IMPACT SUM-UP
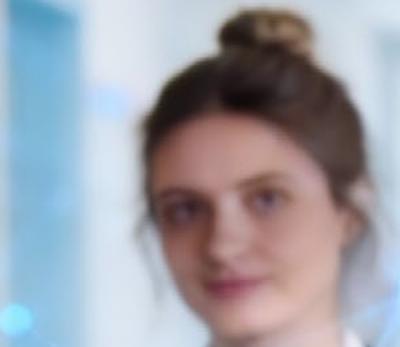
Turning data into better healthcare

#2025

:::: LOGEX
Healthcare Analytics

CONTENTS

Welcome from Philipp Jan Flach

Future-proofing healthcare with data

If there is one certainty in European healthcare, it is that the challenges ahead will not get easier. Rising demand, increasingly complex patient cases, and persistent workforce shortages are stretching systems to their limits. At the same time, financial pressures and regulatory reforms demand that providers do more with less.

Simply spending more will not solve these problems. We see this in countries with the highest per capita expenditure, where waiting times and staff shortages remain. The real question is: how do we make healthcare sustainable without compromising quality or access?

The answer lies in data. Data brings clarity to complexity. It helps us understand where resources are used, where inefficiencies hide, and where improvements can deliver the greatest impact. It enables hospitals to plan strategically, benchmark performance, and make decisions based on facts rather than assumptions.

At LOGEX, we believe future-proofing healthcare means equipping providers with the insights they need to navigate uncertainty.

As you read through this Sum-Up, I hope you see what we see every day: the power of data to transform challenges into opportunities. At LOGEX, we are committed to supporting this transformation, helping healthcare deliver high-quality care sustainably, for every patient, now and in the future.

Philipp Jan Flach, CEO

In Numbers: Understanding Europe's Healthcare Landscape

€1.648 Billion

For EU health expenditure in 2022

Note 4

Figure 1
Note 1

% EU countries reporting shortages in 2022
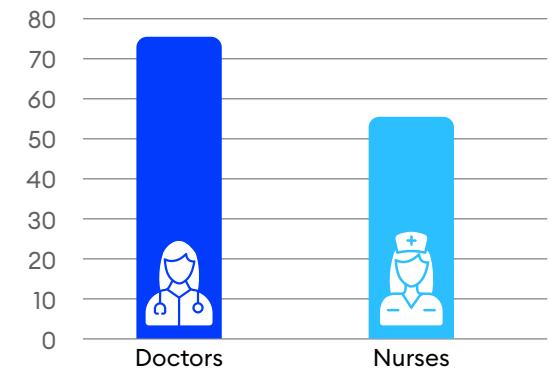
Figure 2
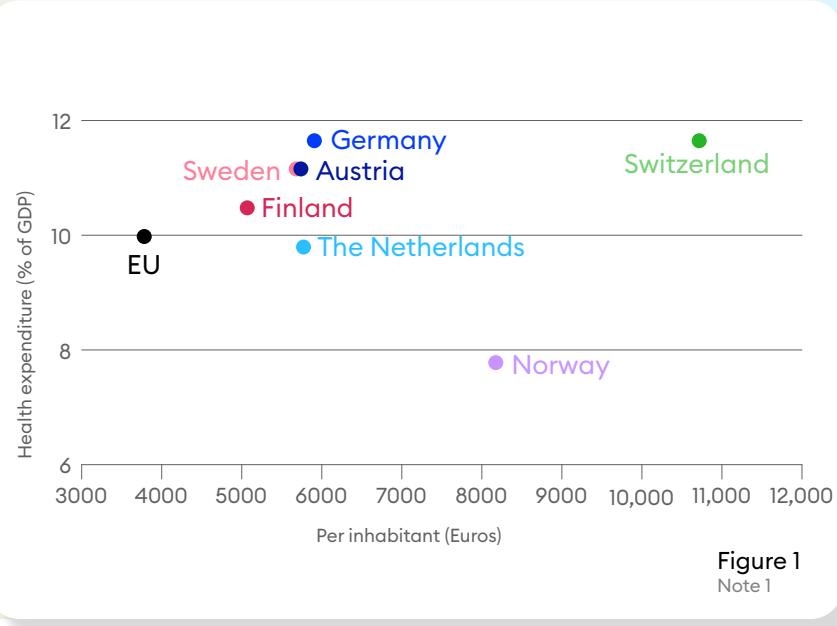Note 2

1.2 Million

healthcare workforce shortage in 2022

Note 3

Healthcare ranks among the largest government expenditures in the EU, totaling approximately €1.648 billion in 2022, with countries like Germany allocating nearly 12% of their GDP to health, while the highest per-capita spending is seen in Norway and Switzerland (Figure 1). Despite this significant financial commitment, many European health systems face severe workforce shortages. In 2022,

75% of countries reported a lack of doctors and 55% a shortage of nurses (Figure 2), resulting in an overall gap of about 1.2 million healthcare professionals. This stark contrast between high spending and persistent staffing deficits underscores the complexity of ensuring accessible, high-quality care across Europe.

[1] Eurostat. (2022). Health care expenditure by financing scheme [Dataset]. In Publications Office of the European Union. https://doi.org/10.2908/hlth_sha11_hf
[2] Oecd, & Commission, E. (2024). Health at a Glance: Europe 2024. In Health at a glance. Europe. https://doi.org/10.1787/b3704e14-en
[3] World Health Organization. Global health and care workforce: current status and future trends. Geneva: WHO; 2023.
[4] Eurostat. (2022b). Health care expenditure by financing scheme [Dataset]. In Publications Office of the European Union. https://doi.org/10.2908/hlth_sha11_hf

In Numbers: Understanding Europe's Healthcare Landscape
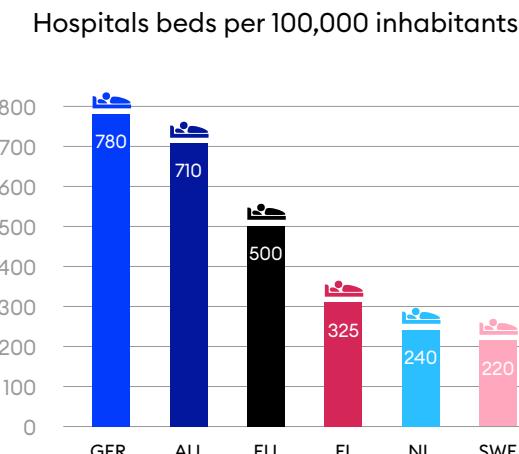
5-10%
of ER visits are **not** urgent care in the UK

Note 8

Despite substantial resources, European healthcare systems face persistent access issues.

Even though healthcare expenditure per capita is highest in Germany and hospital bed availability is greater (Figure 3), waiting times for care remain significant (Figure 4). For instance, the UK and Sweden report some of the longest waiting times for non-emergency surgeries, with 62 and 50 days respectively.

Another issue we see in care across Europe is the level of variety in treatment. As an illustration of this we take a look at the duration of hospitals stays. Germany and the UK have the longest average hospital stay of respectively 8.8 and 8.5 days whereas in the Netherlands, this is only 4.5 days (Figure 5).

