MEDICAL MOTION

2026 / VOLUME 1 INTERNATIONAL

The Smart Move

More time for what really matters: caring

page 16

Stavanger University Hospital embraces

A New Era of Care

page 4

Smart medication management

at UM6P Hospital

page 12

A major step in

Speed, quality, and safety

AZ Jan Palfijn, Ghent

page 26

ALPHATRON Medical

ALPHATRON
Medical

Creating flow in healthcare

Together we are working on
Smart Intelligence solutions

Dear reader,

I am very proud to present the special international edition of Medical Motion. In this issue, healthcare professionals from around the world share practical stories about how our smart mobile workstations succesfully helps them to create flow in their daily care tasks.

The healthcare sector faces major challenges: in the field of digitalization, achieving more efficiency and patient safety. Our modular and sustainable mobile workstations support caregivers in working more smoothly, from managing digital patient records to administering medications and capturing vital signs at the point of care. This magazine highlights how we contribute together to our mission: "Creating flow in healthcare".

I believe healthcare doesn't need more technology, just smarter technology. Technology that anticipates needs. That connects, simplifies, and brings back what matters most: focus, time, and joy in caring. That is why AMiS has evolved into SmarCart. It represents the next step in intelligent care delivery: smarter, more scalable, and designed for the evolving demands of modern healthcare. I invite you to discover how SmarCart is not only a new development, but a new way of thinking.

Enjoy reading!

Best regards,

Harald Verloop,
CEO of Alphatron Medical

Table of contents

Colofon: January 2026, Volume 1, Issue 1.
Medical Motion is a publication of Alphatron Medical. Editorial team: Esther Hertog, Miriam Lagerwaard, Harald Verloop and Sven Klement. Design and layout: Het Stormt, Rotterdam and Gemini Design Hoofddorp. Printing: Drukkerij Verloop, Alblasserdam. If you would like to respond to this publication, please contact the marketing department at +31 (0)88-5506200 or marketing@alphatronmedical.com.

Stavanger University Hospital Embraces

a New Era of Care

Single-bed design meets smart mobility

When Stavanger University Hospital (SUS) in Norway opens its brand-new facility in late 2025, it won't just be a building milestone. The hospital, one of Norway's six university medical centers, is making a fundamental shift to single-bed patient rooms: a design choice that redefines care delivery.

 Photo credit © Egil Gåre, Helse Stravanger

But with the same number of staff covering a much larger area, the change also introduces new challenges. Cato, one of the clinical leaders at SUS, explains: “We’re opening a completely new hospital with single rooms, but with the same number of staff. That is a major challenge. It forces us to work differently, to become more mobile, and to have systems that support us exactly where and when we need them.”
To stay efficient, safe, and patient-centered, SUS deployed more than 200 mobile clinical workstations, fully integrated into the hospital’s architecture and daily workflows. With approximately one workstation per four patients, they provide real-time access to ICT systems, support documentation and medication, and even storage of essentials. All directly at the bedside. The result: less walking, more patient time, safer routines, and more efficient teamwork.
In short, the mobile workstations transformed distance into closeness, making care more efficient, safer, and more patient-centered.

Care, uninterrupted
"We used to rush medication rounds," says Vilde, a nurse in the stroke unit. "Now, we take the time to sit with patients, explain their medication, discuss side effects, and confirm that everything is correct. It feels far more professional, and most importantly, it’s safer."

She continues, "Before, everything was rushed. Now we deliberately spend more time with patients during medication rounds. It’s no longer just about getting through the task: it’s about involving the patient. And that makes all the difference."

Designed in, not added on
"We literally integrated the trolleys into the floor plans," explains Margareth, Project Manager of Organizational Development for New SUS. "They are not an afterthought, but a natural part of the environment and daily routines. Instead of standing against a wall in the corridor, they are built into the furniture and the workflow itself."
From the start, clinical teams, planners, and IT experts collaborated to ensure the workstations served every discipline. Storage compartments were customized. Charging stations were embedded in the architecture. Even walking distances were calculated into deployment strategies.

A regional strategy powered by collaboration
SUS was not alone in this transformation. Tonje from Helse Vest, the regional authority responsible for IT implementation across hospitals, highlights the power of shared expertise:
"It’s the combination of different knowledge that makes it work. At Helse Vest, we saw mobile workstations being implemented across hospitals, each with their own approach. So, we formed a working group with representatives from different institutions. That way, hospitals could learn from each other’s experience, and implementation became much more streamlined."

“WE LITERALLY INTEGRATED THE TROLLEYS INTO THE FLOOR PLANS."

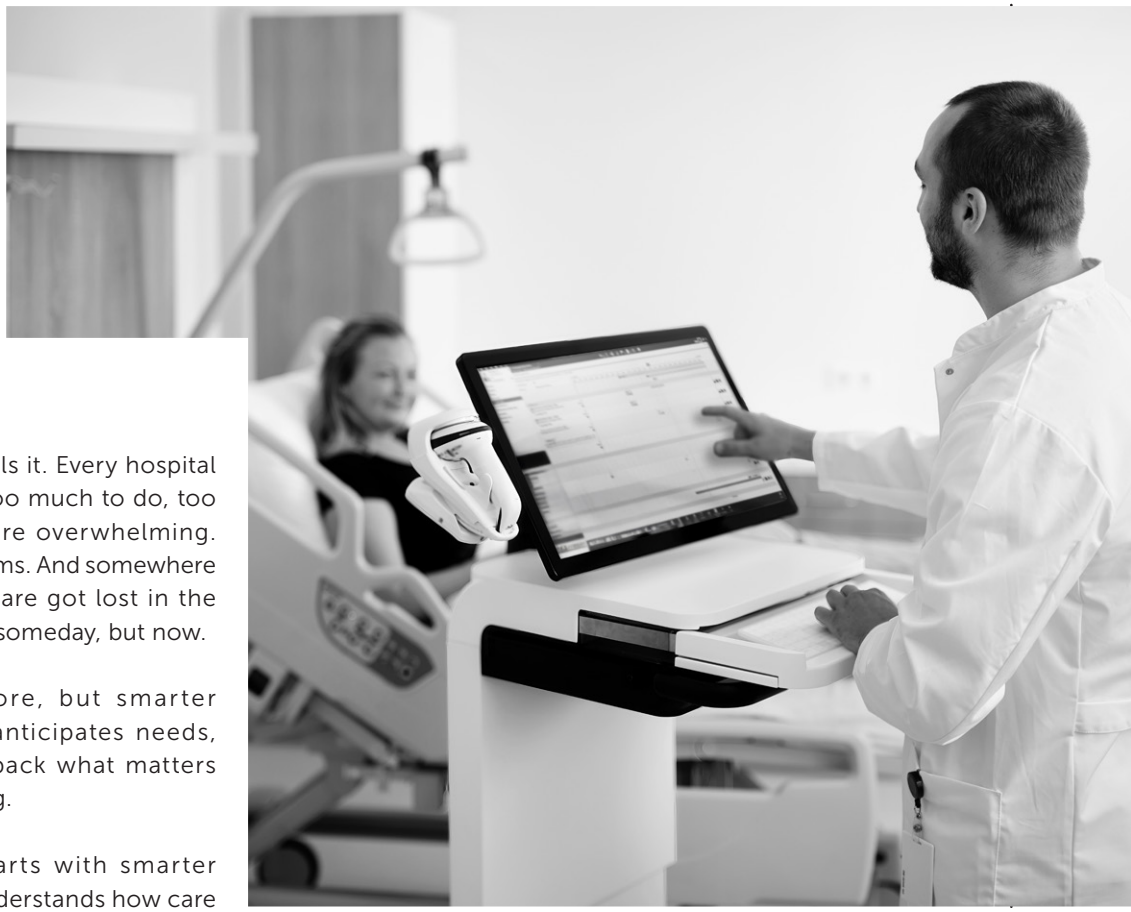
The value of partnership
The project in Stavanger was realized in close cooperation with Beckman Solutions AS, Alphatron Medical’s Norwegian partner. Their local expertise ensured a smooth implementation, with systems configured to meet the hospital's unique needs. The result: a solution that works from day one.

