

GCRI INTERVIEW

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What are the greatest opportunities and challenges in the medical technology field in Germany?

With the wide availability of intelligent information technologies and increased knowledge of the origin of diseases down to the human genetic code, there are numerous opportunities to create innovative medical technologies by combining established medical technologies with new technologies. This will result in measurable benefits not only for patients, but also for health care professionals.

The main challenges are to identify, select, and finance the development of the innovations that have the potential to create measurable benefits while the medical technology can still be financed by the health care system.

What will be the most significant changes in Germany's medical technology innovation system in the next decade?

In recent years, the so-called "Nutzenbewertung" (effectiveness measurement) was introduced. So far, this has been the most significant change that impacts the creation of innovation capabilities in Germany and other countries / regions.

There are now institutions that assess new medical devices and drugs regarding their cost-benefit ratio. This will probably create hurdles to innovation, especially due to high costs of clinical research and because innovations in the field of medical devices often develop gradually. It could also affect the availability of lifesaving medical technologies, such as drug-eluting implants and antimicrobial catheters, specifically designed to reduce life-threatening complications.

In your opinion, which developments in medical technology will create lead markets in the next five to ten years?

In the future, innovation will occur more frequently across different branches like pharma and IT. But also individualized medicine will play a major role in medical innovation like the reproduction of the body's own cartilage tissue. Here, the body's cells are cultured outside of the body and re-implanted, so that the damaged cartilage tissue can regenerate.

How would you like to see clinical translation expedited?

This is an important question which gives rise to some criticism. Although information and news are spread instantly throughout the world, today it usually takes 10-15 years before a medical innovation is established as a standard therapy. This is due to many factors, such as the stringent regulations for registration of medical and pharmaceutical products, the high cost for research and development and for the product launch. Regulatory processes should be more efficient and processes to make innovative products and therapies available for patients should be facilitated. In Germany, e.g. it takes too long until healthcare insurance companies include innovative therapies in their portfolios. Increased communication and closer collaboration between clinical research and medical centers are needed to accelerate processes.

Could you please provide us with one or two examples of innovations that are improving the quality of patient care.

The safety of patients as well as of medical and nursing staff has been a focus of innovation in recent years. For example, software solutions like B. Braun Space OneView help streamline infusion management processes within the hospital. The software increases efficiency due to a centralized IV therapy overview. It also reduces alarm stress for both nursing staff and patients and increases medication safety. Another example is the use of smart phones in blood glucose monitoring or the addition of nerve extensions into prostheses for better control. The possibilities to improve the quality of patient care are unlimited.