Hospitals beds per 100,000 inhabitants

GER	AU	EU	FI	NL	SWE
780	710	500	325	240	220

Figure 3
Note 5

Average waiting time for non-emergency surgery in 2023

UK	SWE	GER	CH
62	50	31	28
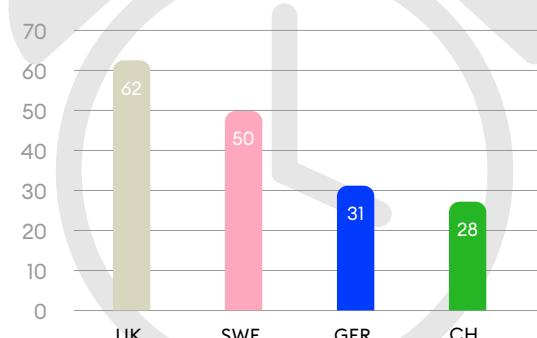
Figure 4
Note 6

Length of stay in days

GER	AU	FI	NO	SWE	NL	UK
8.8	8.5	7.3	5.2	5.5	4.5	8.3

Figure 5
Note 7 - 7a

[5] Eurostat. (2024). Hospital beds by function and type of care [Dataset]. In Publications Office of the European Union. https://doi.org/10.2908/hlth_rs_bds1

[6] Fleck, A. (2024, 17 september). Healthcare: How Long Do Patients Have To Wait? Statista Daily Data. https://www.statista.com/chart/33079/average-waiting-times-for-a-doctors-appointment/?srsltid=AfmBOoo2m8gqIcl6X75Milspv5ekKsYLoI4ggQwaW6bSUvAIKErvjD2z

[7] Eurostat. (2022b). In-patient average length of stay (days) [Dataset]. In Publications Office of the European Union. https://doi.org/10.2908/hlth_co_inpst

[7a] Longer hospital stays and fewer admissions. (n.d.). The Health Foundation. https://www.health.org.uk/reports-and-analysis/briefings/longer-hospital-stays-and-fewer-admissions

[8] Doctorsa. (2025, 23 mei). Healthcare Wait Times by Country: Global Comparison. Doctorsa. https://doctorsa.com/stories/er-waiting-times/#:~:text=The%20UK's%20National%20Health%20Service,home%20or%20to%20outpatient%20facilities.

In Numbers: Understanding Europe's Healthcare Landscape

Projected increase in patients with chronic illnesses in the Netherlands

+14%

12
10.5

2022   2050
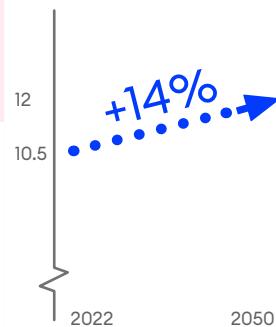
Projected increase in major illnesses in the UK
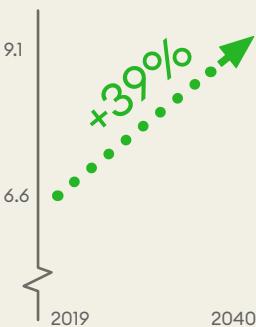
9.1

+39%

6.6

2019   2040

Figure 6
Note 9 - 9a

+21%
Projected increase of cancer cases in the EU by 2040
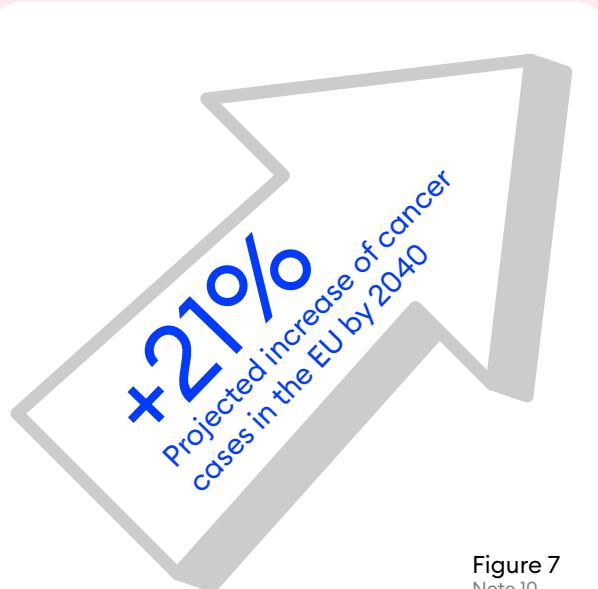
Figure 7
Note 10

Expected number of healthcare staff shortage in 2030 compared to 2022
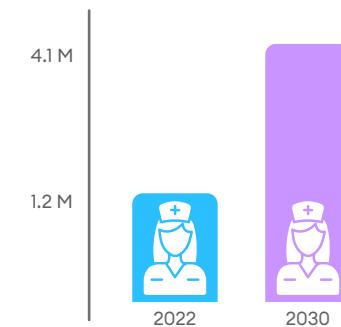
4.1 M

1.2 M

2022   2030

Figure 8
Note 11

Healthcare systems across Europe face mounting pressure as patient numbers surge. As shown in Figure 6, chronic illness is projected to rise sharply, with the Netherlands expecting 12 million people affected by 2050 and the UK anticipating a 39% increase in major illnesses by 2040. Cancer cases in the EU are also forecast to grow by 21% by 2040 (Figure 7). At the same time, workforce

shortages are set to worsen dramatically, climbing from 1.2 million in 2022 to 4.1 million by 2030 (Figure 8).
These trends underline the urgency for healthcare institutions to be well-equipped and efficient. Addressing these challenges will require more than increased spending alone, as seen in countries like Germany that invest heavily yet still grapple with systemic challenges.

Based on these numbers, it's clear that healthcare systems across Europe will need to deliver care to more patients while managing limited human and financial resources. Improving productivity and efficiency with the resources available will be essential.
The key lies in making better use of data.

[9] https://www.rivm.nl/nieuws/in-2050-verdubbeling-aantal-mensen-met-dementie-en-artrose
[9a] The Health Foundation. (n.d.). 2.5 million more people in England projected to be living with major illness by 2040. https://www.health.org.uk/press-office/press-releases/25-million-more-people-in-england-projected-to-be-living-with-major
[10] European Cancer Information System: 21% increase in new cancer cases by 2040. (2022, March 16). The Joint Research Centre: EU Science Hub. https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/european-cancer-information-system-21-increase-new-cancer-cases-2040-2022-03-16_en
[11] Healthcare sector: addressing labour shortages and working conditions | News | European Parliament. (2025, February 10). https://www.europarl.europa.eu/news/en/agenda/briefing/2025-02-10/14/healthcare-sector-addressing-labour-shortages-and-working-conditions

In Focus - Germany

Germany stands at a turning point in healthcare. As one of Europe's most populous and influential nations, it has long been seen as a pillar of strength. Yet, its healthcare system is undergoing a profound transformation, especially following the COVID-19 pandemic, which revealed critical gaps that can no longer be ignored.

