcare that's personalised, proactive, and accessible for all.

> “AI-driven insights from RWD have the potential to unlock a future of healthcare that's personalised, proactive, and accessible for all.”

Wouter van Dijk
Head of Group Data & Analytics at LOGEX

A Czech Perspective on Technical Excellence

Behind every successful healthcare analytics solution lies a rich tapestry of technical expertise. From ensuring smooth day-to-day operations to crafting intuitive interfaces and optimising complex databases, our technical teams quietly collaborate to deliver robust, powerful tools to healthcare professionals. Meet four of the specialists who, each in their distinct way, help transform raw healthcare data into actionable insights.

Vojtěch Olej

As an IT engineer, I ensure my colleagues' devices and applications function optimally. This year, we unified the office IT systems and adopted our security policies accordingly. We ensured easy yet secure access for colleagues and customers. Additionally, I supported safe file-sharing, I assisted customers with SharePoint access, I secured the internal network, and much more.

I enjoy working with people, contributing ideas, and improving the environment at LOGEX, where my input is valued and implemented.

Tereza Lacinova

As a front-end developer for our budgeting and forecasting solutions, I ensure that pages are both visually appealing and functional for employees and customers. My role involves facilitating intuitive interactions that make sense. With LOGEX expanding into new markets, we continuously adapt and introduce new features. To make sure we deliver the best product possible, we actively gather customer feedback and implement enhancements continuously.

I enjoy my job because working for front-running healthcare markets like Finland and Sweden reveals the future potential of healthcare.

Ludmila Skřivánková

As a senior database developer, I collaborate with product owners and analysts to deliver data to applications, ensuring fast response times for users. My work involves writing code, optimising system performance, and adapting to customer needs. All processes are constantly evolving, so that keeps me busy. For example, we recently implemented a dashboard landing page. This made our tool more user-friendly and more valuable for customers.

Being an orderly person by nature, I find that my role as a developer, which involves organising and clarifying data, perfectly aligns with me: it brings me joy when everything is well-structured.

Katarína Zubnárová

As a System Analyst in the Costing team, my job is to ensure the delivery of new features without bugs and to address reported issues. I value LOGEX's focus on customer needs, evident in our prompt issue resolution. The complexity of costing in healthcare provide endless opportunities to learn.

I like it most when I can find some hidden bug during testing or when after a while of digging, I find the root cause of some more complex issue. It is nice to have that "eureka moment".

Navigating Healthcare's Digital Transformation

The snapshots we have seen from some of Europe's leading healthcare markets indicate that the common denominator is change. Data analytics play an important role in that. But for data analytics to even be an option, data needs to be captured digitally and made available. This is not necessarily easily achieved, explained Pieter Krop, Commercial Director Patient Engagement at LOGEX and expert on implementing digital tools and data analytics within healthcare. We spoke to him about the challenges of this journey and how to overcome them.

Pieter, you have been active in this field for close to twenty years. Can you describe the state of healthcare ten years ago?

Back then, the development of healthcare know-how was centered around traditional lengthy clinical trials, anecdotal clinical expertise, and sometimes retrospective cost analyses. These methods are notoriously slow and, in many cases, inadequately reflect real-world clinical practice variation with actual real-world patient populations.

What brought about the realisation that change was needed?

Various factors contribute to the need for real-world data collection in healthcare. The COVID-19 pandemic in particular highlighted the limitations of traditional methods. It created a demand for faster data capture, digital analytics, and remote follow-up solutions. Healthcare organisations had to rapidly implement these systems, exposing the painful backlog in the deployment of digital healthcare solutions necessary to meet these shorter healthcare knowledge life cycle requirements.

So, part of the solution lies in using more digital tools and digital data. But knowing the solution and applying it are two different things, right?

Indeed, many hurdles remain in this transformation. Technical challenges include integrating new digital tools with outdated legacy systems, dealing with fragmented data across various databases, and ensuring data consistency for effective analysis. There are also concerns about compliance with regulations such as GDPR and the (IT) resource constraints most healthcare institutions face.

Is it even possible to overcome these hurdles?

It is certainly no easy task, and we have had our share of disappointments as well. Projects that proved to be too ambitious for the available budgets, people involved and hours in the day. But even though the lessons we have had to learn were tough at times, they have helped us to become more realistic, plan for contingencies better and to make sure we use the time of care providers wisely. The cliché we learned is true: keep it simple, stupid.

How are we progressing?