Conclusion: the future, closer to the patient
The mobile clinical workstations at SUS are more than technological tools. They are symbols of a new culture: one where care teams are empowered, patients are engaged, and workflows are human-centered.

As the hospital opens its doors, its caregivers are ready. Because in this future, care doesn’t just happen behind a desk. It happens where it matters most: at the bedside. ■

"Healthcare needs smarter technology."

Creating flow in healthcare



About Alphatron Medical
Every healthcare professional feels it. Every hospital sees it. Care is under pressure: too much to do, too little time to care. Workloads are overwhelming. Too many screens, too many systems. And somewhere along the way, the essence of care got lost in the process. That has to change. Not someday, but now.

Healthcare doesn't need more, but smarter technology. Technology that anticipates needs, connects, simplifies. Bringing back what matters most: focus, time and joy in caring.

Real change in healthcare starts with smarter thinking. With technology that understands how care actually works. At Alphatron Medical, we call that Smart Intelligence. It's the way we connect people, technology and data into one seamless, intuitive flow. Smart Intelligence simplifies what used to be complex and makes sure healthcare professionals work more efficiently, more safely, and with greater joy, creating space, energy, and time for what matters most: the patient.

At Alphatron Medical, we are proud to have a strong presence across Europe. But our impact goes far beyond these borders. Through close collaboration with our valued partners, we are continually expanding our network and delivering our innovative healthcare solutions to more countries across Europe, and around the world. ■

"THIS INTERNATIONAL GROWTH IS PART OF OUR MISSION: ENSURING THAT HEALTHCARE PROFESSIONALS EVERYWHERE CAN WORK MORE EFFICIENTLY, MORE SAFELY, AND WITH GREATER JOY."

ALPHATRON Medical

Digitally empowered:

How LKH Laas streamlined care with mobile AMiS workstations

A regional hospital with a future-focused mindset

Nestled in Austria's Carinthia region, Landeskrankenhaus Laas (LKH Laas) is part of KABEG, the central healthcare provider managing five regional hospitals. Known for its commitment to proximity, quality, and innovation, LKH Laas blends cutting-edge diagnostics with warm, patient-centered care.

With over 8,500 employees, KABEG is the backbone of healthcare in the region. But as healthcare rapidly digitalizes, LKH Laas faced a familiar challenge: how to embed new technologies into daily routines without losing the human connection that defines their approach.

KABEG
LKH LAAS

The challenge:

Going digital without losing the human touch

LKH Laas needed a solution that would:

- Optimize workflows for nurses and physicians and simplify documentation
- Increase mobility and data security in daily operations
- Strengthen the hospital's digital foundation for future innovation
- Improve work conditions to support staff retention

The answer:

Mobile ward trolleys that bring digital tools to the bedside

In collaboration with CANCOM Austria AG, the solution came in the form of Alphatron Medical's AMiS-X and AMiS-PRO workstations. These mobile units allow clinical staff to access electronic patient records (ePK), document care, and coordinate treatment, right at the patient's bedside. Fast, secure, and intuitive.

Importantly, these were not replacements, but a critical next step away from paper-based processes, enabling full digital documentation where it matters most: at the patient's bedside. "The AMiS-X and AMiS-PRO aren't just carts; they're smart tools that support our staff wherever care happens," said hospital management. "They're easy to maneuver, adjustable to any body height, and fit into every room. That makes a huge difference during long shifts."

Each unit was customized with:

- Thin Client integration tailored to KABEG's infrastructure
- Foldable side tables and modular drawer setups
- Height-adjustable design for ergonomic use

From tender to transformation:

A collaborative rollout

Doctors, nurses, and management tested various trolley models in real-world settings. Their feedback directly shaped the final configuration. After a successful tender, a structured implementation followed, led by CANCOM and KABEG's procurement team.

The result: a digital tool that felt purpose-built, but not imposed. A mobile platform with integrated IT components and fully compatible with the hospital's electronic patient record (ePK). A necessary step forward from paper based processes to fully digital documentation at the patient's bedside.

The impact:

Streamlined workflows and digital clarity

Since implementation, LKH Laas has seen measurable improvements:

- Documentation now happens directly at the bedside, saving time and reducing walking distances
- Interdisciplinary teams work more efficiently with real-time data access
- Handover processes are smoother, with improved traceability
- Standardized workflows are now established across wards

The AMiS solution bridged the gap between analog and digital, without sacrificing the human factor.
Overall, the solution is compact, functional, and future-ready, perfectly aligned with the hospital's ambition to improve efficiency and support its staff in a modern clinical environment.

Built for the present.
Ready for the future.

