



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 28
16th November, 2018

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







Wearables

UnitedHealthcare offering Apple Watches to employee wellness plan members

– November 14, 2018 (1/2)

Applicable Product Categories:

Wearables

 Technologies	Wearable (Smartwatch + App)	 Therapeutic Areas	Lifestyle driven health condition management
 Applications	Patient monitoring and engagement platform	 Geographic Focus	US
 Segment Focus	Clinical/Consumer Grade	 Topics (News type)	Business Model Innovation
 Companies	Apple Inc. and UnitedHealthcare	 Others	NA

ANALYST TAKE:

- **Synopsis:** Apple Watch is now part of the UnitedHealthcare wearable device program that helps motivate people to walk nearly 12,000 steps per day.
- **Industry Needs:** The health insurance policies available today are aged and often fail to meet the personalized needs of individuals. As a result the health insurance industry, even across developed markets, is expected to see less than 1.5% growth during 2018. To ensure future growth globally, a number of insurance companies are already providing data and digital-driven healthcare services to their policyholders to personalize experience and reduce the cost from potential claims.

UnitedHealthcare offering Apple Watches to employee wellness plan members

– November 14, 2018 (2/2)









- **Value Proposition:** Starting this month, Apple Watch is now available to eligible employer-sponsored program participants, enabling people to use their Apple Watch or shop for a new one. An alternative payment option enables participants to receive and start using Apple Watch (initially paying only tax and shipping) and then apply program earnings toward the purchase price of the device. Participants may be able to own – with a zero balance – Apple Watch after approximately six months of meeting daily walking goals.
- **How the program works?** Through the employer-sponsored program, eligible participants use a fitness wearable to record their daily steps and receive monetary rewards for reaching certain daily milestone — for instance, logging 10,000 daily steps or 3,000 steps within a 30-minute period.
- Frost & Sullivan views this as a successful extension of UnitedHealthcare’s Motion Plan powered by Apple’s smartwatch. UnitedHealthcare Motion provides eligible plan participants access to wearables that may help them earn over \$1,000 per year by meeting certain daily walking goals. As per UnitedHealthcare, since the program’s inception, about 59% of those who register a device remain active for at least six months and have collectively walked more than 235 billion steps and earned nearly \$38 million in rewards.
- Furthermore, nonadherence is a serious problem for healthcare industry, and costs the US health care system between \$100 billion and \$289 billion annually. Considering this Frost & Sullivan finds results of the Motion Plan encouraging, and proves that tangible health outcomes are possible with wearable powered self-health management programs, and can incentivize individuals for practicing preventive care and healthy lifestyles.
- Frost & Sullivan research suggests, interactive policy approach will continue to gain popularity globally as it enable insurance companies to leverage individual data and then use it to personalize premiums and discounts/rewards. Entailing this Frost & Sullivan believes that by end of 2019, about 5-10% of Health Insurance plans will be linked to lifestyle and health data-driven interactive policies in some form – this would open-up a new market for wearables OEMs to collaborate with progressive private insurance players and employee wellness programs. [Note: this is one of our predictions from our 2019 Global Healthcare Outlook.]
- **Target End-User:** Private Insurance Players and Employee Wellness Programs.

WEBLINK: <https://bit.ly/2RWRO2V>

Withings launches the \$130 Pulse HR activity tracker, its second product since spinning out of Nokia – November 14, 2018

Applicable Product Categories:

Wearables

 Technologies	Wearable (Fitness Tracker + App)	 Therapeutic Areas	Lifestyle and chronic condition management
 Applications	Remote patient monitoring	 Geographic Focus	US / Global
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	Withings	 Others	NA

ANALYST TAKE:

- **Synopsis:** Withings announced the latest addition to its product line: the Pulse HR, a connected wearable that can track a user's heart rate using photoplethysmography (PPG) sensors that can measure pulse in 10-minute intervals while offering continuous heart rate measurements for each workout session. This comes only months after Withings was bought back from Nokia by its original cofounder Eric Carreel.
- **Value Proposition:** This continues Withings' dive into the digital health as it continues to carve out its space in the wellness area, which is seeing more and more tech giants looking towards health. The Pulse HR wearable connects to the Health Mate app, and offers dedicated multi-sport tracking for 30 different activities including volleyball, rowing and skiing. According to the company, users have the ability to see their heart zone and calorie rate after each workout. Pulse HR also has a GPS system geared to help users with outdoor workouts.
- Considering the wellness or consumer grade wearable space already crowded with dominant players such as Apple, Fitbit and Xiaomi all having their unique value propositions, Frost & Sullivan views the Withings's Pulse HR just a me-too wearable unless they find differential healthcare use cases for optimal market positioning and future success.
- **End-users:** Average consumers, Homecare, Sports Professionals