In response, 2025 marked the launch of a major hospital reform by the federal government; the Krankenhausversorgungsverbesserungsgesetz, or KHVVG. This reform introduces service groups, portfolio restructuring, and new financing rules. All designed to steer the system toward greater sustainability. These changes indicate not just a policy shift, but a redefinition of how care is delivered in Germany for the years to come.
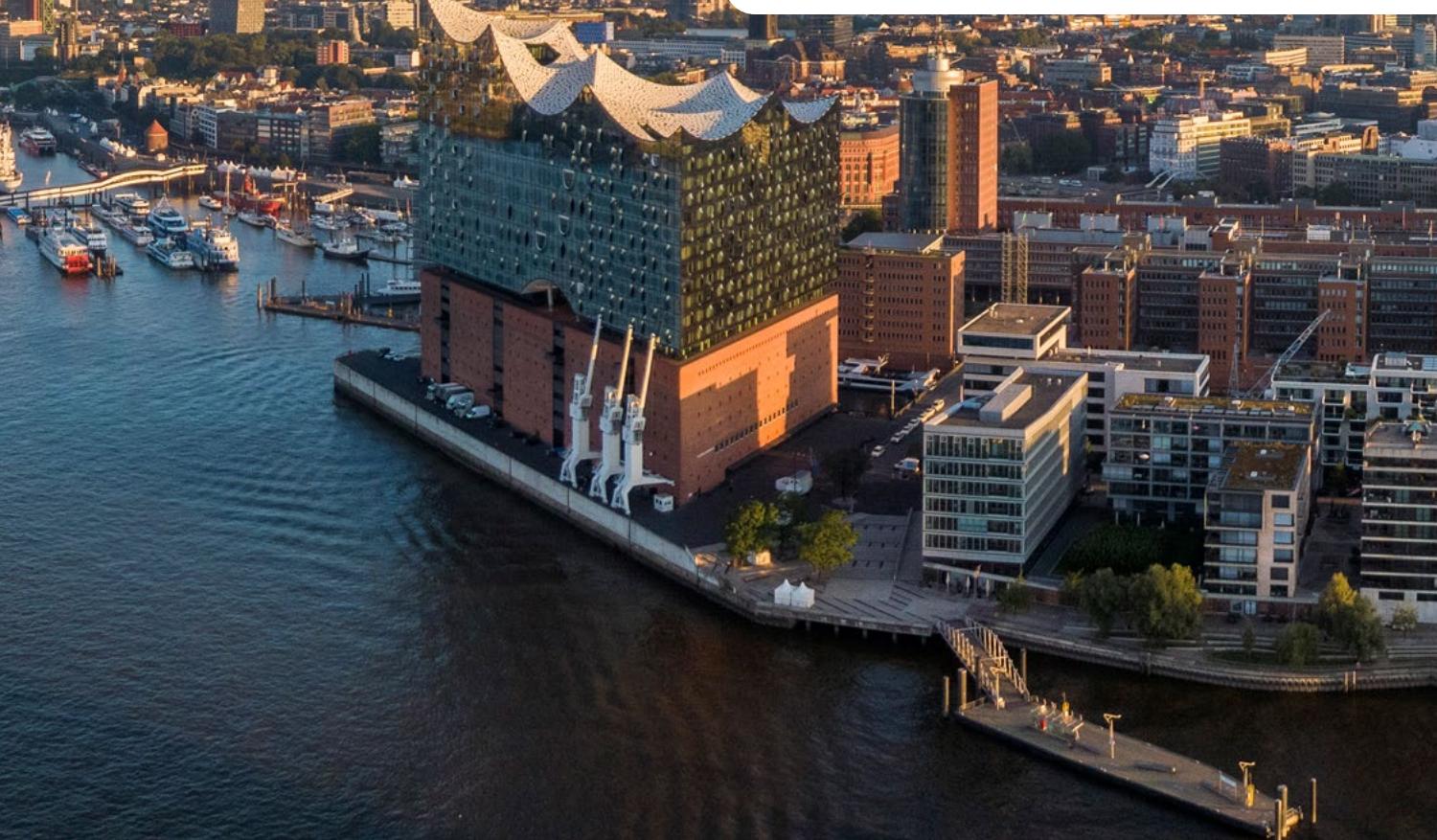
Harnessing Data to Shape Germany's Healthcare Transformation

In an interview with the German magazine Health & Care Management, Phillipp Jan Flach, CEO of LOGEX, and Mark Zluhan, Board Member DACH at LOGEX, shared their insights into how data can empower German hospitals to optimise performance and successfully meet the requirements of the KHVVG reform.

While the full article is available on the magazine's website, here is an interesting summary of their conversation.

Click here for more information

How can those in charge master this complex transitional situation?

Mark: Answers to these challenges can actually be found within the hospital's data – especially from the treatment context. This forms the foundation for sustainable management of processes. With careful data collection and strong data analysis the complexity and the risks of change can be mitigated.

Philipp Jan: Of course, that's easier said than done, but using the right tools to facilitate this exercise helps significantly. Hospital managers get the answers they need much faster, and these answers are based on facts rather than on a gut feeling.

In practical terms, how can LOGEX support hospitals with this?

Mark: We help hospitals make the most of their data for tackling their main challenges. That includes, for example, analysing data, improving treatment processes, and managing finances. When hospitals can clearly see where inefficiencies exist, and take action to fix them, they free up time and energy to focus on what matters most: their patients.

And data is not analysed in isolation: we also link it to the quality of care, which is essential. It's great if a hospital can save costs, but we want to be absolutely sure that patients do not suffer from reduced quality of care.

Philipp Jan: Across healthcare systems worldwide, one thing is clear: all stakeholders rely on digital data. And with data, remarkable things are possible, like comparing the performance and results of similar hospitals, identifying best practices and ultimately improving care outcomes. For instance, hospital A can benchmark its resource use for procedure X: "Are we spending significantly more effort than hospital B or the national average?"

Negative deviations often point to process inefficiencies, like suboptimal management of length of stay, operating room times, or diagnostics. By digging into the details and comparing each step to benchmarks, hospitals can pinpoint exactly what needs improvement without compromising the quality of care.

How Klinikum Bayreuth Is Making Operating Theatre Management More Efficient with OPTEAMIZER

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About the Customer

Klinikum Bayreuth GmbH is one of the leading healthcare institutions in Upper Franconia in Central-East Germany, offering the highest level of medical care. Across its two main sites, Klinikum and Hohe Warte, as well as numerous specialist clinics, medical centres, and the outpatient care centre with its wide range of specialties, it provides interdisciplinary and comprehensive treatment. This combines professional medical excellence with genuine human compassion and care.

Klinikum Bayreuth GmbH stands for a close integration of medical care, academic teaching, research, and modern diagnostics with the aim of optimally promoting the health of people in the region.

The challenge

Until recently, there was no systematic foundation for evaluating and optimising operating room (OR) processes. Although individual key performance indicators (KPIs) existed, such as incision-to-suture time or changeover times, these were usually only available per individual OR room and lacked comparability. The heterogeneous data environment from the hospital information system and the patient data management system further complicated any analysis. Discussions about efficiency often remained subjective and lacked focus.

Our solution

With LOGEX's OPTEAMIZER, for the first time a consistent, factual, and transparent representation of OR KPIs was made possible – including benchmarking with comparable top clinical hospitals. The implementation was carried out in close collaboration with business development and controlling.

The Results

LOGEX OPTEAMIZER enables:

- Transparent and comparable analyses of OR performance data

- Emotion-free, objective communication between management and healthcare providers

- Derivation of concrete improvements, for example in early start times, shift towards day treatment, or OR occupancy

- Regular reporting to departments with clear benchmark comparisons

OPTEAMIZER has now become a central management tool for Klinikum Bayreuth and a key lever for effectively improving processes and achieving strategic goals, such as the shift to outpatient care, in a well-founded manner.

In Focus - UK

The UK has long been home to one of the world's most recognised public health systems: the National Health Service (NHS). For decades, it has stood as a symbol of universal care. Today, however, the NHS faces mounting challenges, from financial pressures to growing demands for transparency and accountability.

