Summary

Executive summary

mHealth can revolutionize how healthcare services are delivered, leading to better outcomes, decreased costs and improved sustainability of the healthcare system. The market for mHealth solutions is still in an early stage, but on the brink of entering a strong growth phase that will last for many years to come. At the end of 2013, there were 3.0 million patients using connected home medical monitoring devices worldwide. This figure comprises all patients that were remotely monitored by a professional caregiver. Patients that use connected medical devices for various forms of personal health tracking are not included in this figure. Berg Insight estimates that the number of patients using connected home medical monitoring devices will grow at a compound annual growth rate (CAGR) of 44.4 percent to reach 19.1 million by 2018. Cellular connectivity has already replaced PSTN and LAN as the de-facto standard communication technology for most types of connected home medical monitoring devices and will account for 14.1 million connections in 2018. Using patients' own mobile devices as health hubs has thus far not been a viable option for remote patient monitoring, but will emerge as the favoured alternative for some groups of patients in the long term.

Berg Insight estimates that revenues for remote patient monitoring (RPM) solutions reached € 4.3 billion in 2013, including revenues from medical monitoring devices, mHealth connectivity solutions, care delivery platforms and monitoring services. RPM revenues are expected to grow at a CAGR of 35.0 percent between 2013 and 2018, reaching € 19.4 billion at the end of the forecast period. Connected medical devices accounted for 76.7 percent of total RPM revenues in 2013. However, revenues for mHealth connectivity solutions, care delivery platforms and monitoring services are growing at a faster rate and will account for 40.0 percent of total revenues in 2018, up from just 23.3 percent in 2013.

There is a strong trend towards incorporating more connectivity in medical devices in order to enable new services and value propositions. Implantable cardiac rhythm management (CRM) device vendors such as Medtronic, Biotronik and St Jude Medical have marketed connected CRM solutions for years. Today, CRM is by far the largest segment, representing 65 percent

of all remotely monitored patients. Sleep therapy has emerged as the second largest market segment, accounting for 18 percent of all connections in 2013. Furthermore, connectivity is gaining momentum in several other device categories such as glucose monitoring and air flow monitoring, as well as enabling the emergence of new categories such as telehealth hubs and medication compliance monitoring solutions. Examples of companies that have launched connected solutions in these market segments include ResMed, Philips Respironics, Fisher & Paykel Healthcare, Propeller Health, MIR, iSonea, Telcare, J&J, Honewell, Bosch, Tunstall, Alere, Evondos and InRange Systems. Pharmaceutical companies will also be active in this space in the future.

Care delivery platforms and mHealth connectivity solutions are two of the most rapidly developing parts of the mHealth value chain. Care delivery platforms are software solutions that enable the remote delivery of healthcare services and allow care efforts to be coordinated between patients, various professional caregivers and other stakeholders such as the patient's family. Care delivery platforms will be instrumental for engaging patients in their own care and delivering remote monitoring services to a large number of people in a cost efficient way. There are various types of care delivery platforms available on the market. General-purpose platforms are provided by companies such as BePatient, Exco InTouch, Get Real Health, HealthyCircles, Medixine and Verizon. Similarly, solutions specific to one therapeutic area are provided by companies such as Scottcare, Voluntis and Welldoc. mHealth connectivity solutions include products and services that are used for collecting data from medical monitoring devices, transmitting this data to caregivers and enabling the data to be used by care delivery platforms. Examples include the 2net platform from Qualcomm Life, HealthGO from eDevice, Connected Health Centre from Orange and HealthKit from Apple.

The adoption of remote patient monitoring solutions is driven by a wide range of incentives, related to everything from demographics and technology development to new advancements in medical treatment. However, there are a number of barriers, including resistance to change among healthcare organizations and clinicians, misaligned incentive structures and the financing of wireless solutions by what is at large an underfunded healthcare sector. Several catalysts are nevertheless speeding up the rate of adoption – in particular incentives from payers and insurance companies, national health systems that support remote monitoring and a shift to performance-based payment models.