LKH Laas sees this digital transformation not as a one-time upgrade, but as a foundation for continued innovation. The mobile workstations are now a core part of their strategy to deliver efficient, modern, and compassionate care, anchored in local values but powered by future-ready tools. ■

"OVERALL, THE SOLUTION IS COMPACT, FUNCTIONAL, AND FUTURE-READY."

Controlled medication workflow

in Canisius Wilhelmina Hospital

All 11 clinical departments of Canisius Wilhelmina Hospital (CWZ) in Nijmegen (the Netherlands) have transitioned to a fully digital medication process. This initiative enhances medication safety for both patients and staff while optimizing and automating the distribution process. What inspired this transformation? Project Leader Eric Claassen and Application & Project Coordinator Saba Iylia share their insights.

“WE WANT EVERYTHING TO BE ACCURATELY RECORDED, SO WE’VE AUTOMATED THE PROCESS.”

Modern medication Smartcarts and Software

“In the Netherlands, most Patient Care Incident reports are related to the medication process, often at the point of administration, wrong medication, incorrect dosage. We aimed to minimize these risks,” explains Eric. Saba adds, “Our previous medication carts were outdated, and we wanted to upgrade to a modern system that meets new standards.” This provided an opportunity to implement a solution that aligns with evolving safety regulations. “Medication safety is under increasing scrutiny, and regulations will only become stricter in the future,” Eric emphasizes.

Enhanced safety for patients, nurses, and pharmacy staff

To establish a closed loop medication process, CWZ introduced AMiS-PRO integrated with an automated double-check via a medication scanner. “We want everything to be properly documented, so automation was the logical step,” Eric states. “This approach not only increases patient safety, but it also benefits nursing and pharmaceutical staff. Another advantage: with automated registration, we are partly filling the gap created by the staff shortage.”

Choosing the best solution

The AMiS-PRO was the optimal choice, according to Eric. “From a security perspective, assigning patients their own medication bin is a major advantage. During medication rounds, the nurse scans the patient’s wristband, which automatically opens the patient’s administration screen in the Electronic Health Record (EHR). With a single button press, the corresponding patient-specific medication bin unlocks.”

Furthermore, the AMiS-PRO offers future scalability. “We can integrate additional functionalities, such as vital signs monitors, effectively turning it into a complete nursing care station.”

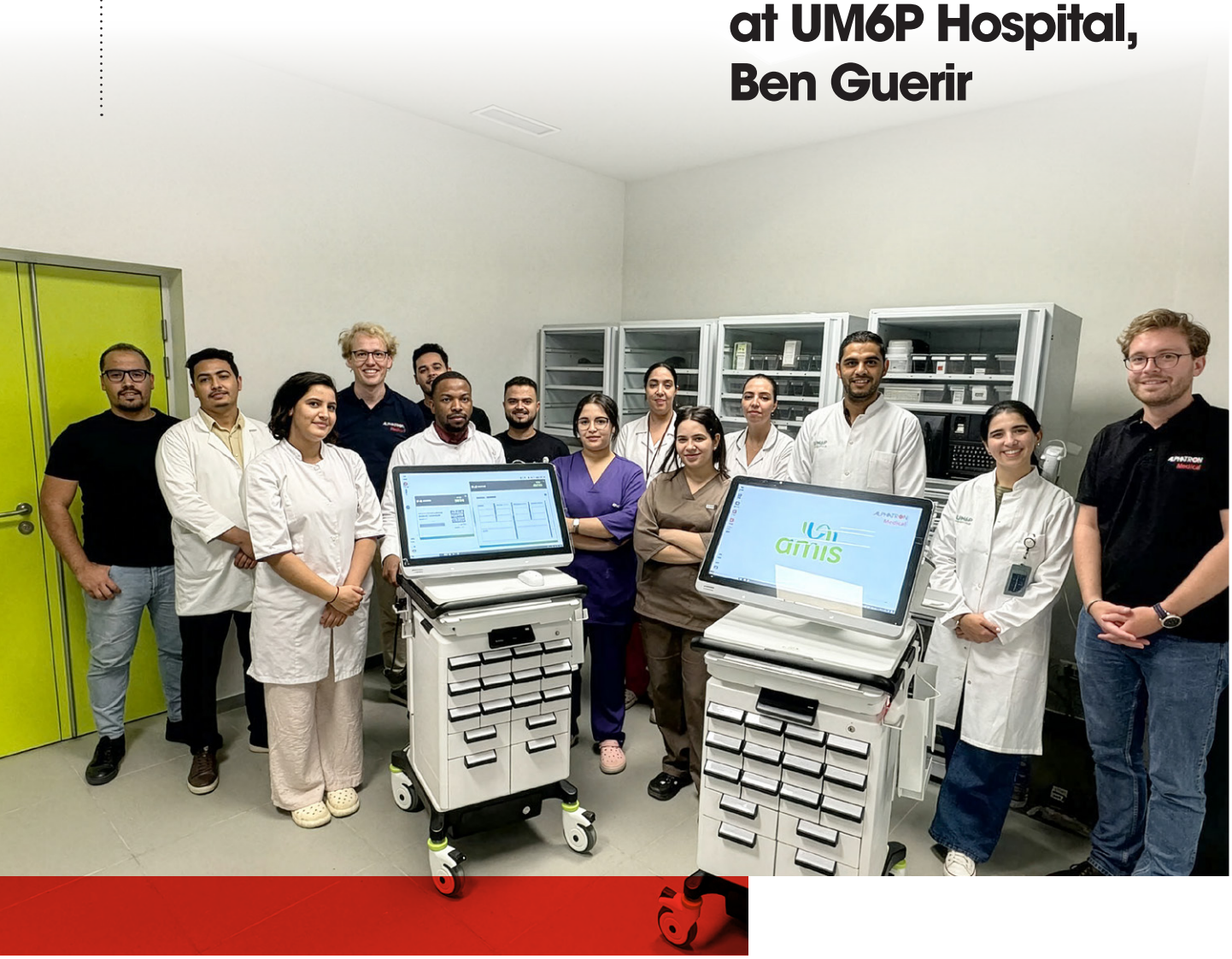
A more efficient medication process

Nurses and pharmacy staff appreciate the improved process. Some adjustments were needed, particularly getting used to one medication bin opening at a time and the few seconds required for the AMIS-PRO to start after login. “While it may feel like a slight delay, the overall medication process is now significantly faster,” Eric concludes. ■

Article published in Medical Motion 31 (2023)

Smart medication management

at UM6P Hospital, Ben Guerir



UM6P Hospital in Ben Guerir is a new beacon of innovation in Moroccan healthcare. Located in the "Green City" and part of Mohammed VI University of Polytechnique (UM6P), the hospital goes beyond conventional care. It is a forward-thinking hub for academic research, clinical excellence, and a model for the smart hospitals of the future — with a mission to support healthcare innovation across Morocco, Africa, and beyond.

