



# Smarter paths to better care

## The future of customer experience in healthcare



# Contents

<b>3</b>	<b>Introduction – the future of healthcare</b>
<b>4</b>	<b>Resource shortages, cost pressures, and well-being at work</b>
<b>6</b>	<b>Key elements of customer experience</b>
<b>10</b>	<b>How new technology transforms customer experience management</b>
<b>13</b>	<b>Enhancing customer experience with technology in Lapland</b>
<b>14</b>	<b>Towards a holistic service process</b>
<b>16</b>	<b>Case study: Enhancing customer experience at the New Children's Hospital</b>
<b>19</b>	<b>Towards a customer-centric future</b>
<b>20</b>	<b>References</b>

# Introduction – The future of healthcare

In the service industry, customer experience has long been a key driver of success. Businesses know that dissatisfied customers will quickly turn to competitors. However, in healthcare, patient experience has traditionally taken a backseat to medical care. The emphasis has been on providing medical care, often overlooking how the care journey feels to the patient.

That perspective is changing. The way patients are treated – beyond just their medical care – is now recognized as a critical component of quality healthcare. Even in public healthcare, where financial incentives are not dictated by competition, improving service quality is becoming a priority.

Yet, healthcare systems across Finland and Europe face major challenges. Aging populations, shrinking workforces, and rising costs are straining resources. The COVID-19 pandemic further highlighted the urgency of addressing these issues.

In this evolving landscape, health technologies – such as mobile apps, self-service tools, and telecare – play a vital role in improving patient experience. These innovations enhance accessibility and transparency while reducing staff workload, making care more efficient and patient-centric.

This guide explores the key aspects of customer experience in healthcare, offering practical solutions and encouraging innovation. We hope it serves as a valuable resource for shaping the future of healthcare services.



# Resource shortages, cost pressures, and well-being at work

One of the most pressing challenges in Finnish healthcare today is resource adequacy. An aging population, workforce retirements, and financial constraints continue to put significant pressure on the system.

"As a general rule, healthcare professionals are operating in survival mode, focused on meeting patient demand as efficiently as possible. The priority is making the best use of nurses' and doctors' working hours," says **Toni Hirvonen**, COO of Axel Health.

**"Job satisfaction is low, work is chaotic, and there is a constant feeling of pressure."**

**Toni Hirvonen, COO, Axel Health**

Patients often express concerns that healthcare staff seem too busy to provide personal attention. This affects not only patient satisfaction but also the well-being of healthcare professionals, who often experience stress and frustration due to constant time constraints.

A stronger focus on employee well-being is essential for improving customer experience. Even the most dedicated professionals struggle to deliver quality care in an overwhelming workload and chaotic environment. If staff exhaustion leads to departures from the field, workforce shortages will only worsen.

Improving customer experience goes beyond direct patient interactions. It requires smarter workflows, addressing operational inefficiencies, and improving workplace conditions. By streamlining processes and optimizing resources, healthcare organizations can create a more sustainable, high-quality system that benefits both patients and professionals.





## Lean in healthcare: Beyond efficiency

Originally developed by Toyota, Lean management is a methodology that focuses on eliminating waste, streamlining processes, and maximizing value. In healthcare, however, Lean is more than just an efficiency tool – it's a framework for enhancing service quality, improving patient outcomes, and optimizing workflows to reduce unnecessary burdens on staff.

Key principles of lean in healthcare:

- **Patient-centered care:** Services should be designed around the needs and experiences of patients.
- **Empowered staff:** Continuous improvement relies on the engagement and insights of healthcare professionals at all levels.
- **Incremental progress:** Sustainable change comes from ongoing enhancements, rather than large, disruptive overhauls.

- **Data-driven decision-making:** Improvements should be guided by measurable outcomes and real-time data.
- **Agility and adaptability:** Healthcare organizations must quickly identify problems and implement responsive solutions.

As healthcare systems face increasing resource constraints, Lean methodologies are becoming more valuable than ever. When implemented effectively, they improve care quality and workflow efficiency and create a better experience for both patients and staff.



## Example: Streamlining patient transfers

Efficient patient transfers are a critical component of a smooth healthcare experience. In the wellbeing services county of North Ostrobothnia (Pohde), Axel Health's **Uoma system** has streamlined this process by automating transfer requests and reducing manual coordination. Uoma ensures real-time visibility into patient transfers and bed availability, which has helped healthcare professionals save time and focus more on patient care, ultimately improving staff efficiency and the overall patient experience.