To address these issues, the NHS has outlined a 10-year plan focused on modernising services, improving efficiency, and ensuring long-term sustainability. Alongside this, new approaches to financial management and reporting are being introduced to strengthen governance and optimise resource allocation. This is a moment for the NHS to rethink its approach and drive meaningful change.

"NHS Budgeting Teams Must Lead the Way in a Decade of Transformation"

Finance at the Wheel:

A Conversation with Mark Speller on the NHS 10-Year Plan

The NHS has set out a bold vision for the next decade: shifting care from hospitals to communities, embracing digital transformation, and focusing on prevention rather than treatment. These changes promise better outcomes for patients, but they also place new demands on finance departments. To explore what this means in practice, we spoke with LOGEX's Mark Speller, who has worked across all areas of NHS Finance and now supports Trusts throughout the financial year.

Mark, what does the NHS 10-Year Plan mean for finance teams?

Well, I feel we should see this as more than a policy update: it's a challenge. Finance leaders are being asked to move beyond short-term targets and take on a strategic role in shaping a new model of care that is proactive, personalised, and digitally enabled. That means rethinking how resources are allocated and monitored. Traditional incremental budgeting won't cut it. Teams will need to adopt scenario modelling across a long-term timeframe, factoring in changes to activity, workforce, and income.

What makes this shift so challenging?

The move to neighbourhood health services will take years and involves complex changes. Finance leaders need integrated tools to model assumptions, control variables, and produce outputs without relying on fragmented spreadsheets. Without good planning, the NHS risks becoming a reactive service with growing waiting lists and declining outcomes.

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What can the NHS learn from countries that have already gone through similar transformations?

We've been closely involved in similar shifts before. For example, in Sweden, where health and social care moved toward more integrated, community-based models. Working alongside those organisations, we saw firsthand how challenging it was to plan effectively when information was scattered across departments. The key takeaway? Success depends on reliable data and strong collaboration. That's a big ask, but with the right tools and know-how, it becomes achievable.

What is your advice for finance leaders?

Embrace the challenge. Invest in tools and relationships that support integrated planning. Build strong connections across functions. And above all, don't see budgeting as a constraint - see it as a catalyst for better care.

Empowering the Portsmouth Hospitals University and Isle of Wight NHS Trusts Through Integrated Costing

Click here for more information

About the Project

Portsmouth Hospitals University NHS Trust (PHU) and the Isle of Wight NHS Trust (IWT) initiated the integration of their costing teams after the January 2023 announcement of their strategic partnership and shared leadership model. Both organisations recognised the need for consistent, high-quality costing data to support financial planning, business cases and clinical decision-making. While both trusts were already using LOGEX Costing, they were at different stages of their costing maturity, and engagement with costing data varied significantly. PHU had moderate involvement, while IWT's was minimal.

The challenge

The integration faced several hurdles:

- **Technical barriers:** Despite using the same costing system, the trusts operated on separate servers, preventing shared access to data. This limited collaboration and delayed plans for a unified team structure.

- **Process misalignment:** Each trust had different costing processes and reporting formats, creating inconsistencies in outputs.

- **Low engagement:** Historically, costing data was underutilised in decision-making, particularly at Isle of Wight, where the costing team did not sit within finance.

- **Resource constraints:** Moving from quarterly to monthly models was challenging due to data readiness issues, slowing progress towards real-time insights.

Our solution

- **Standardised reporting:** Both trusts aligned their costing processes and outputs, ensuring consistent formats across sites. This was a major success in the first year.

- **Enhanced visibility:** The organisation exported the LOGEX Costing outputs into the tool they were using for Business Intelligence, Power BI. From there, the team was able to set up user-friendly dashboards enabling self-service access for finance and operational colleagues. Thanks to this, it was much easier to understand the data and to have confidence in them.

- **Clinical engagement:** The innovative introduction of a Clinical Director for Finance and a Deputy Clinical Director fostered clinician involvement. Costing data is actively used in the identification of CIPs and now informs departmental reviews, such as respiratory benchmarking and renal transplant service growth plans.

- **Continuous improvement:** LOGEX Costing's transparency of cost calculation and improved export capabilities strengthened trust in the system, both within and outside of finance. Collaboration with the allocated LOGEX consultant ensures the needs of the Trust are heard and taken on board in ongoing enhancements to the tool.

Future Vision

Portsmouth Hospitals University and Isle of Wight NHS Trusts aim to make costing data an integral part of everyday financial and operational conversations, rather than a secondary consideration to budgets. The goal is to provide timely, consistent, and actionable insights that support strategic planning and service development.

A key ambition is to streamline Business Intelligence reporting, which will be facilitated by further LOGEX developments, reducing manual processes and accelerating access to information. By continuing to collaborate with LOGEX on system enhancements and export improvements, the Trusts hope to strengthen engagement across clinical and finance teams, ensuring data-driven decisions that improve efficiency and patient care.

In Focus - The Netherlands

Despite being a much smaller country than the UK and Germany, the Netherlands faces similar challenges in its healthcare system, including staff shortages, financial pressures, and the need for greater efficiency.

At the centre of this transformation is the principle of appropriate care: a patient-centred approach that ensures the right care is provided at the right place and time. The goal is clear: avoid unnecessary and ineffective treatments and care activities, while improving outcomes and usage of resources and capacity. This concept is supported by the national Framework for Appropriate Care, which guides hospitals in redesigning services, optimising collaboration, and prioritising value over volume.

The coming years will be decisive as Dutch healthcare works to embed these principles and create a system that is both efficient and future-proof.

LOGEX Financial Analytics Explained

It's not a secret that LOGEX's mission is to turn data into better healthcare.

It's a great purpose, but what does that actually mean in practice? How does it translate into the tools and services LOGEX provides, for example in the field of Financial Analytics?

We spoke with Tjon Chen, Service Manager in the Financial Analytics team, to get a better sense of this. He shared how LOGEX's tools and services support healthcare organisations.

So, Tjon, how does LOGEX's Financial Analytics support care providers with future-proofing their organisation?

Essentially, our Financial Analytics tools and services help these organisations to make better operational and strategic decisions. They provide insights that support planning and resource management, covering production, costs, capacity, and resource utilisation. Clear visibility into financial flows and patient volumes is essential, and benchmarking against similar organisations shows where processes can be improved. These insights ultimately help deliver high-quality care in the most efficient way.

What does that look like on a more practical level?

One clear example is LOGEX Costing. It gives care organisations a detailed view of their cost structure by breaking it down across departments and clinical settings. This allows controllers to identify exactly where optimisation is possible. Combining a structured approach to production costs with benchmark data makes it easier to spot opportunities for improvement quickly.

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Another example focuses on medical specialists. LOGEX can provide benchmark insights into how their care compares to others. By analysing resource use and care pathways, specialists can identify efficiency gains and best practices. This supports streamlined operations and informed practice variation. These improvements can help specialists use their capacity more effectively, enhancing consistency and quality in patient care.

Simply put, you are claiming that, by looking at the books in a more detailed manner, financial departments can play a significant role in future-proofing healthcare?

Yes. Financial analytics is more than just numbers, it's about enabling smarter decisions that improve care. By helping healthcare organisations understand their cost structures, optimise resource use and benchmark performance, LOGEX empowers them to adapt to changing demands and deliver sustainable, high-quality care. That's how analysing financial data can help to future-proof healthcare.

Less is More: How Less Care Leads to More Appropriate Care

Dutch healthcare faces the challenge of deploying scarce staff and resources as effectively as possible to help all patients. This requires clear-cut choices and the courage to phase out care that adds little or no value.