To understand the vision and impact of smart medication management at UM6P Hospital, we spoke with Ghizlaine Tadlaoui, Amine Tanouti, and Nisrine Chemlal, the hospital pharmacists leading the transformation.

From clinic to smart hospital

Previously, Ben Guerir had a small clinic. Today, the UM6P Hospital is a state-of-the-art facility with 330 beds and 19 wards. It has been designed not just for patient care, but also as a living laboratory for medical innovation.

From the outset, the pharmacy team was given a leading role: a strategic decision that proved to be a game changer.

Why automation was essential

Unit-dose medication dispensing was identified early on as a cornerstone of safe and efficient medication management. This led to an extensive vendor selection process. In November 2023, a joint visit with an Alphatron reseller Binarios IT to Alphatron Medical in Rotterdam was planned. The result? A high-trust partnership and a tailored, end-to-end solution. "Excellence is the main criterion in everything we do. Everything must be state-of-the-art and supported by cutting-edge technology," said the pharmacy team, highlighting a cultural shift where pharmacists moved from background roles to becoming central decision-makers in clinical workflows.

The pharmacy team's mission is clear: "We want to control the medication flow to the patient." They are responsible not only for medication supply, but also for overseeing medication administration workflows, ensuring that every dose reaches the patient exactly as prescribed.

Building the closed loop ecosystem

UM6P Hospital implemented a fully integrated, closed loop medication system that connects the pharmacy to the bedside, ensuring safety, traceability, and operational efficiency:

- **AMiS-PRO with MedSafe Individual Lock:** For safe and secure bedside medication administration — fully integrated with the EHR.
- **Omnicell Automated Dispensing Cabinets (ADCs):** Secure medication storage on the wards, integrated with the AMiS-PRO.
- **Deenova Unit Dose Robots:** Automatically prepare and fill patient-specific medication bins for the upcoming 24 hours.
- **Omnicell Box Picking Robot:** Automates the storage and retrieval of medication boxes in the hospital pharmacy.

People behind the process

Staffing has been as strategic as the technology itself. The pharmacy team, currently made up of three pharmacists and ten pharmacy technicians (trained nurses), is scaling up to 24 technicians, ensuring 24/7 operation. They also manage sterilization services, bringing even tighter control over clinical quality.

"We want to control the flow to the patient," the pharmacy team emphasized. And they do. Every dose is tracked,

Binarios by T2S GROUP

Reseller Alphatron Medical

verified, and precisely timed, ensuring full traceability and safety.

Implementation Highlights

Hardware was delivered swiftly, and integration with the hospital's EHR system is complete. To manage the full medication workflow, extensive coordination was required between multiple vendors and hospital stakeholders. The hospital is live and AMiS-PRO has been implemented. The go-live followed a "safety mode" rollout, activating key systems while continuously monitoring performance. The full closed loop process will be phased in throughout the hospital's ramp-up.

Supported by smart tools

The hospital is working toward a fully closed loop medication process, from pharmacy to bedside. Medication is delivered to the patient in the right dose, at the right time, exactly as prescribed. Nurses are supported by smart tools that reduce manual steps, prevent errors, and give them more time to focus on patient care.

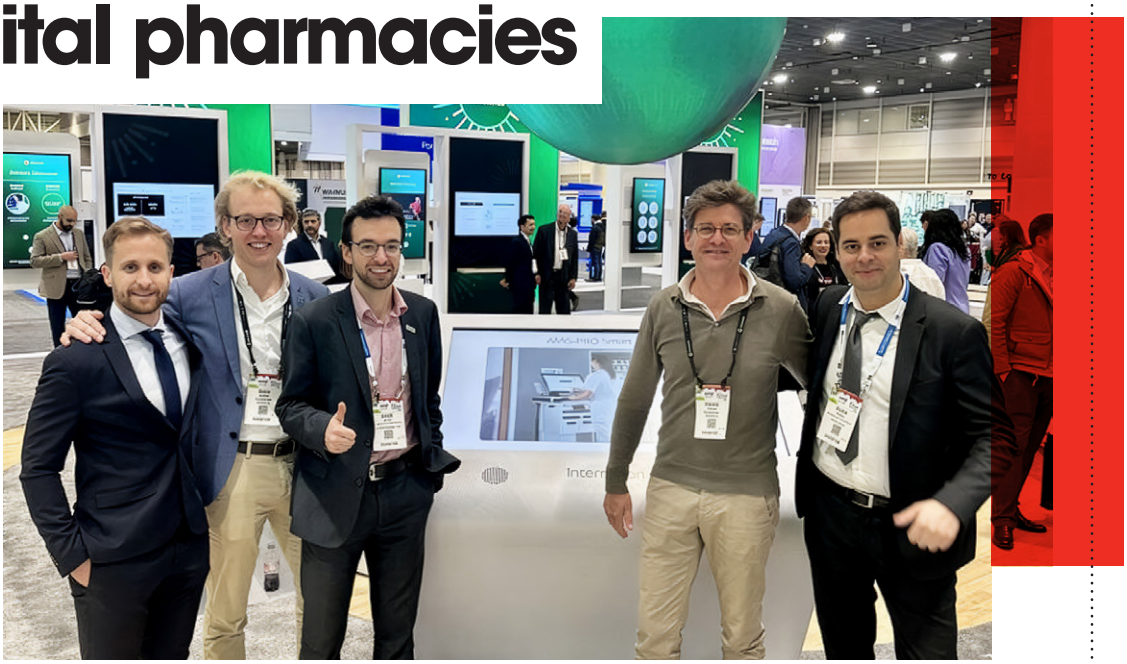
Scaling up for tomorrow

As the hospital expands operations, more AMiS-PRO carts will likely be deployed to cover all wards. The goal? A future-proof, fully automated medication administration process: standardized, scalable, and rooted in safety.

UM6P Hospital is not just transforming care in Ben Guerir. It's redefining what's possible for healthcare across Morocco and beyond. ■

"WE WANT TO CONTROL THE MEDICATION FLOW TO THE PATIENT."

