



Dedalus

**DIGITAL EXCELLENCE IN PAEDIATRIC
MEDICINE**

**THE CHILDREN'S
HOSPITAL
AUF DER BULT
AND ORBIS**

A PIONEER IN DIGITISATION

The Children's and Youth Hospital Auf der Bult in Hannover, Germany, is one of the few specialised children's hospitals in the country. With over two decades of experience using the ORBIS Hospital Information System (HIS), the institution has achieved an impressive level of digitisation. The clinic relies on comprehensive digital documentation, seamless system integration, and continuous adaptations to its specific requirements—in close collaboration with Dedalus.

"We are certainly one of the most digitally advanced children's hospitals in Germany," says Karen Krebs, the hospital's HIS coordinator. ***"Thanks to ORBIS as our central system and our long-standing collaboration with Dedalus, we have been able to optimise many processes digitally. Today, other hospitals occasionally call us for advice."***





AN INTEGRATED SYSTEM FOR COMPLEX REQUIREMENTS

At the end of the 1990s, the Children's Hospital Hannover faced a crucial challenge: the increasing complexity of medical care and billing required a powerful and integrated information system. The hospital management wanted a solution that would not only simplify daily clinical operations but also be sustainable in the long term.

The search for the right system took the hospital on a journey through various software solutions and best practices from other institutions.

"We wanted a system that offered everything from a single source."

After intensive evaluation, the hospital chose ORBIS in 1999. The integration of all modules into a single system was particularly convincing.

"We knew that the fewer interfaces we had, the fewer sources of errors there would be, and the more stable daily hospital operations would be," emphasises Krebs. .

"We visited multiple hospitals at the time, looked at different systems, and kept encountering the same issues: too many interfaces, too many isolated solutions," recalls Krebs.

ORBIS AS A DIGITAL FOUNDATION - A HIS THAT GROWS

Over more than 20 years of partnership, ORBIS has been continuously expanded. Today, the installation includes:

- Patient Chart
- Unit View
- Nursing Documentation
- Nursing Workflow Support
- Anaesthesia incl. MEGS
- Medical Device Integration
- Medication Management
- Medical Report Writing
- Speech-to-Text for Dictation
- Digital Patient Portal
- OR Planning and Documentation
- Emergency Department Cockpit
- and much more

“We now have around 80 ORBIS modules in use,” explains Krebs. ***“Our focus is always on integration: wherever possible, we incorporate new processes directly into the HIS.”***



SPECIFIC REQUIREMENTS IN PAEDIATRICS



Paediatric medicine places particularly high demands on a HIS, as success or failure in treatment often depends on precise details: medications must be administered in microgram doses, and growth progress must be meticulously documented using percentile curves to detect deviations early. The integration of specialised medical devices is also crucial—only when all relevant data converge in ORBIS—can a seamless flow of information ensure efficient and safe care. This comprehensive integration is the key to optimised treatment, from medication management to long-term monitoring.

To meet these integration requirements, the hospital uses ORBIS add-ons and custom adaptations. Examples include digital percentile documentation, which integrates seamlessly into the electronic patient record, neonatal-specific ventilation control, and finely tuned medication dosing. Here, ORBIS demonstrates its strength as a flexible and adaptable system. Krebs summarizes:

“We have made many specific adjustments over the years and utilised add-ons to tailor our system to the unique needs of a children’s hospital. ORBIS has always given us the flexibility to develop solutions with Dedalus and integrate them into our system.”





THE BENEFITS FOR THE CHILDREN'S HOSPITAL

Thanks to the deep integration and flexible customisation options of ORBIS, the Children's Hospital Hannover has achieved significant progress in key areas:

- **Structured and Specialised Documentation:** The digital fever curve, customised medication plans, and percentile documentation enable more precise patient care, particularly in neonatology.
- **Seamless Communication Between Departments:** The close integration of various ORBIS modules ensures that all relevant data is immediately available—from the emergency department to the intensive care unit.
- **Optimised Processes and Reduction of Interfaces:** The high level of integration allows for efficient work on a unified data basis and reduces errors caused by multiple systems.
- **Improved Patient Care with Real-Time Data:** Physicians and nursing staff always have access to current patient data, enabling informed decision-making.

CONCLUSION: ORBIS AS A KEY TO DIGITAL TRANSFORMATION

Thanks to its long-standing collaboration with Dedalus, the Children's Hospital Hannover has built a digital infrastructure that serves as a benchmark. The full integration of ORBIS ensures efficient workflows, a nearly paperless environment, and improved patient care.

"Our high level of digitisation is a major advantage in our daily work. We are proud of it."



ABOUT THE HOSPITAL

The AUF DER BULT Children's and Youth Hospital in Hanover is a specialist hospital with 295 beds that treats over 50,000 young patients each year. As a teaching hospital of the Hannover Medical School, it offers a wide range of medical services. Specialities include the largest diabetes centre for children and adolescents in Germany, a centre for children with severe burns and a day clinic for chronically ill children and adolescents.



Dedalus

Life flows through our software

ABOUT DEDALUS

Dedalus is the leading healthcare and diagnostic software provider in Europe and one of the largest in the world. With its innovative framework of comprehensive and process-oriented solutions, Dedalus enables a revolutionary digital transformation of country-wide Healthcare Systems fully supporting the patient digital journey.

Dedalus serves more than 6,700 private and public hospitals across 40 countries, through more than 7,700 highly specialised resources, of which 2,700 are dedicated to R&D activities. We aim to help caregivers and healthcare professionals to deliver better care to the communities they serve and for this reason we are very proud of doing a special job, working with healthcare organisations to improve healthcare outcomes for patients.

www.dedalus.com