The Dutch Federation of Medical Specialists and the ZE&GG programme (the Dutch Care Evaluation & Appropriate Use programme) are taking a leading role in this with the national "Less is More" programme. This programme aims to responsibly discontinue care that does not bring the right value to patients. This is done by adjusting the guidelines temporarily and continuously monitoring the effects. After a thorough evaluation, the guidelines are structurally revised.

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The 13 Topics of Less is More

1. **Hospital Pharmacists** - Stop measuring anti-Xa levels when using low-molecular-weight heparins in adult patients with impaired kidney function.

2. **Pulmonologists** - Discontinue pemetrexed as maintenance therapy in immunochemotherapy for non-small cell lung cancer (NSCLC).

3. **Internal medicine specialists** - Stop overdiagnosis of M-protein during osteoporosis screening; only test when clinically indicated.

4. **Paediatricians** - Shorten observation time for neonates exposed to meconium-stained amniotic fluid from 8 to 4 hours (if no risk factors).

5. **Urologists** - Stop cystoscopy follow-up for low-risk non-invasive bladder cancer after 1 year instead of 5 years.

6. **Dermatologists** - Reduce unnecessary check-ups for patients on systemic medication for inflammatory skin conditions (hidradenitis, psoriasis, eczema).

7. **Gynaecologists** - Lower follow-up for ovarian cancer from 15 to 6 check-ups within 5 years, partly performed by nurse specialists.

8. **Cardiologists** - Stop routine echocardiogram for analysis of cardiac embolic source after a stroke/TIA.

9. **Cardiologists** - Stop routine follow-up echocardiography in the first five years for patients with a biological heart valve prosthesis.

10. **Gastroenterologists** - Stop surveillance in patients with inflammatory bowel disease (IBD) at low to mild risk of colorectal cancer.

11. **Gastroenterologists** - Stop lifelong follow-up of patients with low-risk pancreatic cysts.

12. **Neurologists** - Stop routine hospital admission for observation in minor strokes.

13. **Surgeons** - Stop routine surgery for uncomplicated acute appendicitis; switch to oral antibiotic treatment.

The Less is More program focuses on thirteen topics for which the de-implementation processes are already underway. This will give the national movement towards more appropriate care concrete scale and speed. Examples include forgoing standard surgery for uncomplicated appendicitis and ending lifelong follow-up for low-risk pancreatic cysts. Reducing unnecessary care means a lower burden on patients and more room to deploy capacity and resources where they are needed most.

To actively make progress in this area, hospitals need clear insights: their current status, how developments are unfolding, and the effects of improvement initiatives on costs, revenues, capacity and, most importantly, on the clinical outcomes of patients. It's also crucial to be able to track developments over time and adjust where necessary.

LOGEX continuously adapts to regulatory changes and evolving healthcare priorities, including the Dutch "Less is More" approach. By offering tailored tools, LOGEX helps hospitals and medical specialist in the Netherlands gain accurate insights and monitor progress, translating policy into daily practice. Rather than navigating change alone, organisations are supported with relevant, reflective information that aligns with their needs. LOGEX focuses on what matters most to each organisation, ensuring decisions are grounded in clarity and context. These insights help improve coordination, make the impact of initiatives measurable, and support more effective use of resources, ultimately.

In Focus - Sweden

The Swedish healthcare system is decentralised across twenty-one regions, allowing local adaptation while maintaining national standards. Built on a tax-funded model, it guarantees access to care for everyone, regardless of financial circumstances. Another key feature of the Swedish healthcare system is that its hospitals and care facilities are among the most modern in Europe. However, modernisation alone does not eliminate the challenges.

With one of the highest life expectancies in Europe, Sweden faces the growing demands of an ageing population. These pressures, combined with persistent staff shortages and long waiting times, continue to strain the system. To remain strong and sustainable in the years ahead, changes will be needed to improve efficiency and make the best use of resources.

Data-driven Insights Create More Efficient Healthcare

In light of the challenges Sweden health and social care is facing, we spoke to Erika Sundefors, the Country Head of LOGEX Sweden to get some insights.

Erika, what do you see as the biggest challenge for healthcare today?

As is the case in most European countries, the greatest challenge is finding the balance between delivering high-quality care and managing limited resources. We need to increase productivity and use resources more efficiently.

Innovation is often seen as the solution. Do you agree?

Innovation will shape the future, but we also need to make better use of what we already have: data. Regardless of how systems are structured across countries, they must be built on digital data to meet future demands. Automating routine tasks, monitoring resource allocation and identifying inefficiencies are just a few ways data can help create more sustainable healthcare.

Can you give an example of how data is changing resource management in Sweden?

A few years ago, gaining a clear picture of how resources were used, and linking this to costs and quality of care, was difficult. Today, however, the data exists, and the tools are available. The Cost per Patient (KPP) model enables providers to connect care delivered with the cost of resources required and compare with other providers to drive improvement.

What does this mean for healthcare providers in practice?

Properly used data makes healthcare more efficient and more tailored to needs. With data analysis, we can help create sustainable, patient-centered care. With the help of our solutions, healthcare actors can identify where resources can be reallocated to provide greater value, without compromising quality.

Click here for more information

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Mobile Community Health Teams Optimising Care in Region Värmland

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About the Customer

Region Värmland is responsible for providing healthcare services to over 280,000 residents in Värmland County, Sweden. Each day, approximately 2,100 patients visit the region's doctors and healthcare providers. With more than 8,200 employees, Region Värmland plays a vital role in delivering what they proudly call „world-class quality of life" for the residents of the county.

The challenge

Region Värmland strives to offer efficient and accessible care to all its residents. However, with the support of the PLICS (Patient Level Information and Costing System) calculations provided by LOGEX, it became obvious that the number of contacts with local healthcare providers, for the most fragile patients in the region, was often high, which made the care chain cumbersome. A time-consuming process for patients with high care needs, as well as potential inefficiency in how the available resources were being used, led to the question: **how can we better utilise and optimise the care resources in the region to ensure the best and most effective care for our most fragile patients?**

Our solution

To answer this, Region Värmland partnered with LOGEX consultants to expand the calculation and thereby obtain documentation and data which represents the entire care chain. In addition, they included ambulance services in their PLICS calculations to gain a more comprehensive understanding of how patients accessed care across the system.

This extended dataset was then used to support the implementation of mobile local healthcare teams–multidisciplinary units able to meet patients with more flexibility and eliminate unnecessary steps in the care process.

Through regular follow-up using LOGEX Costing, Region Värmland was able to clearly track how the initiative led to significant improvements, for example, in ambulance operations, by redirecting care more effectively and efficiently across the system.

Our Impact

With LOGEX's support, Region Värmland was, for the first time, able to clearly demonstrate the economic impact of initiatives beyond the specific units where investments had been made. It became evident that deploying mobile teams in just one care unit reduced the need for hospital admissions and ambulance transport, while also enabling more personalised and effective care for patients.

"*Thanks to the system-wide visibility that LOGEX provides, we now identify, implement, and track various improvement initiatives more easily. This allows us to make smarter decisions that benefit every part of Region Värmland and its residents, supporting good and accessible care throughout every stage of life.*"

Hans Carlsson, Operations Analyst, Region Värmland

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Real-World Evidence: Supporting the Future of Patient Care

Real-World Data (RWD) is data generated during routine care. Analysing it creates Real-World Evidence (RWE): insights into how treatments and care pathways perform in everyday practice. RWE helps identify patterns in outcomes and resource use, supporting better decisions. Unlike randomised controlled trials (RCTs), which focus on selected populations, RWE offers longitudinal, actionable insights from real-life settings.