Committed to advancing interoperability in hospital pharmacies



From left to right: Oriol Ballester Puiggròs - Sr. Commercial Director Int'l - Hospital Sector - Omnicell, Niels de Vries - Product Manager - Alphatron Medical, Louis Bertin - Board of Directors EAHP, Harald Verloop - CEO - Alphatron Medical, Pedro Pereira - Development Strategist - EAHP

We're proud to be part of the Special Interest Group (SIG) initiated by the European Association of Hospital Pharmacists (EAHP), focused on improving interoperability in pharmacy automation. The goal: to develop a vendor-neutral communication standard that enables seamless integration between systems across European hospital pharmacies.

Although automation has clear benefits, better workflows, fewer errors, and improved patient safety, less than 30% of hospital pharmacies in Europe have adopted it. One of the main barriers is the lack of standardised communication between different systems, resulting in inefficiencies, high costs, and complex implementations.

By contributing to this SIG, we're working alongside other industry experts to design a universal protocol that simplifies system integration, reduces friction, and accelerates the adoption of automation in hospital pharmacies. ■

THE SMART MOVE.

The **SmartCart** connects EHR (Electronic Health Records), medication, vitals sign and documentation in one intelligent workflow: secure and effortless. **Fewer actions. Fewer errors.**

The **SmartCart** is built to grow with you. Future-ready, flexible and designed to make workflows safer and more efficient. From digital work at the patient's bedside to an all-in-one solution, the **SmartCart** evolves seamlessly with your needs. Easy to upgrade and always future-proof. It's your partner for smarter care.

AMiS is now SmartCart:

New name. Same reliability. Even smarter.

It's the next step in intelligent care delivery, it's smarter, more scalable, and built to meet the evolving needs of modern healthcare.

More time for what really matters: *caring.*"

THE BENEFITS

- **Time saving** per nurse per shift
- **Access** to individual patient bins, directly from the EHR
- **Secured** medication
- **No mistakes** in vital signs measurements
- **Efficient** workflow

Meander Medical Centre chooses AMiS-PRO:

future-ready, patient-centered care

At Meander Medical Centre in Amersfoort (The Netherlands) all nursing departments have welcomed the AMiS-PRO. What began as a replacement for aging computers on wheels quickly turned into a leap forward in clinical workflow, patient interaction, and digital medication safety.

> **"I CAN DO MY ADMIN WITHOUT TURNING AWAY FROM THE PATIENT. THAT CONTINUOUS CONTACT MATTERS."**

Long-term vision, smart investment
When the hospital's previous mobile units reached the end of their lifecycle, the decision was clear: upgrade, don't overhaul. After a compelling demonstration at Alphatron's HQ in Rotterdam, Meander saw the value in AMiS-PRO as a future-ready platform. ICT buyer Marcel Loomans explains, "Instead of reinvesting in outdated systems, we chose innovation that will last. The AMiS-PRO isn't just modern: it's designed to evolve with us."

A 10-year service contract was part of the package, covering maintenance, software updates, battery replacement, and guaranteed part availability, providing peace of mind and protecting Meander's investment.

Designed around the nurse and the patient
Senior nurses Jip Lubberink and Samira Yürümez played a key role in selecting and customizing the AMiS-PRO. What stood out? The tilting screen. "It sounds simple, but it changes everything," says Jip. "I can do my admin without turning away from the patient. That continuous contact matters." Samira adds, "It's also easier to navigate hospital corridors, and I can share images or data with patients on the spot."

The system even remembers their preferences. With myHeight, AMiS-PRO adjusts automatically to each nurse's ergonomic settings upon login, user-friendly, intuitive, and personal.

Custom-built for medication safety
As an integral part of the AMiS-PRO mobile care station, the medication solution at Meander Medical Centre is custom-built to meet the highest standards of safety and efficiency. Medication distribution is now safer, smarter, and easier. The pharmacy and nursing teams co-developed a tailored medication drawer system to fit the specific needs of each department, from orthopaedics to gastroenterology.

Access is tightly controlled. Nurses use a staff pass for secure login, and only authorized personnel can open medication drawers. "No more shared codes, no more confusion," Marcel says. "Now, every step is logged, and every drawer opens with a click."

The integrated AMiSconnect-MedSafe software ensures every dispensing action is recorded and aligned with the EHR. Even patient-specific drawer access is possible, adding an extra layer of safety for future implementation.

Scalable for the future
While Meander has opted for a modest initial configuration, the AMiS-PRO is built to grow. Add-ons like barcode scanners, or even real-time vital signs monitoring (ViTALS) are all within reach.

"It would make things even smoother and safer," says Jip. "It's good to know we can expand over time, depending on the hospital's direction."

Smarter Fleet Management
The hospital also deployed AMiSconnect Fleet Manager, giving ICT real-time oversight of all AMiS-PRO units. From battery status to fault detection, everything is visible remotely. "Before, we'd waste time just locating the carts. Now we manage everything proactively," says Marcel. "It saves time and ensures every unit stays in top condition."

With AMiS-PRO, Meander Medical Centre has not only upgraded its care stations—it has transformed how nurses work, patients interact, and medication is safely delivered. A smart investment today, with the flexibility to support tomorrow's care. ■

Article published in Medical Motion 27 (2020)

> **"NOW, EVERY STEP IS LOGGED, AND EVERY DRAWER OPENS WITH A CLICK."**

The Next Generation Hospital Nemocnica Bory in Bratislava, Slovakia, has fully implemented an advanced digital medication and nursing workflow. Following an extensive collaboration, the hospital has deployed AMiS-PRO for nursing and AMiS-X for doctors. In total, 54 AMiS-PRO and 31 AMiS-X units are in operation, alongside 8 dedicated transportation carts for secure medication transport to and from the central pharmacy.

Time-saving and efficient workflow

at Bory Hospital, Bratislava

Time-saving nursing workflow

At Bory Hospital, nursing efficiency has been significantly improved with the AMiS-PRO , equipped with the medication solution (MedSafe collective). This solution ensures accurate logging and monitoring of medication security. Each medical cart drawer configuration is customized to suit the needs of different wards, optimizing patient care and medication management. Furthermore, the integration of a vital signs monitor (Mindray VS) eliminates the need for multiple carts, streamlining bedside procedures. This improvement saves time and allows nurses to maintain a seamless workflow at the patient's bedside. Additional accessories such as glove holders and storage boxes are tailored to the hospital's specific needs, enhancing overall workflow efficiency.

