Summary

Executive summary

The market for home health monitoring of welfare diseases was worth approximately US$ 11 billion in 2008, and is growing with about 10 percent annually. Among the most common conditions to monitor at home are cardiovascular irregularities, respiratory problems and high levels of metabolic products in the blood. Diabetes testing accounts for the vast majority of the market value. In many cases the monitoring is related to chronic, often welfare-related, conditions. Wireless technologies have only just begun to penetrate the market but have a huge potential. Berg Insight estimates that 300 million people in the EU and the US suffer from one or several diseases where home monitoring can become a treatment option. Among those, about 25 percent would benefit from existing wireless home monitoring solutions available and another 50 percent who would benefit from handset integration of existing medical devices. Additionally, there are those monitoring their personal health without a strict medical need and those monitoring their medication intake.

The adoption of out-of-hospital wireless monitoring in healthcare is driven by a wide range of incentives, related to everything from demographics and technology development to new advancements in medical treatment. There are however also challenges such as the financing of wireless solutions by what is at large an underfunded healthcare sector. In order to receive reimbursement, suppliers of medical products not only have to prove their worth in a clinical perspective, but also in a health economical one. With rising healthcare costs there is an increasing focus on early diagnosis and home treatment – potentially enabled by new technology. There are several potential catalysts that could speed up the adoption of cellular communication for healthcare monitoring purposes. These include increasing monitoring during clinical trials, insurance company requirements and growing popularity for non-prescribed medical monitoring. When it comes to consumer-oriented propositions it is vital that they in an easy way offer integration of personal medical devices and popular handsets.
mHealth has already attracted the interest of many of the leading players in the telecom and

IT industries. Business opportunities exist related to both offering home medical monitoring services directly to patients or caregivers and the surrounding infrastructure of devices, networks and data centres. Currently, the wireless medical monitoring services generate only neglectable revenue, but the field shows great potential. The volume of traffic related to medical monitors will increase sharply in the next few years, as new web based services are being established. Also, in the last year, health related applications, for smartphones have become a factor in marketing, and certain services actually generate some direct revenue. This is especially true with Apple’s iPhone, which has provided a burst in smartphone medical apps. Apple and other companies are also actively working to make health monitoring companies provide smartphone integration. The telecom operator community is more cautious in its attitude to wireless home medical monitoring and existing solutions still tend to rely on fixed line networks. Initiatives such as Verizon Wireless' partnership with LifeWatch may however signify a change in the market. Another interesting group to watch are IT companies such as Google and Microsoft who are positioning themselves in the health and medical data space.

Berg Insight is convinced that wireless monitoring in home healthcare represents an important and compelling business opportunity for the mobile industry. Presently, the market is in an early phase and in need of coordinated efforts to take off. Even if the situation is starting to change, there is currently a wide gap in the adoption of new technology in the healthcare sector, compared to other industries. When it comes to communication technologies, healthcare applications are sometimes several generations behind the latest advances in telecom, but again, the situation is now starting to change. Mobile communication is only now being adopted, while the number of mobile subscribers worldwide is exceeding 4 billion. In order to pave the way for a wider use of wireless solutions in healthcare, the mobile industry will need to explain that they fulfil all requirements on safety, data security and reliability in the healthcare sector while at the same time delivering better performance at lower cost compared to legacy systems. Mobile industry players must reach out to medical device manufacturers and caregivers to present solutions that allow them to take full advantage of the latest communication technology. They will also have to offer interfaces, making the technology accessible and the data interpretable.