Yet even with the right expertise, creating RWE remains complex, particularly in Europe, where the healthcare landscape is highly fragmented. Access to RWD is limited, and the data that is available is rarely harmonised across countries. On top of that, data quality can vary significantly.

Solutions exist to harmonise processes and help care providers, policymakers and researchers make data-driven decisions. While adoption is still limited, these tools offer a real opportunity to transform healthcare and create a system that is data-driven and designed to unlock better treatment pathways for the future.

Closing Evidence Gaps in Healthcare: The Role of RWD and Observatories

As part of our Annual Sum-Up, we must absolutely check in with our RWE team. A lot of progress has been made over the course of the year in the efforts to make RWE an accessible goal within Europe. One of the most exciting developments has been the expansion of our Healthcare Observatories: an approach that's transforming how RWE is generated and used. To dive deeper into this topic, we sat down with Jasper Deuring, who is LOGEX's Medical Lead, to discuss why real-world data matters, the challenges Europe faces, and how Observatories are paving the way for smarter decision-making.

Jasper, let's start with the basics. Why is RWD becoming so important in healthcare today?

Well, randomised controlled trials are fantastic for clinical evidence, but they can't answer every question we face in routine care. Many decisions simply can't be studied ethically or practically in that way. That's where RWD comes in. It captures care as it happens, across diverse patients and settings. With it, RWE can be created. RWE is a complementary source of evidence that helps us understand what's really going on.

Right, and how is RWE currently being used?

It's increasingly supporting clinical research, regulatory submissions, and even informing guidelines. But here's the challenge: in Europe, hospital data is fragmented. Different countries, institutions, and departments use different formats, privacy rules, and analytic standards. That makes large-scale insights really hard to achieve.

Click here for more information

What about the complexity of patient care? Does RWE capture that well?

Honestly, not always. Many real-world studies are supported by clinical registries, which usually focus on a single disease or drug. In a world where many patients experience overlapping conditions and use cross-indication treatments, integrated, cross-specialty datasets are required to truly understand existing patterns.

So how do Healthcare Observatories help solve this?

Observatories provide a structured approach. They collect and harmonise diagnostic and treatment data for broad therapeutic areas, across defined regions. By bridging together hospitals across specialties and regions, Observatories enable collaborative data sharing and support studies that reflect the complexity of routine care. With their breadth and depth, they capture patterns across related conditions. This helps generate evidence that complements existing clinical research and supports a broader understanding of care delivery.

Can you give an example of this in action?

Sure. At LOGEX, we've developed Observatories in three key therapeutic areas: Solid Cancer, IMID (immune-mediated inflammatory diseases), and RTI (respiratory tract infections). A great example is the REACH study, where Sanofi used RTI Observatory data to assess RSV immunisation impact. The results showed reduced hospitalisations in Spain and the UK, making a convincing case for the effectiveness of immunisation against RSV.

Looking ahead, what role will RWE and Observatories play in healthcare?

As healthcare systems strive to become more data-driven, RWE will be essential for better decision-making. RCTs are not always feasible or representative in the real world setting for creating the evidence required for clinical decision-making. RWE has been proven, albeit anecdotally, to be a reliable alternative to RCTs in some cases. This was underlined by the results of a RWE project we did with AstraZenea, which is detailed on the next pages. So we feel that Observatories have a big role to play in the future of healthcare. They help us move beyond isolated data and toward a holistic view of care.

Customer story

AstraZeneca: Leveraging Real-World Data to Close Evidence Gaps in Clinical Practice

Click here for more information

About the Customer

AstraZeneca is a global biopharmaceutical company focused on the discovery, development and patient access of prescription medicines. Head-quartered in Cambridge, UK and Gothenburg Sweden, AstraZeneca's innovative treatments are sold in over 125 countries and used by millions of patients.

The challenge

Andexanet alfa, an antidote for anticoagulants rivaroxaban and apixaban, was approved by the European Medicines Agency (EMA) and made available in the Netherlands in 2019. After launch, clinicians sought detailed insights into its usage in routine clinical practice, including patient characteristics, concomitant medications, and treatment effectiveness.

Our solution

AstraZeneca partnered with LOGEX to conduct a retrospective research project using real-world data. The project aimed to provide a comprehensive understanding of how andexanet alfa was used in the Netherlands, evaluate patient cohorts, and gather evidence on its practical effectiveness.

Project Details

Ethical Approval: The project design, developed in collaboration with a steering group of clinicians, was approved by an Advisory Committee. The project was fully compliant with all data protection laws and regulations.

Data Collection: LOGEX analysed RWD from healthcare providers, capturing detailed insights into the drug administration and treatment. AstraZeneca received results on an aggregated level.

Project Objectives: To describe patient characteristics, treatment strategy and outcomes of patients using andexanet alfa in a real-life setting.

Our Impact

Insights for Clinicians: The project provided critical insights into practical use cases, aiding treatment decisions.

Reliable Insights: A clinical study[1] that was carried out around the same time, showed consistent results compared to the RWD study, confirming the reliability of these RWD in generating evidence alongside clinical trials.

RWD as an easy way to investigate further: The project's initial results led to a strong interest to perform a more in-depth analysis of a specific subgroup of patients. Astra-Zeneca obtained approval from the Advisory Committee to extend the RWD project to answer the additional questions surrounding this patient group.

While the outcomes of this extended analysis are pending, the approval to investigate further underscores the importance and potential of RWD studies for extending the scope of studies with new research questions.