WEBLINK: <https://bit.ly/2BbmV57>

Atlantic gains FDA nod for wearable incontinence device – November 14, 2018

(1/2)

Applicable Product Categories:

Wearables

 Technologies	Wearable (Device)	 Therapeutic Areas	Women Health - stress urinary incontinence (SUI)
 Applications	Femtech / Women Health	 Geographic Focus	US / EU
 Segment Focus	Clinical Grade	 Topics (News type)	Product Innovation
 Companies	Atlantic Therapeutics	 Others	iTouch Sure

ANALYST TAKE:

- **Synopsis:** The FDA granted a de novo clearance to Atlantic Therapeutics' electrical muscle stimulator for women called INNOVO, for treating stress urinary incontinence (SUI) .
- **Industry Need:** Based on industry estimates, about 25% to 45% of women suffer from some form of urinary incontinence globally. For example, in the US alone, about one-third of all women are affected by SUI. A range of treatment options, from pelvic floor exercises up to surgical procedures are available to women with SUI. However, there is still a need for non-invasive treatments that work for all women, many of whom struggle to adhere to muscle exercise regimes. Furthermore, current invasive treatments for SUI such as pelvic mesh implants have seen complications and thousands of lawsuits. For example, in 2017, a jury awarded a patient \$20 million in damages from Johnson & Johnson's Ethicon business unit, after her TVT-Secur implant failed and eroded inside her body. Given the limitations with invasive treatments, Frost & Sullivan views Atlantic Therapeutics' INNOVO wearable solution, a electrical muscle stimulator, as a true product innovation that really bridges the care delivery gap for women with SUI.

- **Value Proposition:** INNOVO is the first ever transcutaneous electrical stimulator cleared by the FDA, offering US women a safe, clinically effective and non-invasive choice to treat stress urinary incontinence. With INNOVA, Atlantic is set out to make a more convenient device, leading to the development of shorts that deliver electrical stimulation and are worn for 30 minutes a day.
- The FDA clearance covers a wearable, garment-based device, Innovo, designed to modulate pelvic floor nerves and thereby strengthen the muscles involved in SUI. Innovo wearable can now be prescribed as front-line therapy in SUI, or as a second-line treatment in people who have tried physical therapy without success. As per the company, externally worn INNOVA device can be prescribed as a primary therapy or after ineffective physical therapy, such as pelvic floor or Kegel exercises.
- More importantly, the INNOVA device efficacy has been validated across multiple clinical trial studies, both in the US and EU. For example, a randomized sham-controlled trial found it to be an effective, low-risk device, with 87.2% of US patients seeing successful treatment after 12 weeks and 93% reporting improvements in four weeks. Similarly, a second controlled study in Europe also demonstrated significant improvements, where the device has received a CE mark. The company reported over 1.5 million Innovo therapy sessions delivered in Europe with no device-related complications.
- Unlike majority of me-too health/wellness wearables, Frost & Sullivan views INNOVA as a true product innovation in a much less crowded Femtech space that solves critical care delivery gaps for women with SUI. FDA's DeNovo clearance for INNOVA wearables reflects regulatory authorities changing mind-set towards innovative products that promise to solve actual healthcare challenges. FDA cleared the device on the strength of a pivotal clinical trial that compared INNOVA to iTouch Sure in 180 women with SUI. The trial looked at the proportion of women who achieved a 50% reduction in pad weight over the course of the 12-week study. The pad weight test measures urine loss. Moving forward, Atlantic has plans to pitch INNOVA as an alternative to transvaginal stimulation devices, and prove its device to be superior to iTouch Sure.
- **Target End-User:** Femtech, Women Health

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









Mobile Phones/ mHealth

Teladoc teams up with Jefferson Health on telehealth fellowship – November 14, 2018 (1/2)

Applicable Product Categories:

Mobile Phones

 Technologies	Telehealth; mHealth	 Therapeutic Areas	Primary Care
 Applications	Virtual care	 Geographic Focus	US
 Segment Focus	Clinical Grade	 Topics (News type)	Business/ Monetization Model Innovation
 Companies	Teladoc	 Others	Jefferson Health

ANALYST TAKE:

Synopsis: Teladoc, the virtual health provider, has entered into an academic partnership with Jefferson Health aimed at the advancement of telehealth delivery by enabling a specialized curriculum for physicians interested in a telehealth career.

