

GCRI INTERVIEW

Prof. Dr. Wolfgang Renz

**Corporate Vice President, Business Model & Healthcare Innovation,
Boehringer Ingelheim**

What are the greatest opportunities and challenges in e-health in Germany and the U.S.?

The greatest opportunity for e-health in Germany and the U.S. is standardization of e-health. Unfortunately, this also represents a great challenge. The problem with e-health in both countries is that there are different standards and ways of executing models. While the current interest in e-health has promoted extraordinary innovations, and produced countless e-health models, none seem to be diffusing quickly. In other words, there are so many ideas, but none appear to be standing out and taking hold.

In your opinion, which developments in e-health will create lead markets in the next five to ten years?

We have reached a unique point in history in terms of e-health today. We are seeing mobile health and social media converge in ways that no one could have imagined even 10 years ago. These developments will create new markets and new technologies over the next 5-10 years, particularly in the areas of older adult care, electronic data sharing, and clinical decision making.

Health expenditures totaled 287.3 billion euro in Germany and 2.6 trillion dollar in the U.S. in 2010. How can telehealth solutions contribute to cost reduction for patients and payers?

The key to success of telehealth solutions over the next 5 years will lie in how well those solutions can remove costs within the healthcare system. One perfect example of this is the technology called Cardionet in the U.S. This company reduced the cost of hospital stays for patients with atrial fibrillation – the primary risk factor for stroke - from nearly \$10,000 USD to approximately \$500 through remote cardiac telemetry. Telehealth solutions such as this will see a spectacular adoption over the next 5 years. It is these technologies that will ultimately save the healthcare systems billions of Euro and Dollars, while maintaining the highest levels of quality.

How secure is e-health information transfer? What are the major challenges e-health providers need to address with respect to data privacy?

Most healthcare data breaches are not caused by technical issues, but by human error. The challenges that we need to meet within e-health data security have as much to do with improving human processes as they have to do with improving technical infrastructure.

Since the U.S. Department of Justice began tracking patient data breaches in 2009, there have been hundreds of reported infractions. And these are only for data breaches concerning more than 500 patients! The challenges that e-health providers face with respect to data privacy include administrative, technical, and legal modifications to the current healthcare data value chain. Although these challenges are large, they are not insurmountable and are in fact becoming more manageable as governments become more transparent about how these data breaches are occurring.

In your opinion, to what extent will e-health solutions become standard for health education, prevention, rehabilitation, and post treatment?

It is my opinion that e-health solutions will be mandated over the next 10 years by the U.S. government for treatment and prevention. Health education will become an area that people subscribe to more enthusiastically as public health issues such as heart disease, diabetes, obesity, nutrition, and physical activity, become more pervasive among society at large.

When we look at the potential of e-health solutions to improve health prevention, we are very excited about the use of personal activity monitoring as a way for people to better understand their daily habits in much the same way as people use a scale to understand their weight. In the near future, rather than realizing that you have not exercised in a week and your weight has gone up, an activity monitor that you wear on your wrist will remind you that you need to exercise – reducing your chances of gaining weight in the first place.