[1] Connolly SJ et al. N Engl J Med. 2024;390:1745-1755

Understanding the Need: Creating the Right Tooling for Future-proofing Healthcare
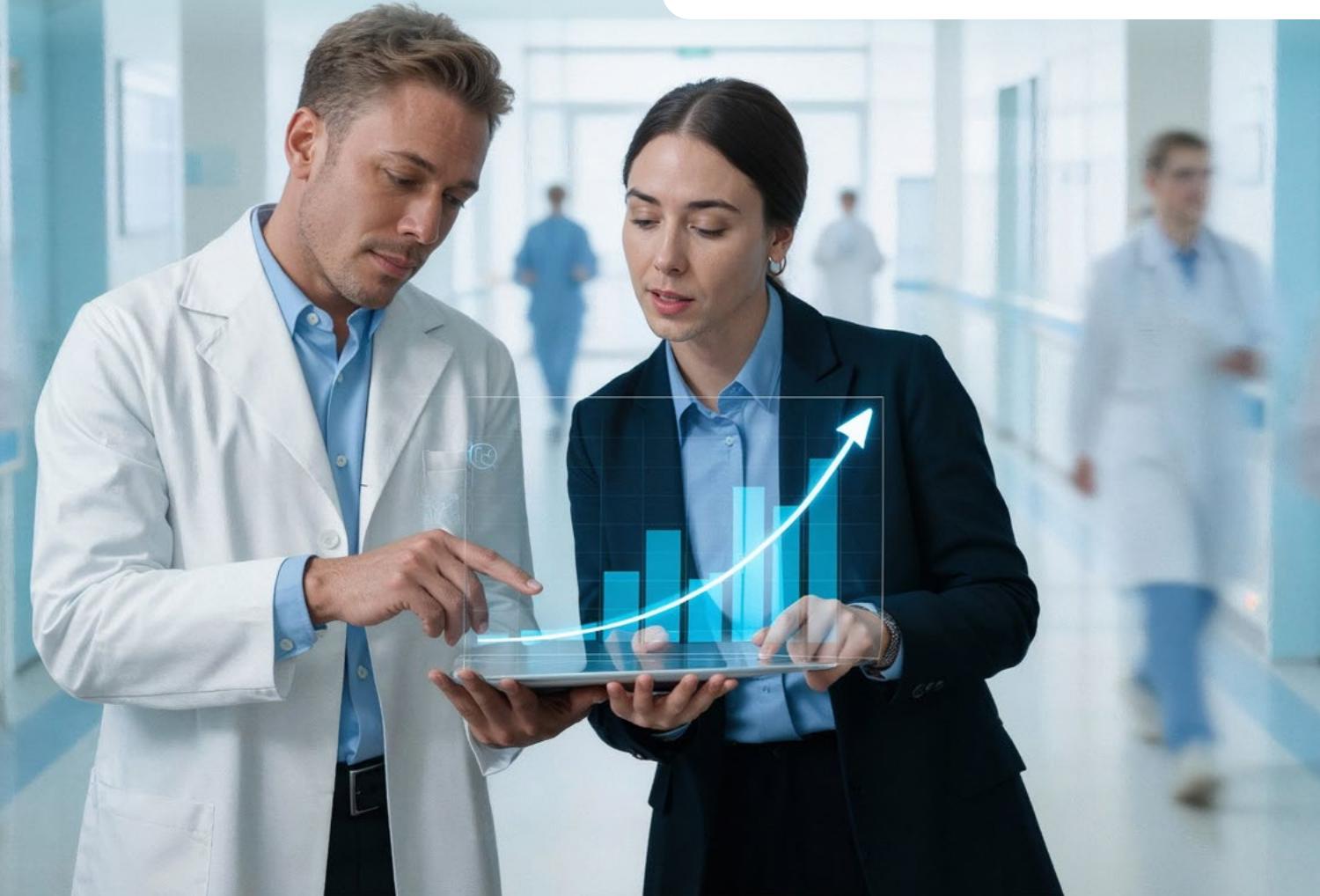
Turning Feedback into Better Healthcare

Offering solutions that help healthcare providers make data-driven decisions is a good start toward improving care. But situations evolve, challenges change, and what worked last year might not solve today's issues. Keeping our offerings relevant is crucial. One-way LOGEX achieves this is by proactively engaging with the organisations we work with. To learn more, we spoke with Hilde Aune Skretting, who leads the Services, Support and Success teams. She explained how LOGEX turns feedback into scalable solutions, and why collaboration is key to better care.

Jörg Zirklewski, Product Manager at LOGEX talks about how this was recently put to practice:

For our German customers, LOGEX actively addressed hospital challenges through a dedicated workshop. This session gave hospitals the space to share their struggles while our experts provided practical solutions. This was more than just a conversation, as it sparked action: LOGEX product team is now developing a requirements specification based on the workshop outcomes, ensuring our solutions evolve with our customers' needs.

So, Hilde, can you explain how LOGEX gathers and responds to feedback?

We have regular touchpoints with the users of our solutions through onboarding, ongoing services and support, and regular review sessions. These conversations give us a deep understanding of priorities and how we can support them even better. On top of that, we started running an annual customer survey to capture even more insights. When we spot patterns in feedback, that's when the magic happens, because one request often reflects a broader need, and we work to turn that into scalable solutions.

Can you give an example of how feedback got implemented?

Actually, all of our analytical solutions are developed through long-term collaboration with healthcare providers and authorities across Europe. Great ideas often come from forums such as user group meetings. For example, we've introduced new dashboard views for benchmarking and adapted our tools for mental care providers. Sessions with clinicians have sparked ideas for deeper data collection and RWE, leading to insights that improve treatments in real life.

How does this approach help healthcare providers?

It keeps our tools relevant and practical. We're solving real-world challenges. That means our solutions and services are scalable, easy to use, and ready for tomorrow's demands. Plus, we support users to get the most out of our tools and foster collaboration across organisations. It's all about how we can improve healthcare together.

A Peek Into LOGEX's Approach to Innovation

New business idea development (or product innovation) in healthcare technology often happens in one of two ways: it's either driven by what's technically possible (technology push) or by what customers are asking for (market pull). But how does this process actually work at LOGEX?

We spoke with Pieter Krop, Head of Product Strategy & Marketing, to understand how LOGEX moves from identifying problems to delivering solutions that help hospitals balance quality care with financial sustainability.

Can you walk us through how LOGEX approaches innovation?

Typically - although other routes exist - the situation for us is 'market pull'. Our Customer Office works hard to understand the practical challenges healthcare organisations face and talk to us about. We then build a minimum viable product that addresses the problem at hand. If the business value of the new solution is proven in a few pilots, we move forward to product development and create something scalable. Sometimes, we are the ones to see a new market challenge and decide to develop that idea. We validate it first with a few customers and then basically the same process kicks off as with the market-pull setting. This way we ensure that the jobs-to-be-done we uncover are valuable to the customer and can be translated into products that are relevant, urgent and scalable across geographies.

How do you move from identifying challenges to building solutions?

When recurring pain points emerge - such as unclear income streams, inefficient negotiations, or rigid budgeting processes - we validate them against our strategic priorities and strive to align them with market insights. Ideas are shaped through an iterative process: we test prototypes with customers, establish feedback loops and develop business cases. This ensures that each solution is grounded in real customer needs and delivers measurable value that the customer is genuinely interested in. To be fair, this process is still evolving and not yet fully institutionalised at LOGEX.

How do you decide where to invest resources?

This is still a very new process at LOGEX and it is not yet where we want it to be. Under the right circumstances, we prioritise initiatives that combine 'relevance of the problem', 'urgency of the problem' and a 'customer willingness to buy this from LOGEX'. In a nutshell, *does this provide the customer with real value*? Strategic product-fit to our existing portfolio is important here as well; we aim to leverage our existing customer base, architecture and datasets, and ensuring lightweight onboarding.

How does this connect to the product and marketing strategy?

Our goal is to help healthcare strike the right balance between affordability, accessibility, and quality while keeping an eye out for technological innovations from the healthcare industry. Every product we create supports this goal by enabling the entire healthcare ecosystem to ensure the delivery of high-quality care while safeguarding financial health in an uncertain environment.

LOGEX Income: Transforming Revenue Management for NHS Trusts – launching a new module with customers in the UK

Example 1

(1)

Customer Challenge

NHS Trusts face increasing complexity in managing variable income under the evolving NHS Payment Scheme. With fee-for-service models gaining prominence, accurate invoicing and compliance with strict Data Landing Portal structures have become critical. Many Trusts struggle with fragmented data processes, manual data handling, and tight, monthly deadlines: issues that directly impact revenue recovery.

How the Idea Started

The concept for LOGEX Income was driven by customer feedback and market signals. Trusts highlighted inefficiencies and dependency on BI teams for data corrections. Combined with NHS reforms and the need for interoperability, this created a clear need for an integrated, cloud-based solution.

What's the job-to-be-done we help resolve

LOGEX Income consolidates the entire income process - data collection, validation, NHS groupers, pricing, and reporting - into one platform. This eliminates system dependencies, reduces manual work, and ensures compliance with NHS standards.

Main goals of the product

- **Cut customer time spent in half:** about 50% less time spent on data preparation and validation thanks to automation.