Successful use of technology in any industry requires that the technology supports and complements existing processes. If it lacks an identifiable function within the workflow, its implementation can lead to inefficiencies rather than improvements.

# Key elements of customer experience

Before exploring how to improve the healthcare customer experience, it's essential to define what it truly means. A positive customer experience isn't just about a single interaction at a service point – it's a continuous journey that begins long before a patient enters a healthcare facility and extends beyond the treatment itself.

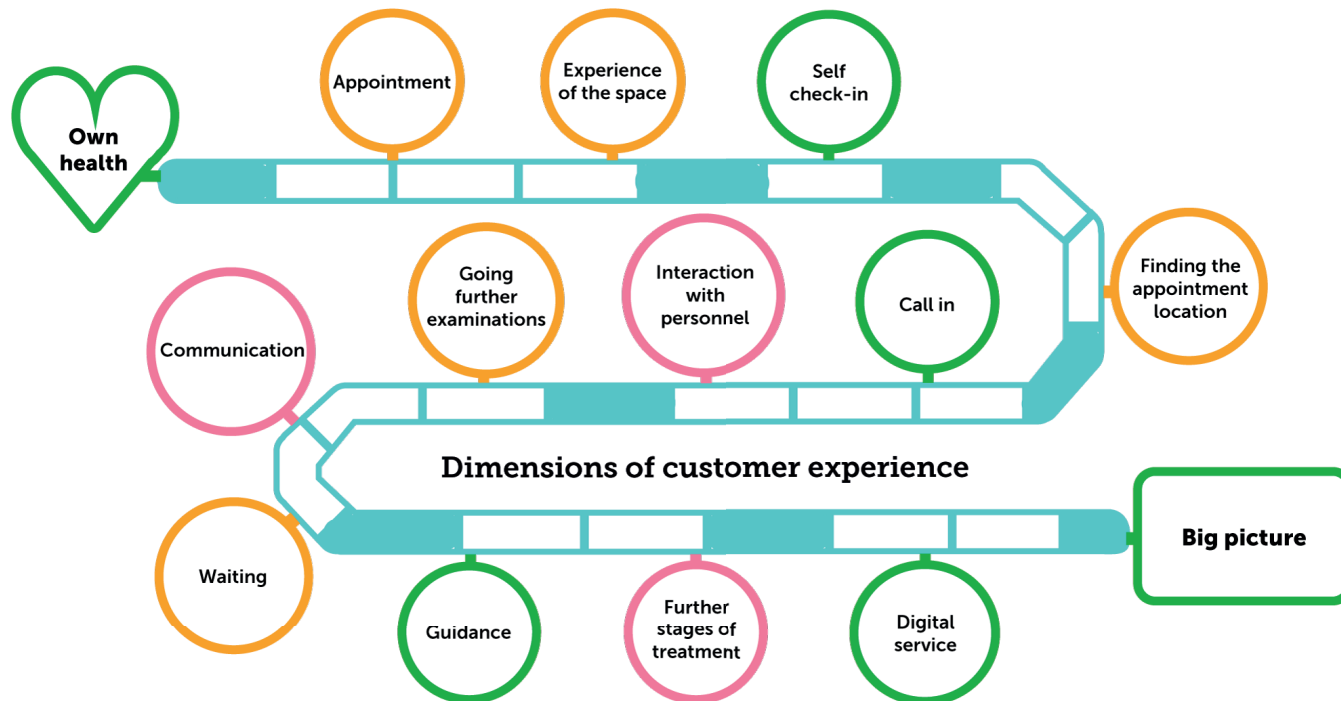
– Customer experience in healthcare is a multi-dimensional phenomenon. It's not just an interaction at a service point or an appointment, but an accumulation of interactions throughout the entire

treatment journey. From access to services to post-care communication, every step shapes the overall experience, says Toni Hirvonen.

The experience starts with a patient's first point of contact – whether it's recognizing a health concern, seeking information, or deciding to book an appointment. From there, every touchpoint contributes to the overall perception of care:

- **Booking an appointment:** Ease of scheduling, clarity of available options, and digital accessibility.