From central pharmacy to patient's bedside

Bory Central Pharmacy employs a patient-specific blistering process, ensuring comprehensive medication management. To further optimize nurse workflow, the hospital extended the medication process directly to the patient's bedside through close cooperation between pharmacists and head nurses.

Medications are securely stored in patient-specific drawers and securely transported to the wards using AMiS Transportation carts. Nurses simply exchange medication bins once daily, reducing workload and enhancing workflow efficiency.

Key role of the implementation team

During the preparation phase, Bory Hospital collaborated closely with Alphatron Medical, fostering a strong partnership. Alphatron provided essential support in accurately configuring the systems to align with the hospital's specific needs. Together, they developed a clear overview of the necessary equipment and project goals. The Bory project team played a pivotal role in both supporting and implementing the initiative.

The involvement of key personnel was vital in achieving optimal results. Representatives from various critical departments—including the Director of Nursing, Head Pharmacist, Chief Information Officer, Logistics Manager, and Clinical IT Director—were actively engaged. Their expertise ensured the project was driven by insights from multiple relevant disciplines, leading to a well-rounded and effective implementation.

Seamless software implementation

Thanks to the joint efforts of the Bory and Alphatron teams, software implementation was completed swiftly. Technical requirements were delivered promptly after the project kick-off, enabling rapid deployment. Within two weeks, the integration and medication application were successfully installed across all wards, ensuring a smooth transition.

Training as the key to a successful launch

Comprehensive on-site training sessions equipped nursing staff with a clear understanding of the system's functionality, benefits, and best practices. Simultaneously, technical training sessions prepared the hospital's IT and Service teams to maintain and service the carts effectively, ensuring long-term operational efficiency. ■

Article previously published on amissolutions.com

"INVOLVING THE RIGHT PEOPLE FROM THE START ENSURES THE BEST AMIS-PRO SOLUTION FOR THE HOSPITAL!"

The last 50 meters to the patient's bed:

where technology increase medication safety

WITH A SINGLE CLICK, THE CORRESPONDING MEDICATION DRAWER UNLOCKS: ONLY THE RIGHT DRAWER, AT THE RIGHT TIME, FOR THE RIGHT PATIENT. EVERY ACTION IS LOGGED. EVERY STEP IS TRACEABLE.

Closing the loop on medication errors with a fully integrated bedside solution

In today's hospitals, the pressure on healthcare professionals is higher than ever. Short staffing, administrative overload, and rising regulatory demands all weigh heavily on daily operations. These challenges not only affect staff wellbeing but also increase the chance of critical mistakes. One area where this pressure becomes especially risky is medication administration. According to the World Health Organization, 1 in 100 patients is exposed to medication errors[1] 56.8%[2] of which occur during the final step: medication administration. In the last 50 meters from medication storage to patient's bedside, the risk of medication errors is great, that's why precision matters most.

So, how can hospitals increase medication safety, and improve efficiency, without adding more pressure on nurses?

The answer: a seamless closed loop medication flow

We've developed a future-proof solution: a unique closed loop medication flow from the pharmacy to the patient's bedside. SmartCart and the Omnicell Automated Dispensing Cabinet (ADC) are fully integrated and connected to the hospital's EHR. Together, they provide unmatched control, security, and efficiency. This approach not only reduces medication errors but also eliminates unnecessary waste and saves valuable time for healthcare professionals.

Here's how it works

Medications are dispensed from the ADC based on digital orders and placed into patient-specific medication drawers within the SmartCart. At the bedside, a nurse scans the patient's wristband, automatically prompting the EHR to open. With a single click, the corresponding medication drawer unlocks: only the right drawer, at the right time, for the right patient. Every action is logged. Every step is traceable.

Why this changes everything

- **Maximum safety**
  Only authorized personnel can access the medication stored in SmartCart. Medication drawers open exclusively through patient verification in the EHR, ensuring that staff only have access to the right medication at the right time.
- **End-to-end traceability**
  From pharmacy to bedside, every transaction is digitally recorded. This provides full transparency and supports compliance with medication safety regulations.
- **Real time, real savings**
  Nurses save up to 25 minutes per shift thanks to automation, while real-time inventory tracking minimizes waste and reduces costs.
- **Peace of mind**
  One digital workflow connecting hardware, software, and patient care: secure, streamlined, and ready for the future.

Not just smart care: better care

This isn't just about technology: it's about care. By integrating directly with the hospital's EHR, all access rights, patient data, and medication logs are centrally managed. Every action is documented and visible through dashboards, giving teams insights to improve continuously.

Most importantly, patients receive the correct medication, at the correct time, from an authorized nurse. That's not just smart care, it's better care. ■

[1] World Health Organization, 2017

[2] Keers, R. N., Williams, S. D., Cooke, J., & Ashcroft, D. M. (2013). *Causes of medication administration errors in hospitals: a systematic review of quantitative and qualitative evidence.* Drug Safety, 36(11), 1045–1067.

Driving digitalisation at the bedside

KAGes hospitals in Styria streamline care with AMiS-X

Photo credit © LKH Graz II.

A modern answer to a growing challenge

Since 1985, the Steiermärkische Krankenanstalten-gesellschaft m.b.H. (KAGes) has been managing the network of state hospitals in Styria, Austria. Today, it operates 20 hospital sites and three state nursing centres, supported by more than 19,000 employees. The organisation's mission is clear: to provide high-quality, patient-focused care across the entire region. Like many healthcare providers, KAGes faces rising patient numbers and a shortage of skilled staff. To maintain its standards of care, it actively seeks practical innovations that streamline workflows, freeing up more time for direct patient interaction.

“THE AMIS-X IS DESIGNED TO MEET THE NEEDS OF ALL DEPARTMENTS.”

Choosing the right partner

The introduction of an electronic fever chart (eFK) created an urgent need for modern, versatile ward trolleys: units that could support both medical and nursing staff, provide space for essential tools such as SpotCheck monitors, and offer powerful, reliable battery life.

Through an open, Europe-wide tender, KAGes searched for a framework agreement partner capable of delivering quality, flexibility, and long-term support. CANCOM Austria AG won the contract with the AMiS-X, meeting all technical and functional requirements while giving each hospital the flexibility to order exactly what it needs, when it needs it.

A solution tailored for every ward

The AMiS-X is designed to meet the needs of all departments, offering a complete set of functionalities as standard, including holders for disinfectant dispensers, disposable glove boxes, barcode scanners, dictation devices, and a dedicated mount for the SpotCheck monitor with keyboard and mouse. Each unit is fully height-adjustable for ergonomic use by staff of all sizes.