With patience and perseverance, we are collectively transforming healthcare into a more digital and data-driven sector. This shift allows for improved decision-making, enabling providers to treat more patients with the same resources while achieving similar or better clinical outcomes.

Impact stories

Improving the Treatment Journey of Breast Cancer Patients

My B-Pathway is an online portal that guides breast cancer patients through their treatment journey. It provides tailored information, a safe space, and support. The portal was developed by Cristina Guerrero Paez of the Dutch Breast Cancer Association, and LOGEX Patient Engagement.

"We aim for transparency for breast cancer patients so that well-informed choices can be made. By collecting questionnaires and information, we can give patients insight and take them through their journey step by step," said Cristina Guerrero Paez.

Challenge

Breast cancer patients often feel overwhelmed by their diagnosis and the flood of information that follows. The challenge was to create a solution that guides them step by step and provides the right information at the right time. It also needed to offer personalised counselling and improve patient satisfaction through PROMs questionnaires.

Solution

LOGEX Patient Engagement partnered with the Dutch Breast Cancer Association to create My B-Pathway. This portal guides patients through treatment, offering personalised information tailored to their situation. The platform uses PROMs (Patient Reported Outcomes Measures) questionnaires to monitor the patient's emotional and physical state, allowing for better care delivery tailored to individual needs. Additionally, the portal has been extensively tested for functionality and understandability, with input from both caregivers and patients.

"We want women who need more information to know how to find the portal. Out of 17,000 new cases in the Netherlands each year, we want to reach and help a few thousand interested people," added Cristina.

Impact

With the implementation of My B-Pathway, breast cancer patients now have a reliable, user-friendly guide to help them through one of the most difficult periods of their lives. Over 250 breast cancer patients have started using My B-Pathway right after its introduction. The PROMs questionnaires allow healthcare providers to better tailor treatment to patients' specific needs, resulting in improved quality of life. Additionally, anonymised data from other patients helps to make informed treatment choices. LOGEX Patient Engagement has successfully delivered a platform that not only helps patients but also optimises healthcare delivery.

> “The project has been challenging and valuable, especially filling content and pointing patients to correct information. Involving patients and volunteers made for a well-tuned final product.”
>
> Cristina Guerrero Paez

Want to learn more? Click here.

What's Next

Conclusion 2024 & outlook 2025

Looking Ahead to a Sustainable Future for Healthcare

Transformation can often be an over-used word. Yet, in 2024, we've seen it happening in real-time. Organisations are merging, treatment pathways are morphing, and what was cutting-edge five years ago has become the baseline expectation today. Healthcare leaders are meeting these challenges head-on, and at LOGEX we are proud to help ensure that momentum is sustained, and resources are used wisely as the speed of change accelerates.

The demands on healthcare systems today require a shift in perspective. Sustainability is no longer about adding more resources–it's about making better use of what we already have. By combining data, innovation, and collaboration, we can help providers not just adapt but thrive.

Looking to the future, there are three critical paths for creating a sustainable healthcare system:

Supporting transitions: Helping healthcare organisations adapt to structural reforms, like those in Finland and the Netherlands, ensures that change brings lasting benefits. LOGEX's work to join up data across pathways, providers, and regions is an essential part of this process.

Harnessing innovation: Embracing technology, automation, and patient-driven care models allows healthcare providers to do more with the same resources. Boldness is needed to overcome the understandable fears around data, AI, and predictive treatments, but the results show their potential to revolutionise care delivery.

Driving productivity: By working smarter, healthcare providers can deliver more care without sacrificing quality. From automation to patient self-management tools, this evolution is vital for sustainability.

It's not just about better data inside individual providers but about connecting insights across pathways, organisations, and geographical areas to deliver true system-wide impact. This approach is where LOGEX excels–helping healthcare providers navigate transitions and make smarter decisions, supported by data they can trust.

We're proud to be growing in our impact across the geographies we serve, supporting healthcare systems in their most challenging moments and proving that data and technology are indispensable tools for the future.

For those who feel overwhelmed by the pace of change, the message is simple: lean in, shape the transformation, and trust that better solutions are possible. We can't do what worked 10 years ago, but together, we can build a sustainable healthcare future that serves patients and providers alike.

As we look to 2025 and beyond, LOGEX remains committed to our mission of turning data into better healthcare. Thank you for being part of this journey.

Discover how we can help you to turn data into better healthcare

Talk to our experts: info@logex.com

LOGEX
Healthcare Analytics

Please visit
our website
www.logex.com