



Healthcare Market Updates



TMX	15
CHK	
AAPL	+2.35
PRTG	-0.14
AMZN	-0.73
TSLA	+1.08
AVGO	-0.87
SIRI	-0.65

Weekly Newsletter
Issue 10
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









Wearables

Fitbit Shows Promise in Tracking Performance, Predicting Cancer Outcomes (1/2) – July 11, 2018

Applicable Product Categories:

Wearables

 Technologies	Wearable (Device + App)	 Therapeutic Areas	Cancer and other lifestyle diseases
 Applications	Remote Patient Monitoring	 Geographic Focus	US / Global
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence / Research
 Companies	Fitbit	 Others	NA

ANALYST TAKE:

- **Synopsis:** In a new study, researchers from Cedars-Sinai Medical Center and Johns Hopkins University found that a Fitbit device successfully gathered real-time, objective data on patients with cancer, helping clinicians predict outcomes.
- **Industry Challenge:** In the current care settings patients spend the majority of their time outside of the clinic, self-report to providers, and undergo dynamic changes throughout their treatment experience. Advent of wearable-based remote monitoring solutions could help increase care coordination and treatment adherence with real-time and objective activity data, allowing for a more accurate assessment of patient performance status and physical function, while reducing the subjectivity and bias associated with current assessments.

Fitbit Shows Promise in Tracking Performance, Predicting Cancer Outcomes (2/2) – July 11, 2018









- **Value Proposition:** The study, published last on July 5, 2018, in Nature's partner journal Digital Medicine, examined 37 patients with advanced cancer, most of whom had pancreatic cancer. Despite larger generalizations due to the nature of the participants and the small sample size, the study suggested that the kinds of physical activity measured by a Fitbit Charge HR could provide insights into the state of a patient with advanced cancer and could help to predict hospitalization risks. While researchers stress the data is not yet definitive, patients that took more than 1,000 steps per day, for instance, were more likely to have increased survival rates and less likely to experience an adverse event.
- Despite the on-going debate around accuracy around consumer-grade wearables, Frost & Sullivan believes given the rapid growth in the use of consumer-based fitness monitors worldwide, it could have a larger public health impact with regard to prevention, control, and survivorship programs. Furthermore considering the increasing prevalence of lifestyle driven chronic health conditions, wearables provide one of the most cost effective and compelling opportunities to enhance patient engagement and communication between patients and providers beyond the traditional care settings, to increase care coordination and patient motivation for improving their daily activity and adherence to drug and treatment schedules.
- **Target End-User:** Clinical Trials, Academic Research, Hospital (Post-discharge rehabilitation) and Home care

WEBLINK: <https://bit.ly/2ukfvsD>

Alphabet's Verily forms joint venture with ResMed to study sleep apnea (1/2) – July 11, 2018

Applicable Product Categories:

Wearables

 Technologies	Wearable and Biosensors (Device + App)	 Therapeutic Areas	Sleep apnea
 Applications	Remote Monitoring / Home care	 Geographic Focus	US
 Segment Focus	Consumer/Clinical Grade	 Topics (News type)	Regulation/ Reimbursement
 Companies	ResMed; Verily (Alphabet from Google)	 Others	NA

ANALYST TAKE:

- **Synopsis:** ResMed is a leading provider of remote monitoring devices and software for sleep apnea patients. Combined with Verily's data analytics technologies, the companies will try to drill down on the health and financial impacts of undiagnosed and untreated sleep apnea.
- **Industry Challenge:** Insufficient sleep has major health and safety consequences for all age groups. Based on industry estimates, about 9% of the women and 24% of the men in the middle-age population are affected by obstructive sleep apnea. As per American Sleep Association, untreated sleep apnea in middle-aged adults cost \$3.4 billion a year in extra medical costs for the United States.

Alphabet's Verily forms joint venture with ResMed to study sleep apnea (1/2) – July 11, 2018

