

Smart Hospitals

Background

CompuGroup Medical was founded in 1987 by Frank Gotthardt and has always pursued the vision of a uniformly digitalised healthcare system based on the development of innovative technologies. The overarching goal is to improve the flow of medical information through advanced software applications and to optimise administrative processes as well as medical diagnosis, treatment and therapy measures for patients by making the data available to all authorised persons.

The digital transformation of hospitals and clinics

Looking at the German health care system, hospitals have to work profit-oriented. However, as there is a severe shortage of skilled workers, especially in the health sector, additional savings often have a detrimental effect on patients. Doctors and nurses have to function and rush from treatment to treatment, which means that humanity suffers due to time pressure and the patient feels treated as an object. Smart hospitals are now supposed to be a labour-saving solution, freeing up time for medical professionals to invest in caring interpersonal care. To achieve this, the structures established in hospitals and clinics must be broken through and rethought in order to focus on the patients and their relatives. Because it turns out that the more digital and technical a medical facility is, the more human the interaction and care in it.

Smart hospitals take a holistic approach, involving all players in the healthcare system. Smart hospitals can also be seen as information-open control platforms that all authorised parties can access in order to view data. The authorised parties are pharmacies, nursing services, general practitioners and rehabilitation facilities. The advantage is that the patient history does not have to be reprocessed again and again, but the digital data is easily accessible for medical professionals. Digitalisation helps to evaluate and make available the existing data in the best possible way and in the interest of the patients.

In order to promote a structured exchange of data, smart hospitals are characterised by the integration and networking of various technologies. This can involve the use of medical robotics systems, remote patient monitoring, the use and evaluation of data from the electronic patient file or digitally supported telemedical applications. Of course, algorithms and AI-based systems or the integration of additive manufacturing processes such as 3D printers for implants or instruments are not to be missed.

One company that deals with solutions for smart hospitals is CompuGroup Medical (CGM). Last year, it received approval for its ePA record system and convinces with its increased focus on the



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security aspect. The electronic patient record has been available since 2020 and must be offered to insureds of statutory health insurance funds, while the offer is mandatory for private health insurers. The front end enables insured persons to access this file. The CompuGroup Medical file system not only successfully passed the strict security test by independent experts, but also the CC evaluation in the EAL2 test depth. Through this certificate, the front end of the insured person's CGM ePA record system is granted an extra high security level for software applications. As the data stored on the ePA is highly sensitive patient data, the software application wins the trust and security of users, making it the only application to have the comprehensive CC EAL2 certification.

The goal of digital transformation in smart hospitals is to introduce a new structure into hospital operations that forms the basis for patient-centred and caring treatment. Through the integration of smart technological systems in everyday hospital life, many routine activities and in part also documentary activities can be taken over by machines through AI and algorithms, allowing hospital staff to focus on their core competencies and devote more time to them.

COMPANY	LOCATION	WEBSITE	FIELD OF EXPERTISE
CompuGroup Medical Deutschland AG	Germany	https://www.cgm.com/ deu_de	electronic patient record
Navify / Roche Molecular Systems Inc	USA (CA)	https://www.navify.com/	Digital tumour board solutions
Xitaso GmbH	Germany	https://planfox.de/	Digital patient portal
Nvidida Corp	USA (CA)	https://www.nvidia.com/ en-us/clara/smart-hospi- tals/	Al solutions for smart hospitals
Polavis Gmbh	Germany	https://www.polavis.de/	Digital patient management
Pflegeplatzmanager GmbH	Germany	https://www.pflegeplatz- manager.de/	Digital platform solutions
Care-Bridge GmbH	Germany	https://care-bridge.de/	Digital discharge management
Avisa Smart Hospital	India	https://www.smarthospi- tals.org/	Digital platform solutions

Are you interested in the complex innovation field of smart hospitals? We have compiled an overview of interesting companies in this field. We invite you to see for yourself!





In our research, we also came across some personalities who are involved in driving Smart hospitals forward and thus actively optimising the healthcare system with forward-looking solutions and approaches! Let yourself be inspired by years of experience and in-depth industry knowledge!

INDUSTRY EXPERT	JOB POSITION	FIELD OF EXPERTISE
Professor Dr. Jochen Alfred Werner	Medical Director of the University Hospital Essen	Smart Hospitals
Dr.Aswini Ashokan Naidu	Director at IC1101 Health- care PVT LTD- Avisa smart hospitals	Smart Hospitals
Dr. Thomas Geislinger	CEO at PLANFOX	Smart Hospitals

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