- **Arriving at the healthcare facility:** Parking, navigation, and first impressions of the environment.
- **Registration and initial interactions:** Efficiency, friendliness, and clarity of instructions.
- **Finding the right location:** Clear signage, assistance, and wayfinding within the facility.
- **Being called in for an appointment:** Transparency in waiting times and smooth transitions.
- **Interaction with medical staff:** Communication, empathy, and clarity of explanations.
- **Additional examinations and referrals:** Coordination between departments and patient guidance.
- **Information flow and transparency:** Understanding the next steps, test results, and follow-ups.
- **Waiting experiences:** Comfort, communication on delays, and overall environment.
- **Instructions before, during, and after treatment:** Clear guidance, digital access to records, and post-care follow-up.
- **Digital service interactions:** Intuitive self-service tools, real-time updates, and easy access to records and instructions



With digital transformation reshaping healthcare, self-service solutions, real-time updates, and improved communication are increasingly influencing the patient experience. Ensuring seamless, transparent, and patient-friendly processes is key to delivering high-quality, customer-centric care

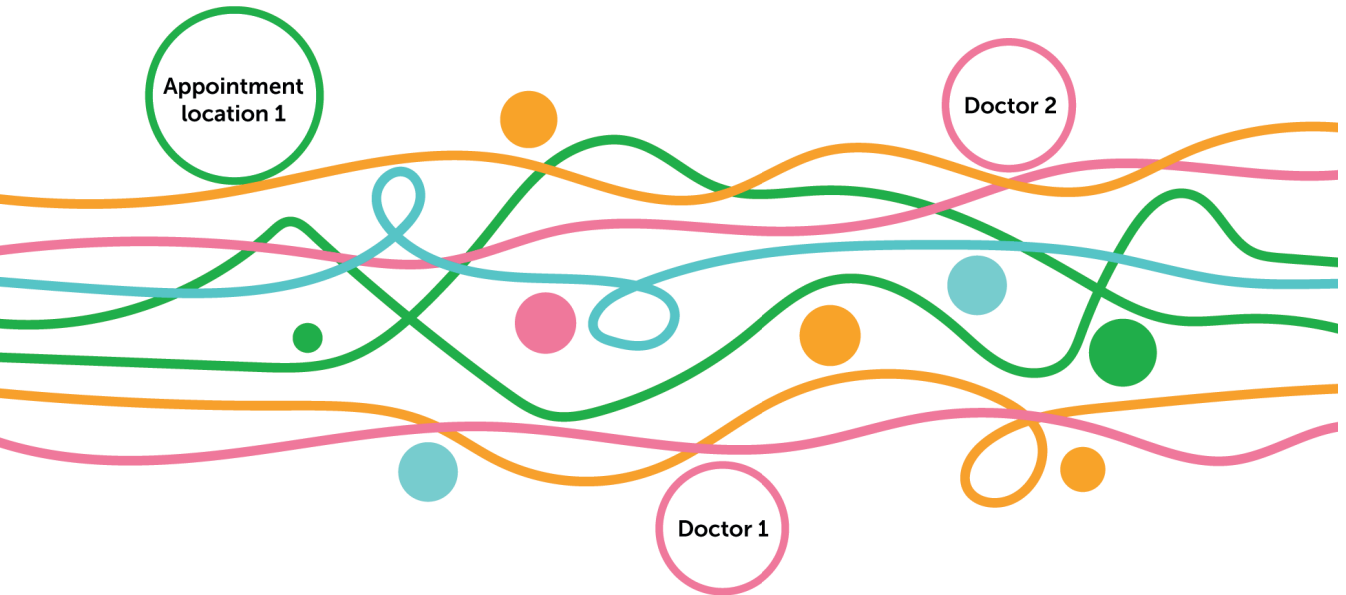
## From booking an appointment to checking in

The first steps of a patient's journey significantly shape their overall healthcare experience. Whether it's a scheduled appointment or an acute emergency, efficiency, clarity, and ease of access are key factors in ensuring a positive experience.

For scheduled visits, the appointment process is largely influenced by digital interactions, such as the usability of online booking systems and mobile applications. Patients expect seamless access to information, easy scheduling, and clear instructions for their visit.

For emergencies, the experience bypasses standard appointment booking and registration, yet clarity in the process, efficient communication, and ease of navigation remain critical.