Thanks to the framework agreement, hospitals can further customise their AMiS-X with a wide range of accessories, ensuring a perfect fit for their specific workflows. During a dedicated product presentation, the KAGes Technology and IT Board thoroughly tested the AMiS-X, confirming its suitability for widespread rollout.

Implementation across the network

Between November 2023 and July 2025, hospitals without ward trolleys, such as the LKH Graz II, the Feldbach and Fürstenfeld sites of the LKH Oststeiermark and the LKH Rottenmann-Bad Aussee placed orders for around 240 AMiS-X. At the LKH Graz II, every department was involved in the process: nursing management, ward leads, physicians, technical operations and administration. Before full deployment, each ward received a AMiS-X for hands-on testing, leading to refinements such as folding side tables and dedicated scanner holders.

Benefits in practice

“The AMiS-X is an indispensable part of implementing our electronic fever chart,” says DI Renato Ternobetz, Team Leader of the biomedical engineering department at KAGes. “From spacious, ventilated PC compartments to VESA-mounted monitors, they meet our technical requirements perfectly. The collaboration with CANCOM Austria AG has been smooth from start to finish.”

Now used as mobile workstations during and after ward rounds, the AMiS-X enable seamless, paperless documentation and quick access to patient data. This has improved communication between professional groups, making processes faster and more transparent.

“These AMiS-X helps us bring digitalisation right to the patient’s bedside,” says HR Ing. Mag. Thomas Hofer, KAGes Director for Technology and IT. “Our cooperation with CANCOM is smooth and characterised by proactive, open communication.”

Looking ahead

With the addition of the new AMiS-X, all KAGes hospitals will be equipped with ward trolleys by early 2026. The framework agreement with CANCOM Austria AG runs until 2027, ensuring a continued supply of units and long-term support. ■

“THESE AMIS-X HELPS US BRING DIGITALISATION RIGHT TO THE PATIENT’S BEDSIDE.”

speed, quality, and safety

AZ Jan Palfijn Ghent takes a major step forward in

AZ JAN PALFIJN
GENT

"NURSES CAN NOW WORK MORE COMFORTABLY AND FASTER BECAUSE THEY NEED TO PERFORM FEWER ACTIONS"

At AZ Jan Palfijn Ghent (Belgium) improving the quality and efficiency of bedside care was more than just a goal: it was a necessity. As a regional hospital serving a wide and diverse patient population, the demands on their nursing teams continued to rise. Their existing tools were no longer fit for purpose. In response, the hospital undertook a phased implementation of AMiS-PRO, many of which were combined with integrated vital signs monitors. The results? A dramatic leap forward in speed, safety, and user satisfaction.

Streamline the workflow

"Our care carts were badly in need of replacement," recalls Edwin Moerenhout, Director of Patient Care. The old carts were oversized, static, and equipped with non-medical laptops. Nurses had to carry separate instruments to each bedside to manually collect vital signs like temperature, blood pressure, heart rate, respiratory rate, and oxygen saturation. These radings were first noted on paper and later added to the Electronic Health Record (EHR). "That was inefficient and prone to error," Edwin explains. The hospital needed a compact, mobile care station that could streamline the entire workflow, measurement, documentation, and EHR integration, all in one go.

All-in-one solution

AZ Jan Palfijn launched a structured search for a new solution. "Our biggest wish was to combine everything into one integrated system with a direct connection to the EHR, right at the patient's bedside," says Elias Driessen, Head of the Biomedical Engineering Department. After thorough market comparison and usability testing, the AMiS-PRO from Alphatron Medical was selected. "The AMiS scored above average in terms of technology, battery life, and durability," says Edwin. But beyond specifications, the opinion of nurses played a decisive role. "We had our nursing staff test the stations extensively for ergonomics and ease of use. Their feedback was crucial."

The hospital also selected Mindray as its vital signs monitoring system, which Alphatron integrated onto the AMiS. "The ability to bring everything right up to the patient's bed was a huge advantage," Elias notes. "And with the integrated monitor, vital sign measurements became much faster and more efficient." Integration with the EHR followed in stages, with Alphatron supporting every step.

Upgrading for the future

AZ Jan Palfijn is pleased with the fully integrated solution: it delivers exactly the benefits they hoped for in Ghent. "Nurses can now work more comfortably and faster because they need to perform fewer actions," says Edwin. "Manual entry is a thing of the past, which significantly reduces the chance of errors."

The hospital continues to invest in improving speed, quality, and safety. In times of increasing staff shortages and rising care demands, this upgrade is both timely and strategic. "The combination of the AMiS care stations and the integrated vital signs monitor sets us up well for the long term," Edwin concludes. ■

"THE ABILITY TO BRING EVERYTHING RIGHT UP TO THE PATIENT'S BED WAS A HUGE ADVANTAGE."

Article published in Medical Motion 32 (2024)

Enhancing medication safety through a fully digital workflow

at Ingolstadt Hospital

A future-ready step toward closed loop medication
Ingolstadt Hospital set out to significantly strengthen drug therapy safety by digitising every critical step of the medication process. Supported by the Hospital Future Act (KHZG), the hospital implemented a scan-supported medication workflow designed to reduce errors, lighten nursing workload, and bring the organisation closer to a true closed loop medication system, even without a unit-dose system.

A complex medication process, now supported end-to-end

The hospital's motivation was clear. As stated in the report: "Meeting the complexity of the entire medication process, from prescription to dispensing, is a challenge for everyone involved, from doctors and nursing staff to hospital pharmacy staff."

This complexity, traditionally dependent on manual checks and documentation, demanded a safer and more efficient approach. Ingolstadt Hospital answered that need by reinforcing the electronic prescription workflow already in place with a new layer of QR- and barcode-supported verification.

Building on a strong digital foundation

Before the project launched, Ingolstadt Hospital already used an exclusively electronic prescription system with automatic checks for allergies, interactions, and contraindications. Clinical pharmacists played a central role by validating prescriptions and training staff.
This established digital ecosystem made it possible for the team to focus on enhancing safety at the preparation, verification, dispensing, and administration stages, linking each one through a guided scanning process.