- **Value Proposition:** The goal is to develop software that can be used by healthcare professionals to identify, diagnose, treat and manage sleep apnea in patients. Interestingly, the companies are formalizing their partnership as a full scale joint venture, complete with customary closing conditions and regulatory approvals. The joint venture will be based in the US and operate as a separate venture from ResMed and Verily.
- Based on Frost & Sullivan research, proper monitoring by wearable devices can help with timely diagnoses and treatment of sleep apnea, and prevent other chronic diseases (comorbidities). Given Verily's expertise around health data management and ResMed's proven capabilities with sleep monitoring devices and software; Frost & Sullivan view this as a winning collaboration for approaching a widespread health problem such as sleep apnea by developing effective solutions across the care continuum of the patient (e.g. formulating end-to-end solutions such as effective collection, interpretation and decision support). This would also enable ResMed to move beyond the device play and monetize the intelligence solutions. Based on the announcement made by Verily's Chief Medical and Scientific Officer, Jessica Mega, one of the chief objectives of this collaboration will be to potentially improve outcomes for millions of people living with sleep apnea by augmenting physicians/care providers to better identify at-risk individuals to generate real-world evidence regarding the value and effectiveness of treatment.
- **Target End-User:** Health Systems, Sleep Monitoring Centres, Home care.

WEBLINK: <https://zd.net/2L38Ht5>









Mobile Phones/ mHealth

Southampton doctors among first in world to implant pacemaker using bluetooth technology — July 9, 2018 (1/2)

Applicable Product Categories:

Mobile Phones

 Technologies	mHealth Apps, Bluetooth, sensors	 Therapeutic Areas	Cardiac
 Applications	Continuous real-time monitoring	 Geographic Focus	Global
 Segment Focus	Clinical Grade	 Topics (News type)	Tech Innovation; Care Delivery Innovation
 Companies	Medtronic, University Hospital Southampton (UHS) NHS Foundation Trust	 Others	NA

ANALYST TAKE:

- **Synopsis:** Surgeons at the University Hospital Southampton (UHS) NHS Foundation Trust have become the first in the world to implant Medtronic's new pacemaker, Azure, which can be monitored by the patient's smartphone using Bluetooth technology.
- **Industry Need:**
 - Smartphone technology is becoming increasingly prevalent and its important in a healthcare context that its adoption among the aged population (more than 65 years of age) has nearly quadrupled in the last five years in the US.
 - Additionally, increasing healthcare consumerism and enhanced push by regulators to enable patients take more control of their health in a value based care context, will drive development and adoption of connected medical device technologies, with smartphones playing a pivotal role in the device ecosystem.

Southampton doctors among first in world to implant pacemaker using bluetooth technology — July 9, 2018 (2/2)

- **Value Proposition:**

- The Azure system is fitted with BlueSync, a form of low-energy Bluetooth developed by Medtronic which automatically connects the device wirelessly to the programming system known as SmartSync, which can be used by doctors to setup the cardiac leads post implantation of the pacemaker.
- The system also automatically connects with an app on the patient's smartphone, through which the patient can view real time heart health data.
- The Azure system also sends notifications to clinicians through Medtronic's CareLink network, in the form of CareAlert notifications which could be viewed only by the clinician.

- Frost & Sullivan believes that continuous real time health monitoring through sensor enabled implants has been the latest addition to the healthcare's patient centricity initiatives which further enhances efficiency, reliability and accuracy of procedures and effective post procedural monitoring. While, it enables easy monitoring, it also enables streamlined healthcare delivery by eliminating the time lags between a serious event and its subsequent diagnosis in a lab and treatment, thus enhancing care efficiency and reduced costs through unnecessary visits. In the cardiac context, this is especially useful for conditions such as Atrial Fibrillation, which are difficult to detect in a controlled environment and requires continuous real time monitoring to ensure timely management. The development and successful implementation of such technologies in the high growth sectors such as cardiac would further enhance the value proposition of smartphones, which are already seeing increased adoption in a global context, and make their adoption inelastic of complex reimbursement mechanisms as far as healthcare is concerned.

- **Target End-User:** Patients, clinicians

WEBLINK: <https://bit.ly/2uuml8S>



Smart Home Devices & Appliances

3 Ways That Amazon Can Win In Home Services (1/2)

– July 6, 2018

Applicable Product Categories:

Smart Home Services

 Technologies	Sensors, Artificial Intelligence	 Therapeutic Areas	NA
 Applications	IoMT	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	Amazon	 Others	-

ANALYST TAKE:

- **Synopsis:** Amazon wants to win the home services battle. In the author's opinion, Amazon “must create a superior customer experience” – he proposes three strategies to do so.
- **Industry Trend:** All kinds of companies are interested in providing services in the ‘smart home’ – the concept requires companies of different backgrounds to enable it. Therefore, communication service providers, engineering companies, architects and builders, technology giants, connected devices manufacturers and probably more, are all interested in this market. Even from a healthcare perspective, Frost & Sullivan identifies Apple, Alphabet (nee Google), Amazon, Samsung, Philips, Microsoft, Duetsche Telekom and Comcast as some key players who can make a difference for healthcare delivery in the smart home. Innovative strategies are being deployed by all – but time will tell who makes the most from this emerging concept.