Once at the facility, patients must quickly understand where to go. Their experience is shaped by the following:



- **Registration efficiency:** Simple check-in processes with minimal friction.
- **Wayfinding and navigation:** Clear signage, intuitive layouts, and digital guidance.
- **Facility environment:** Architecture, lighting, noise levels, and overall comfort.
- **Interactions with staff:** Friendly, informative, and empathetic communication

Every detail, from how easy it is to find a waiting area to the clarity of instructions, impacts a patient's sense of security and trust in the system

## The patient journey: A complex and non-linear path

The customer journey in healthcare is rarely straight-forward. Patients may navigate multiple stages, from initial diagnosis to referrals, additional tests, and

follow-ups. Along the way, they interact with different professionals, facilities, and technologies, each influencing their perception of care.

Patients also experience a range of emotions – from uncertainty about test results to frustration over delays. Transparent communication at each step is essential to reduce anxiety and build trust.

Key moments that define the experience:

- **Receiving information about tests and procedures:** Patients should never feel uncertain about what's happening next.
- **Understanding their next steps:** Clarity is essential, no matter whether patients are moving to another department or awaiting results.
- **Instructions for aftercare and follow-ups:** It must be ensured that patients leave with actionable, easy-to-understand guidance.



## Improving the customer experience

Enhancing the patient journey doesn't always require more resources but smarter processes. Even small improvements, like friendly interactions, better signage, or proactive updates on waiting times, can significantly affect satisfaction.

However, kindness alone isn't enough to fix systemic issues. A great service process must be built on transparency, efficiency, and responsiveness. Patients often have simple but essential questions::

- "Am I in the right place?"
- "What happens next?"
- "Can I leave the waiting area while I wait?"

Addressing these questions proactively through clear communication and digital solutions helps create a smoother, less stressful experience.

## Measuring the customer experience

To improve patient experience, healthcare providers need reliable data. While measuring patient experience is standard practice in North America, it is still evolving in Finland.

Tracking customer experience involves the following actions:

- **Direct feedback:** Surveys, real-time feedback collection, and open comments.
- **Staff insights:** Understanding challenges from a frontline perspective.
- **Quantitative metrics:** Tools like the Net Promoter Score (NPS) help measure satisfaction and areas for improvement.

Currently, data on customer experience is fragmented across different hospitals and healthcare providers. Establishing standardized, nationwide metrics could provide valuable insights for continuous improvement.



## WHAT IS NPS MEASUREMENT?

The **Net Promoter Score (NPS)** is a widely used metric for customer satisfaction and loyalty. It is based on a simple question:

**“How likely are you to recommend this service to a friend or family member?”**

The answer is given on a scale of 0–10, and the results are divided into three groups:

- **Scores 9–10: Promoters** – Highly satisfied, likely to recommend.
- **Scores 7–8: Passives** – Neutral, not enthusiastic.
- **Scores 0–6: Detractors** – Dissatisfied, may switch providers.

The NPS is calculated by subtracting the percentage of Detractors from the percentage of Promoters, producing a score from -100 to 100:

- **Below 0:** Needs improvement
- **0–50:** Good

- **50–70:** Excellent
- **70–100:** World-class

NPS is gaining traction in healthcare, helping providers measure and improve the patient experience systematically.

2. A caregiver managing a relative’s health-care acts as a **customer**, though the relative is the **patient**. Both experience the care process.
3. A person seeking health advice (without an immediate medical need) is a **customer**. If diagnosed, they transition into the role of a **patient**.

In this guide, both terms are used interchangeably, depending on the context and industry practices.

## CUSTOMER OR PATIENT?

The terms customer and patient are often debated in healthcare, but context matters. The distinction can influence expectations and how services are provided:

1. A person who is ill and seeks diagnosis and treatment becomes a **patient**, but they still expect service quality as a **customer**.



# How new technology transforms customer experience management

Technology is playing an increasingly vital role in improving the healthcare customer experience. It can be used to enhance information flow, measure experience, and collect data to support data-driven management of the entire patient journey.

**Lauri Litovuo**, Doctor of Science (Technology) in Industrial Engineering and Management, conducted Finland's first dissertation on how technology supports customer experience management in healthcare. His dissertation aimed to bring a customer angle to managing healthcare processes. According to Litovuo, the key is to lead the entire patient journey, not just manage isolated parts. A unified and consistent experience requires collaboration across multiple stakeholders, including partners and subcontractors.