- **Time spent on errors reduced:** Up to 30% fewer commissioner challenges, reducing rejected claims and disputes, freeing up critical healthcare resources for other tasks.

- **Better liquidity:** Hundreds of thousands of pounds are safeguarded annually through improved accuracy and timely submissions.

Customer Feedback & Next Steps

Early adopters report improved control over deadlines and higher income recovery. Feedback emphasises the value of integrated analytics and monitoring, guiding enhancements such as expanded tariff benchmarking, forecasting and granular integration with other LOGEX modules.

Click here for more information

LOGEX Negotiation Model: Bringing Structure and Confidence to Price Negotiations – a proven case with the Ikazia hospital.

Example 2

2

Customer Challenge

Dutch hospitals negotiate annually with insurers on prices and volumes, a process that determines budgets and care availability. These negotiations are complex, time-sensitive, and strategically critical. Without clear insights, hospitals risk financial setbacks and suboptimal agreements. Ikazia Hospital faced recurring challenges: heavy manual work, limited time, and insufficient transparency.

How the Idea Started

The LOGEX Negotiation Model was designed to address these pain points by making negotiations data-driven and structured. Hospitals needed a way to combine cost, volume, and tariff data into actionable scenarios, reducing guesswork and improving outcomes.

What's the job-to-be-done we help resolve

The model integrates key functionalities: scenario management, tariff rules, benchmarking, audit trails, and direct export to insurer formats (Vecozo/ZI).

By linking to hospital data, it enables accurate calculations and clear, reproducible workflows. Hospitals can simulate multiple scenarios and understand the impact of choices before entering negotiations.

Main goals of the product

Our solution helps the customer to arrive at the negotiations with better preparations:

- **Significant time savings:** What previously required weeks of manual preparation now takes days, saving time to think through the tactics beforehand.

- **Improved accuracy:** Automated calculations reduce errors and ensure compliance with insurer formats, helping the customer put forward a more realistic proposal.

- **Full traceability:** Audit trails and structured workflows eliminate the "black box" effect, support constructive conversations at the negotiation table.

Customer Feedback & Next Steps

Ikazia reports major time savings and greater confidence in negotiations. "Thanks to clear scenarios, transparency, and direct integration with our data, we entered negotiations well-prepared. What used to be manual and stressful is now faster and delivers better results," explained Vincent Ravestijn (Business Analyst, Ikazia Ziekenhuis). Hospitals adopting the model are shaping future enhancements, such as deeper benchmarking and integration with other LOGEX Financial Analytics tools.

Click here for more information

LOGEX Budgeting & Forecasting: Driving Strategic Budgeting for German Hospitals – enabling data-driven decisions

Example 3

3

Customer Challenge

German hospitals operate under increasing financial pressure due to rising costs, regulatory reforms, and structural changes like ambulatory care and Hybrid-DRGs. Budgeting processes are often fragmented, Excel-based, and lack transparency. Excel is error-prone and difficult to audit, making quality assurance challenging. For multisite hospital groups, heterogeneity in data and absence of unified cost accounting make strategic planning even harder. Leadership needs reliable insights to prepare for reforms, simulate portfolio changes, and assess the impact on resources, economics, and long-term results.

How the Idea Started

Hospitals sought a solution that could consolidate financial, personnel, and service planning into one platform, while integrating market and performance analytics. The goal: create a robust basis for strategic decisions, such as service line adjustments, and resource allocation, without adding complexity.

What's the job-to-be-done we help resolve

LOGEX Budgeting & Forecasting provides a single source of truth for budgeting and strategic planning. It automates complex calculations, integrates DRG volumes and staff planning, and enables real-time scenario management. Multi-user access with role-based permissions allows finance, HR, and clinical teams to work simultaneously. Hospitals can simulate the effects of portfolio changes (e.g., adding or removing service lines) on capacity, economics, and compliance with upcoming regulations like KHVVG. Built-in validation and audit trails ensure robust error detection, exceeding Excel capabilities.

Main goals of the product

- **Time saved:** Budget creation can be reduced from weeks of manual consolidation to days.

- **Increased traceability:** Rule-based and data driven calculations and audit trails ensure compliance and reliability.

- **Better collaboration:** Multi-user capability and role-based access enable teams to contribute in parallel without version conflicts, supporting increased realism when setting the budget.

- **Think through future scenario's:** Supports scenario planning for reforms, nursing budgets, and reimbursement negotiations.

Customer Feedback & Next Steps

Early adopters report greater confidence in strategic decisions and smoother, more coordinated budgeting cycles across departments. Next steps include expanding functionality for forecasting DRG volumes, and deeper integration with other LOGEX modules for comprehensive financial analytics.

Click here for more information

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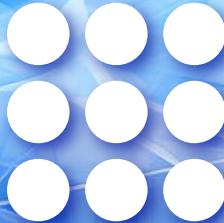
LOGEX

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A day at LOGEX

LOGEX employs hundreds of people across Europe, yet distance is not a barrier. Teams collaborate seamlessly to deliver value for customers, while internally the focus is on building a culture that goes beyond the ordinary, strengthening connections across locations and backgrounds through initiatives led by a dedicated team throughout the year.

Encouraging Creativity and Growth

LOGEX regularly organises internal activities to spark creativity and develop knowledge and skills. Last summer, for instance, LOGEX's first event AI Hackathon took place. It was a one-day event during which eight teams explored how AI could transform healthcare through data and AI.
The outcome was eight fresh, inventive concepts that showcased the ingenuity and collaborative spirit of the participants.

The Hackathon was all about giving ideas room to grow. Some teams focused on improving internal processes, creating tools such as a 'Ticket Prioritiser' to streamline workflows, while others looked outward, developing solutions like a 'Medical Transcriber' to support healthcare professionals. Each team delivered a working demo, a clear use case, and a vision for how AI could make an impact, both within LOGEX and beyond. The event was a powerful reminder of what happens when people are given the freedom to experiment, collaborate, and think creatively.

Raising Awareness Through Medical Campaigns

Beyond promoting creativity and skills, LOGEX also offers its team the possibility to gain more knowledge about certain real-world medical issues. In November and December, the company raised both awareness and funds for the research of respiratory tract infections (RTIs). During the campaign, medical specialists, Health Tech Assessment experts, and data specialists hosted sessions for all LOGEX employees on the topic of RTIs. The sessions were aimed to broaden the understanding of how data analyses are already having a real-life impact on hospitals, patients and immunisation strategies.

What drives LOGEX to deliver meaningful impact for our stakeholders begins within our own walls. By investing in people, encouraging creativity, and fostering collaboration, we build the foundation for solutions that make a difference in healthcare.

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In Conclusion - Building Resilient Healthcare Together

Future-proofing healthcare is an urgent necessity, not some distant goal. The pressures of rising demand, workforce shortages, and financial constraints will only intensify. But as this Sum-Up shows, data gives us the tools to respond with clarity and confidence.

Data-driven insights help hospitals plan smarter, allocate resources efficiently, and measure what truly matters: quality of care. They enable collaboration across teams and systems, turning complexity into actionable strategies.

At LOGEX, we believe the future of healthcare will be shaped by those who embrace this approach today. By working together -providers, policymakers, and partners - we can transform challenges into opportunities and build systems that are sustainable, equitable, and patient-centered.

Thank you for joining us on this journey. Let's keep pushing forward, using data to make healthcare stronger for every patient, now and in the future.

Let's talk!

Click here to contact us