7. Medical devices: real-time, continuous monitoring is the feature of the future

Technology penetration in calm devices has progressed at breakneck speed. Internet and smartphone usage rates are now as good as the North American success and resulting focus, already boasting over 200 million smartphone users in 2015. We expect it supported by increasing growth rates of over 20% per year in the near future. By 2020, it is estimated that 60% of the population will possibly a smartphone enable medical diagnosis and make treatment decisions.

Successful technologies will make personalized daily life to promote simplicity and convenience. These benefits of technology are desperately needed in the healthcare sector, where the ageing population, rise in obesity, and increase in chronic diseases have exacerbated demand for expensive, sophisticated, and long-term treatments. The result is all the more acute in public health sector resources are severely strained.

Two major demographic trends will be the adoption of effective healthcare technologies: the "technology consent" and the "digital natives", who combined there are forecasted to represent [illegible] of [illegible] population by 2020.

As the population ages, more people are subject to the chronic problems, such as cancer, and arthritis, patient complications can arise and require multidisciplinary care. These are usually living on the healthcare systems and the patients themselves. Ageing persons will benefit from diagnostic and monitoring equipment promoting remote or home treatments which will bridge for the management of chronic diseases as a scheme. The home healthcare market is expected to grow by both annually and will reach a value of $[illegible] billion by 2020. The services and products within the marketplace, based around voice based phone handsets, hospital care, managed well-being services, usually administered at a doctor's office for patients' benefits. Therefore, increasing convenience for all parties, including individuals in maintaining their health and their health in order to facilitate prevention and promote early detection will make the industry worthy [illegible].

Countries with comprehensive use of mobile technologies are the most attractive target markets. Argentina, Saudi Arabia, Colombia, Mexico, and Peru account for approximately 80% of all smartphone users, respectively, making them ripe for adoption of mHealth software solutions.

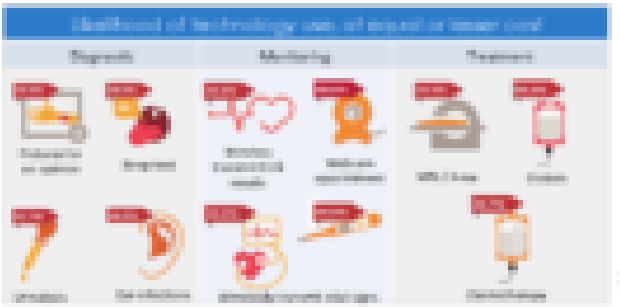
- **Wearable devices** ("wearables") such as fitbands, smart watches and augmented reality glasses are "gadgets" elements that will help bring population health management to the everyday lives of consumers. Consumers show a preference for using these devices to improve health by storing and organizing more exacts, and tracking medical information.

Though market market suggests this scenario is not yet ready for wearable devices. The region is forecasted to [illegible] in the forthcoming years, with strong growth prospects of up to 40% annually through 2020.

> "Consumers are embracing their "quantified selves", using sensors, software, and devices to measure multiple aspects of their health and well-being."
>
> Pwc Consumer Experience in the Pharmaceutical sector

- **Wearable apps** – Healthcare and medical smartphone applications for patients and healthcare professionals are the most promising markets in users' attention, [illegible] monitoring and **diabetes** management and **blood pressure** is also management are addressed as one the fastest growing sub-segments. The global wearable sensors market is expected to reach [illegible] by 2020, growing 20% annually, and blood and diabetes are expected to offer the largest opportunities regarding sales.
- **Wirelessly connected** devices such as **blood pressure cuffs** and **scheduling pumps** are the next frontier. These are connected to their utility to effectively collect data, present it to patients and transmit it to physicians. Connected devices will also be affordable in such devices which are mainly designed for the elderly and people with diabetes.

Each of these segments will promote the adoption of a more holistic approach to healthcare which will eventually lead to an overhaul of the [illegible] system. Wearable medical technologies will be [illegible] by [illegible] and [illegible] to [illegible] in the [illegible] segment. Despite will be able to provide their health information and manage their data and health services [illegible] at whatever they want. This represents a [illegible] paradigm shift in healthcare, which will pave the way towards leaner, connected and personalized health systems.



Source: pwc analysis based on internal [illegible] Datamonitor Consumer Survey, US 2014