**“With the help of technology, information flows better and helps both the patient and the service providers.”**

**Lauri Litovuo, Doctor of Science (Technology) Industrial Engineering and Management, University of Tampere**

Litovuo's work highlights the shift towards experiential healthcare, where operating models are renewed and redesigned with the patient's perspective at the core. His research includes analyzing factors affecting patient experience at the New Children's Hospital and contributing to a tablet-based experience metric.

Healthcare customer experience differs from traditional customer experiences in the following ways:

- The starting point is often negative – patients seek care due to illness or symptoms.
- The experience spans a long timeline, accumulating over multiple encounters.
- The family's role is significant, as a loved one's health affects their entire support system.

To improve this experience, technology must provide clarity and transparency. Patients need to know where they are in the care process, what happens next, and where they need to go and why.

Litovuo emphasizes that healthcare data is often fragmented across systems, paper records, and verbal exchanges. Technology can integrate these sources to give both patients and providers a real-time, holistic view of the care journey.



– Too often, patients feel lost – they are uncertain about their next steps or whether they need to carry information between departments. With better technology, information flows seamlessly, reducing stress for both patients and providers, Litovuo says.

Digital tools not only improve communication but also help measure and refine the customer experience, ensuring continuous improvement in healthcare services.

# Health technology as a success factor

Digitalization is a key driver of innovation, efficiency, and improved patient experiences in healthcare. While new technologies alleviate resource shortages and streamline operations, their success depends on thoughtful implementation.

– Using new technology to organize services takes courage, but I believe it's a success factor. Customer experience, patient flow management, and care quality can all improve significantly. However, technology should never be an end in itself, it must generate real value, Toni Hirvonen says.

Poorly designed digital solutions risk adding complexity rather than solving problems. To be effective, technology must:

- **Integrate seamlessly** into existing workflows.
- **Support both staff and patients** rather than create extra steps.
- **Enhance efficiency** while maintaining human-centered care.

If a system lacks a clear function and measurable benefit, something has gone wrong.

## What do patients expect from technology?

Technology should make healthcare simpler, not more complicated. Patients seek care because of a health concern, not to navigate confusing systems.

– Patients don't want to waste time figuring out technical tools. Digital solutions should feel effortless, offering clear information about their care journey, where to go, and what happens next, Toni Hirvonen says.



To improve patient experience, technology must provide:

- **Clarity and reassurance:** Patients should always know where they are in the process and what comes next.
- **Seamless self-service options:** Digital check-ins, mobile notifications, and automated updates reduce uncertainty.
- **Timely and digestible information:** Waiting room displays, SMS notifications, and app-

based guidance can enhance transparency.

When used correctly, digital tools speed up communication, reduce stress, and make healthcare more accessible.

### Supporting healthcare staff through digitalization

Just as patients need intuitive digital solutions, healthcare professionals require streamlined tools that support – not hinder – their work.

**“A well-designed system reduces unnecessary tasks, allowing staff to focus on what truly matters: patient care.”**

– Toni Hirvonen, COO, Axel Health.

For successful digitalization, employee tools must be:

- **User-friendly:** Interfaces should be visual and intuitive, not complex and time-consuming.
- **Automated where possible:** Routine tasks should be simplified, reducing manual workload.
- **Designed to improve workflow:** When hospital processes run smoothly, staff experience less stress, leading to better patient care.

Optimizing internal hospital operations means treating more patients effectively, reducing unnecessary administrative burdens, and improving both staff well-being and patient outcomes.





# Enhancing customer experience with technology in Lapland

In the last few years, the wellbeing services county of Lapland has made significant progress in improving the healthcare customer experience through digital solutions. Patients now receive real-time care status updates via mobile applications, and electronic appointment booking is widely available. Additionally, NPS-based feedback surveys are conducted across multiple units to monitor and enhance service quality.

Despite these advancements in communication, fragmentation in healthcare services remains a challenge. Different units often operate independently, leading to gaps in communication and information sharing. Patients moving between departments – such as specialists, imaging, and laboratory services – frequently need to repeat the same information, which is inefficient and causes frustration. To address this, technology is being explored as a way to unify data, improve coordination, and ensure a seamless care journey for both patients and professionals.