Industry Need:

- As remote and virtual care models are increasingly adopted across the country, there have been some [studies](#) which highlight unique medical and non-medical challenges faced by physicians, which are not present in face to face consultations. Some of the challenges faced include difficulty of diagnosing from a distance, having to treat unfamiliar patients, technological obstacles, and the volume of calls they receive.
- Amidst such challenges, there have been calls from certain quarter of clinicians for separate specialized trainings and fellowship courses focused primarily on virtual care.

Teladoc teams up with Jefferson Health on telehealth fellowship – November 14, 2018 (2/2)

Value Proposition:









- As per the announcement, Jefferson Health, which includes Philadelphia University and Thomas Jefferson University, has equated the program on telehealth to a public health degree that prepares students in the field of managing telehealth programs.
- The fellowship focuses on the administrative side of virtual care and is backed by funding from Teladoc, which will also help in designing the program. The two-part fellowship program is held onsite at Jefferson Health, and will be delivered directly by Teladoc.
- The only other school that offers a telehealth fellowship is George Washington University, according to the American College of Telemedicine.
- Frost & Sullivan believes that such academic partnerships, in addition to enhancing physician skills at successfully managing virtual care delivery, also enhances Teladoc's outreach to future users of such care models. The company, in order to advance its adoption and stickiness with physicians may offer several advanced and specific modalities to its solutions as well as targeted scholarships to prospective future physicians to build a solid alumnus pool who could positively reinforce the Teladoc brand in the industry.
- **Target End-User:** Hospitals; Primary Care Centers; Patients

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

UCB and Verint Announce Launch of UCB's PD Coach App, Powered by Verint's Intelligent Virtual Assistant – November 15, 2018

Applicable Product Categories:

Mobile Phones

 Technologies	mHealth app; AI, Chatbot	 Therapeutic Areas	Parkinson's Disease
 Applications	Adoption of telehealth	 Geographic Focus	US
 Segment Focus	Clinical Grade	 Topics (News type)	M&A/ Collaborations/ Investments
 Companies	UCB, Verint Systems	 Others	NA

ANALYST TAKE:









- **Value Proposition:** Belgian biopharma company UCB has partnered with Verint Systems to create an AI powered chatbot app called PD Coach. The AI assistant is named April, which is programmed with a wealth of Parkinson's-specific information, and is designed to be able to communicate with Parkinson's patients through speech and dexterity challenges.
- As per Frost & Sullivan research, a number of big pharma companies have been joining the race to include digital health related capabilities in a variety of ways for medication adherence, clinical trials as well as digital therapeutics. Often times the companion app has nothing to do with a particular drug offering like Pfizer's LivingWith app for cancer patients and Quitter's Circle app for smokers, or Novartis's recently launched Galaxies of Hope app. The primary aim, rather than monetization of the companion apps/ products, is greater adoption of the company's products, risk based payment models as well as a definitive brand recall, which is pushing big pharma into the digital health domain.

WEBLINK: <https://bit.ly/2FrB42j>

International study puts AliveCor's smartphone ECG on par with 12-lead system – November 12, 2018

Applicable Product Categories:

Mobile Phones

 Technologies	mHealth App; Sensors	 Therapeutic Areas	ECG Monitoring
 Applications	Home based ECG monitoring	 Geographic Focus	Global
 Segment Focus	Clinical Grade	 Topics (News type)	Care Delivery Innovation
 Companies	AliveCor	 Others	-

ANALYST TAKE:

- **Synopsis:** As per results presented at the American Heart Association's 2018 Scientific Session in Chicago, from an international study conducted in conjunction with AliveCor, the company's smartphone app and the accompanying two-wire ECG was found to be equally effective as compared to a 12 lead ECG for patients with ST-segment elevation myocardial infarction (STEMI).
- Frost & Sullivan believes that clinical grade home based continuous monitoring of vitals such as ECG has been evolving as a preferred mode to manage chronic conditions as well as to enable proactive patient initiated self care. Additionally, increasing miniaturization, enhanced effectiveness of sensors, consumerization, and a surge in the positive study data, coupled with a number of FDA approvals of such devices has added to consumer as well as clinical confidence in these solutions which enable a cheaper, portable and efficient alternative to lab based ECG tests.