A smarter, safer workflow for nurses

Nursing staff traditionally carry the heaviest workload in the medication process, particularly with regard to medication preparation and documentation.
The new workflow significantly reduces this burden:

- **Patient identity verification** via barcode scanning
- **Digital dual-check of medication** via QR codes
- **Bedside verification** ensuring the right patient receives the right medication
- **Automatic documentation** for every step

If discrepancies occur, the system intervenes immediately. As the hospital highlights: "If a scanned medication is not prescribed in the patient's medication plan, not only is a warning displayed in a pop-up, but the documentation itself is rejected by the system, forcing the person dispensing the medication to check again."

This prevents errors before they reach the patient: an essential safety layer in high-pressure clinical environments.

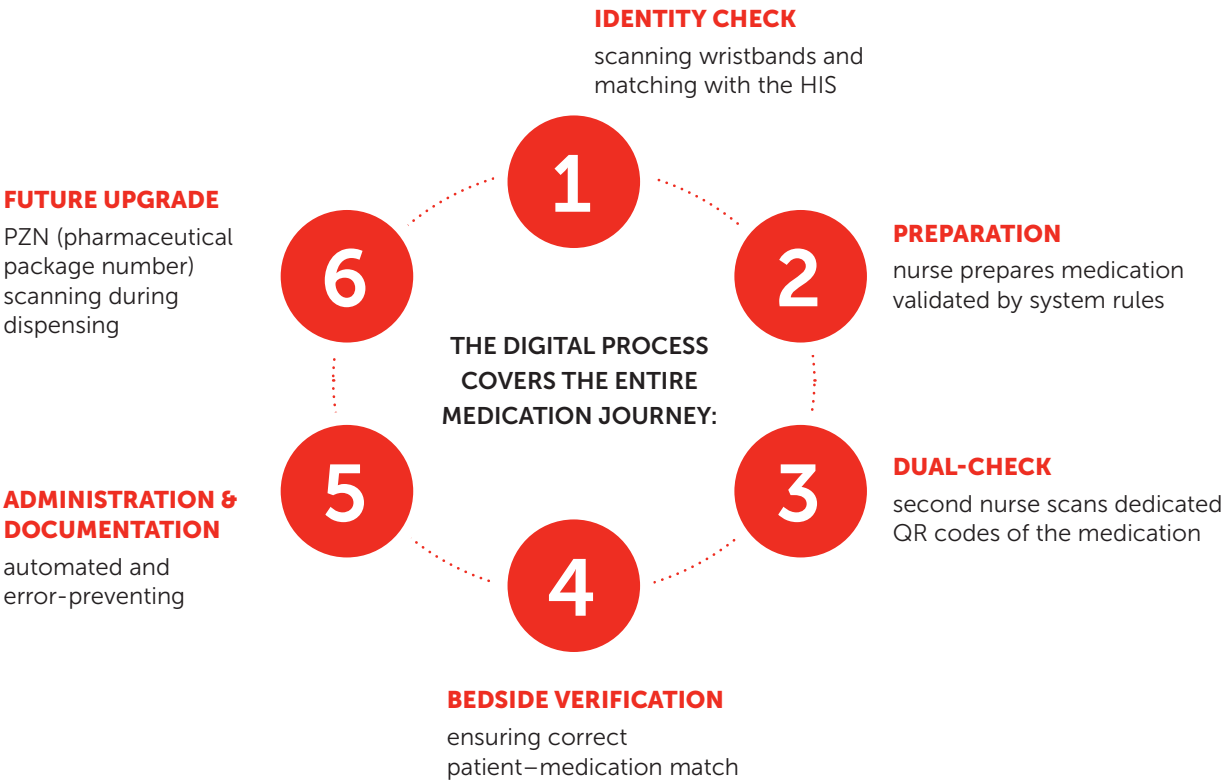
Hardware and software reinforcing each other

To support the redesigned workflow, Ingolstadt Hospital introduced mobile medication trolleys equipped with digital lock systems, touchscreens, and integrated PCs. Only authorised staff can open patient-specific drawers, adding a new level of security.

The hospital underscores the importance of this combined digital and physical update: "The process adjustments made were supplemented by appropriate hardware and software support. This shows that they are an equally important component in the establishment of closed loop medication as in the patient-specific drug logistics desired and described by professional associations and literature. The ultimate goal is a unit dose system."

The trolleys also serve as mobile, height-adjustable workstations, supporting documentation beyond medication rounds and increasing overall workflow ergonomics.

Full traceability through a guided scan workflow



EVERY STEP IS ANCHORED IN THE PATIENT CONTEXT, ENSURING CONSISTENCY AND SAFETY.

Pilot testing, refinement, and hospital-wide rollout

Pilot wards tested the workflow, especially those with frequent medication changes or non-standard schedules. Their input shaped fine-tuned adjustments before the full hospital rollout. Staff training for nurses, physicians, and the pharmacy ensured strong adoption.

A final evaluation, planned after full deployment, will assess ease of use, workload reduction, and safety improvements across all wards.

A major leap toward a closed-loop future

Even without a unit-dose system or ward-based pharmacists, Ingolstadt Hospital has achieved meaningful progress toward a closed-loop medication process. Through smart digitalisation, interprofessional collaboration, and thoughtful hardware integration, the hospital now delivers safer, more consistent, and more efficient medication management for nurses, pharmacy staff, and, most importantly, patients.

This transformation shows that safer medication processes are not only achievable: they're scalable, practical, and ready for everyday clinical reality.

Wilfried Geerdink, head of Alphatron Medical Germany mentioned: "Klinikum Ingolstadt is using the Alphatron AMiS X with one drawer, based on the Collective Lock process. The drawer can only be opened from within the patient file and contains patient-specific dispensers."

Region Syddanmark
OUH
Odense
Universitetshospital

10-Year exclusive framework agreement for AMiS in South Denmark!

Odense University Hospital has chosen AMiS as its solution! A comprehensive 10-year framework agreement has been awarded to supply AMiS medication carts to hospitals in the South Denmark Region.

This contract follows an extensive procurement process, in which multiple solutions were evaluated.

After thorough testing across several hospital wards, AMiS PRO with integrated medication solution was selected for implementation. The solution ensures that the patient drawers opens directly from the EHR, streamlining the medication workflow and enhancing medication safety. The AMiS-PRO is designed to optimize medication workflows through smart storage, efficient logistics, and seamless software integration.

Odense University Hospital, the largest in the region, has received its first deliveries of AMiS-PRO. The solution is in use across most hospital wards, supporting safer, more efficient and streamlined medication management. ■

ALPHATRON Medical

+31 88 55 06 200
info@alphatronmedical.com

Creating flow in healthcare