At the same time, sub-optimization in digital healthcare remains a concern. Many healthcare units purchase technology independently, resulting in incompatible systems that are difficult and costly to integrate. As **Mikko Häikiö**, Development Director in the Wellbeing services county of Lapland, points out, efforts to increase e-visits have been hampered by the use of multiple platforms, making system-wide interoperability a major priority moving forward.

Lapland's geographical size adds another layer of complexity. With vast distances between medical facilities, telemedicine and remote healthcare solutions are critical in ensuring equal access to care. The goal is to reduce unnecessary travel for patients, particularly for routine check-ups, and make specialized care more accessible. Initiatives such as home-delivered sleep apnea monitoring devices are already in place, and there is growing interest in integrating wearable technology and patient-generated data – such as activity trackers and smart devices – to enhance remote monitoring and better allocate healthcare resources.

– We need to explore how we can effectively utilize patient-generated health data. Wearable technology has the potential to provide valuable insights and improve resource efficiency, Häikiö says.

By addressing fragmentation, digital integration, and remote care solutions, Lapland is working towards a more efficient, connected, and patient-centered healthcare system where technology enhances both accessibility and quality of care.





# Towards a holistic service process

New technology has made it possible to measure customer experience in healthcare. When key metrics improve after specific changes, it provides objective proof that services are moving in the right direction. However, true progress requires more than just measurement – it demands a holistic approach to service development, data integration, knowledge management, and operational efficiency.

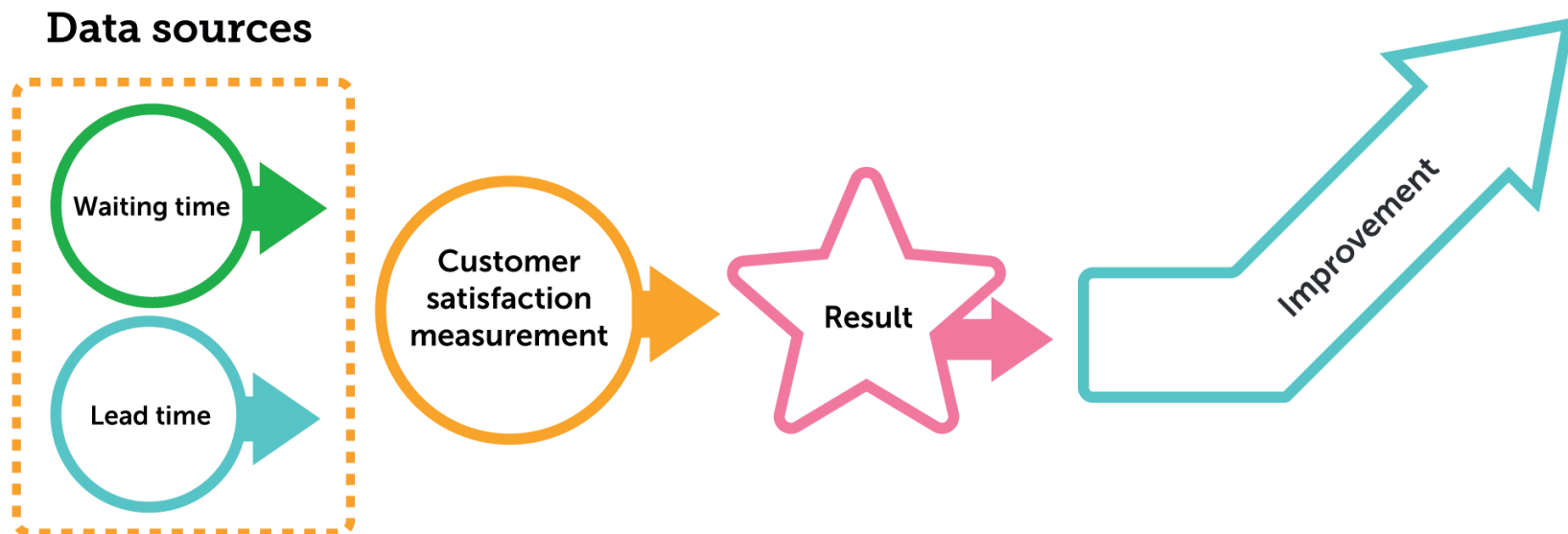
– The understanding that arises from data can only be seen in the big picture. Yet, people often focus too much on their specific roles, making it easy to lose sight of the whole system, Toni Hirvonen says.