3 Ways That Amazon Can Win In Home Services (2/2)

– July 6, 2018







- **Frost Perspective:** The author argues that three strategies can help Amazon become a leader for home services, not just smart homes:
- “Focus on Services Connected to Products” – narrow focus areas to logically connect services to products it sells. For example, delivery, installation, maintenance and servicing of all products, creating a seamless, end-to-end experience for consumers.
- “Curate the Ecosystem” – He believes that instead of acting like an Uber platform for home services, Amazon must have its own employees to fulfill these needs. It can also enter strategic partnerships like the one with Lennar, a residential building company, for demonstrating its smart home capabilities.
- “Move from Lead Management to Project Management” – Similarly, for complex and non-standardized services such as home improvement, Amazon must have a full platform service, instead of an Uber like service connecting home owners with service providers.
- Frost & Sullivan agrees with the author on these points, but disagrees that Amazon should “narrow its focus” – while products and services can be connected, Amazon should not let go of an advantage of having other services – together, the package can be a great value proposition for the end customer. Smart homes, and home services in general require partnerships, as demonstrated by the Alexa ecosystem of smart devices. Similarly, given Amazon’s healthcare ambitions, and the general trend in the healthcare industry of moving towards the home for delivering healthcare services – Amazon can benefit from more partnerships in the healthcare sector –telehealth vendors such as American Well, for example, or for senior living homes designed with Lennar’s help, customized for the elderly, and so on. Amazon has great potential to succeed in this market, and Frost has identified them as a key company to watch out for, even in the smart homes for healthcare space.
- **Target End-User:** All home-owners.

WEBLINK: <https://bit.ly/2JiYXGa>

Hippo Insurance Tops \$10 Billion in Total Insured Property Value and Triples Written Premiums Quarter-Over-Quarter – July 10, 2018

Applicable Product Categories:

Smart Home Devices

 Technologies	Sensor / Appliances	 Therapeutic Areas	NA
 Applications	IoT	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Business Models
 Companies	Hippo Insurance	 Others	-

ANALYST TAKE:

- **Synopsis:** Hippo insurance, a insurtech company from California is providing smart home insurance, and seeing significant growth.
- **Industry Need:** Insurance and claims is a painful process, with consumers demanding a better experience. Property insurance could benefit greatly from a modern touch, and this niche is what Hippo has targeted. In addition, they are leveraging smart home devices and IoT to reduce their own risk, and sharing the risk with the homeowners by encouraging them to better manage their own house's security and upkeep (monitoring leaks for example).
- **Value Proposition:** While this is a smart move, something that Axa in France has done a couple of years ago (by providing subsidized or rented IoT / smart home devices), the model can be replicated by others. Insurance companies are notoriously slow to adopt technology, hence this model can be a challenge. But this is a great value proposition – even in the healthcare space. Just as United Health Insurance offers some incentives for working out (tracked by wearables), such services could be applicable for health insurance too.
- **Target End-User:** Smart Home owners.

WEBLINK: <https://read.bi/2NKuc05>

Thales secures medical IoT with new connected health offering – July 11, 2018

Applicable Product Categories:

Smart Home Devices

 Technologies	Sensors, Cloud	 Therapeutic Areas	NA
 Applications	IoT, Cybersecurity	 Geographic Focus	Global
 Segment Focus	Consumer Grade	 Topics (News type)	Technology Enablers
 Companies	Thales eSecurity, Device Authority	 Others	-

ANALYST TAKE:

- **Synopsis:** Thales and Device Authority have announced a new solution to secure healthcare IoT devices.
- **Industry Need:** Healthcare is the #1 industry targeted by cybercriminals. The increasing number of connected healthcare devices, which tend to be poorly secured, increases the risk for hospitals. Such devices are now also being used in the home monitoring environment, making the home environment another target area. The recent use of smart home devices for domestic abuse are a case in point.
- **Value Proposition:** The current solution focuses on providing device authentication for all devices on a network, and end-to-end encryption for healthcare as well as other connected devices. Such a solution can be a great value add for smart home devices – healthcare focused as well as others.
- **Target End-User:** Connected medical device users (hospitals, patients), as well as smart home appliance manufacturers.

WEBLINK: <https://bit.ly/2u9k7Sk>