To achieve meaningful improvements, healthcare organizations must move beyond isolated data collection and work towards interconnected knowledge management. Measuring waiting times, queue lengths, turnaround times, and patient satisfaction provides valuable insights, but these metrics must be linked to decision-making and real-time process optimization.

When done right, reducing waiting times, streamlining urgent care, and enhancing workflow efficiency benefit both staff and patients, creating a more responsive and patient-centered healthcare system.

A major barrier to achieving a holistic service process is fragmentation which means that different healthcare units operate in silos, using isolated technologies and processes.

- Different care units often acquire independent IT systems, leading to compatibility issues and data silos.
- Staff often use multiple, disconnected tools, adding unnecessary complexity to their workflow.
- Technology meant to streamline operations instead becomes a burden when poorly implemented.



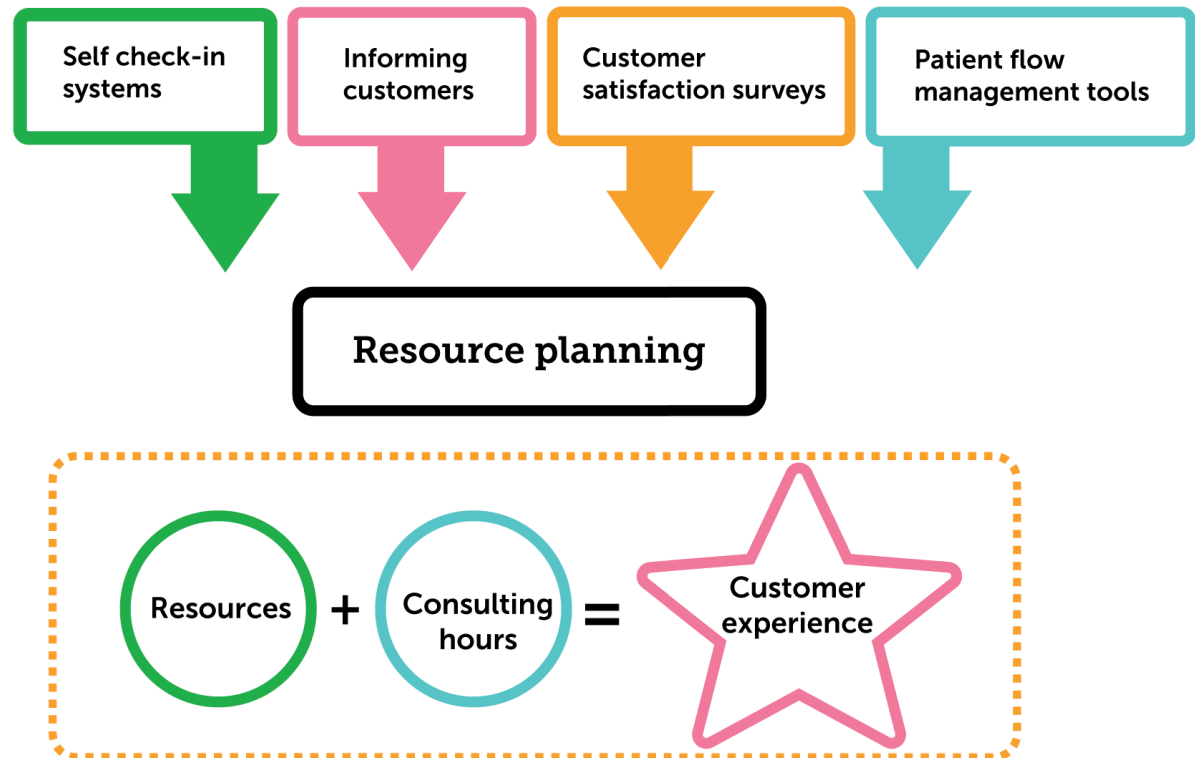
**“If systems are developed without a holistic vision, we risk sub-optimization – where technology adds complexity instead of solving real problems.”**

**Toni Hirvonen, COO, Axel Health**

One of the biggest challenges is patient information systems. While they are essential for data storage and management, they are often heavy, complex, and not user-friendly. Healthcare organizations need a modern and comprehensive ERP system that simplifies daily operations while ensuring patient flow management, resource allocation, and real-time service coordination.

A well-integrated system should include the following features and functions:

- **Scheduling of consulting hours** to improve resource management.
- **Self-service tools** to enhance patient autonomy and reduce administrative workload.



- **Seamless information flow** between different units, reducing duplicate work.
- **Customer experience tracking** to support continuous improvement.

By focusing on integration rather than isolated solutions, healthcare providers can streamline processes, reduce inefficiencies, and create a seamless patient journey.

# Case Study: Improving the Experience at the New Children's Hospital

At the New Children's Hospital in Helsinki, customer experience is at the heart of every operation. From design to daily patient interactions, digital tools play a crucial role in gathering feedback, improving service quality, and optimizing patient flow.

During the hospital's design phase, HUS collaborated with Aalto University's Lapsus research project to gain deeper insights into patient and family needs. They set up a family council and a children's council to collect opinions on how the old children's hospital operated and expectations for the new hospital. The children were involved in many ways, for example, in the design of the hospital clothes and the design of the tablet's user interface in each room.

One of the hospital's most impactful innovations is its digital customer feedback system, which was launched across HUS in 2019. After a visit, guardians automatically receive an SMS requesting feedback on areas such as communication, waiting times, and personal interactions. This structured approach allows for immediate improvements at the unit level and informs broader hospital-wide decisions.



**"This system has been a tremendous step forward, and the feedback rates are several times higher than before.**

**We receive more than a thousand open feedback submissions per month. We also need to be able to process the information we collect, and that is why we have created an internal process for what is done with the information."**

Pekka Lahdenne, Project Manager for major construction projects, HUS

Additionally, the hospital has embraced new digital solutions to enhance patient journeys:

- **Self-check-in with avatars:** A child-friendly system where young patients select an avatar to guide them throughout their hospital visit.

- **Remote visits:** Initially expanded during the COVID-19 pandemic, virtual consultations proved so successful that they are now a permanent care option.

By prioritizing patient-centered care and leveraging digital innovations, the New Children's Hospital has set a new standard for customer experience in healthcare.






## How the digital avatars improve the customer experience

A child and their parents arrive at the hospital for a pre-booked appointment. The hospital's warm colors and playful design create a welcoming atmosphere.

At a self-service kiosk, they scan the child's Kela card to check in. The child selects an avatar – this time, a hummingbird. The kiosk prints a visit printout with their avatar, along with details on their appointment location, visit number, and waiting lobby. In the waiting lobby, an info display shows various animated avatars, including the child's hummingbird.

At the same time, the healthcare professional sees from their screen that the patient has arrived. When it's the child's turn, the hummingbird flashes on the screen, along with the room number. The family follows the digital guidance to the correct consultation room – there's no need for the professional to call the child's name aloud. This system creates a stress-free, engaging experience, especially for young patients, while improving efficiency for staff.


  
110  
This barcode can be used to check in

① X-ray

You have checked in to this appointment.  
Please sit down and wait.

Time: 10:00  
Location: Loikkalan keskussairaala  
Floor: 1  
Lobby: Kuvantamisaula 1

XRTG1

  
VISIT NUMBER  
**110**  
You'll be called in with this number

KIOSK\_123, 2023-12-29 09:41:04





# Towards a customer-centric future

As we reach the end of this guide, you may be wondering what the customer-centric future means. While healthcare cannot – and does not need to – create a fully customized treatment process for every patient, the customer experience can and should feel personal.

A truly great healthcare experience feels individualized to the patient. Every encounter with healthcare services is unique to the individual, shaped by their expectations, concerns, and personal circumstances. People don't want to feel like just another number in a system – they want to feel heard, understood, and valued. When a service truly delivers a good customer experience, it becomes personal in the mind and heart of the customer.

At the same time, healthcare professionals also benefit from a more patient-centered approach. When processes, transparency, and digital support are improved, staff can focus on what matters most – providing meaningful, high-quality care. A well-designed system doesn't just enhance patient satisfaction, it also reduces stress, improves efficiency, and fosters a more rewarding work environment for healthcare teams.

The future of healthcare isn't about a distant utopia. It's about real, practical changes that make healthcare more human, accessible, and efficient. With the right tools, processes, and mindset, we can move towards a system where patients feel valued, professionals feel supported, and healthcare experiences are consistently improved.



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