WEBLINK: <https://bit.ly/2Pucjr0>



Smart Home Devices & Appliances

Dubai Health Authority introduces smart home care – November 11, 2018

Applicable Product Categories:

 Technologies	IoT	 Therapeutic Areas	All
 Applications	Telemedicine	 Geographic Focus	Dubai
 Segment Focus	Clinical Grade	 Topics (News type)	Care Delivery Innovation
 Companies	-	 Others	-

ANALYST TAKE:









- **Synopsis:** The Dubai Health Authority has empowered the home care teams to contact doctors via smart applications and devices for instant consultation, the devices include non-contact thermometers, auto-arm blood pressure monitor, 4G router, smart tablet, pulse oximeter, connected pocket electrocardiogram, blood glucose monitor, wireless stethoscope and a digital scope system.
- Frost & Sullivan notes that the Dubai Health Authority has become very progressive in terms of adopting technology in the last couple of years, and this is one example of that trend. While telemedicine approaches were consumer focused, this concept focuses on equipping visiting home nurse teams with connected medical devices, but more importantly, enabling the collected data to be directly integrated within the health records system, Salama. This, is a great first, and also promotes the idea that home medical use devices can also be connected to it. In the future, Frost envisions Dubai (which is also adopting smart home concepts) to leverage smart home sensors and data for healthcare use as well, providing doctors and care teams with a holistic picture of their patients' activities in home, allowing for tailored recommendations for care management.

WEBLINK: <https://bit.ly/2Bbu59T>

Wynd's new air-purifying bundle lets smart home owners breathe easier – November 14, 2018 (1/2)

Applicable Product Categories:

Smart Home Appliances

 Technologies	IoT	 Therapeutic Areas	Respiratory health, overall wellness
 Applications	Air quality monitoring and purification	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Technology Innovation, Business Model Innovation
 Companies	Wynd	 Others	-

ANALYST TAKE:

- Synopsis:** Wynd's air quality monitor, Halo, and its air purifier, Home Purifier, are being offered as a bundle. Both devices work with the Halo app, as well as connect to other smart devices such as the Nest thermostat and other Alexa enabled devices to integrate with the smart home network.

Industry Needs: An average adult ingests approximately 3,000 gallons of air per day and spends nearly 90% of the time indoors, where the air can carry various pollutants including microscopic pieces of dust, secondhand smoke, harmful gases, and soot mixed with liquid droplets. These pollutants remain trapped indoor, until and unless adequately ventilated, and immediately affect those with allergies as well as cause chronic respiratory diseases to healthy individuals if exposed for extended periods. Home cleaning chemicals are also dangerous - an American Journal of Respiratory and Critical Care Medicine study rates continuous exposure to house cleaning products as bad a smoking 20 cigarettes a day. Further, air pollution may cause other disease conditions, the linkages of which may be unknown. For example, a Lancet Planetary Health study judged air pollution responsible for 3.2 million new diabetes cases globally in 2016, with 150,000 of those cases coming from the United States (US).

Wynd's new air-purifying bundle lets smart home owners breathe easier –

November 14, 2018 (2/2)

The need therefore is for a real-time data stream on air pollution in the home, and for other connected systems to immediately work to purify it or improve ventilation. With air pollution becoming a major threat across cities such as Los Angeles, Beijing and New Delhi – the need for such smart systems is increasing.

- **Value Proposition:** The Wynd Halo contains a comprehensive set of 10 environmental sensors that tracks allergens, odors, chemicals, temperature, and humidity as well as unexpected influences such as noise and ambient light. It's designed to monitor and improve a smart home environment for everyday activities such as work, sleep, and exercise. It even has an infant mode for babies. The Halo is designed to work in sync with its sister product, the Wynd Home Purifier, which can help rid the air of such pollutants. Both devices work with the smart phone app, which can provide personalized recommendations (based on sensitivity to certain elements or particular medical conditions) to improve health and comfort, set timers and regularly scheduled events, and optimize rooms based on the user's age, gender, location, and health.
- Frost & Sullivan notes that the 'smart home air quality monitoring and purification' market is burgeoning – from Philips to several startups (such as Netatmo) there are several solutions being brought to the market. There are products that also integrate external weather and pollution data to provide users with inputs on when to open windows for ventilation and when to close them (the newly acquired Netatmo for example). There are also products that target only air quality monitoring and aim to work with existing (installed) HVAC infrastructure using sensors (such as Airbox Labs). Within this market, the Wynd's approach is not completely unique in concept, but a differentiator in terms of a single manufacturer providing air quality monitoring and purification with two devices. A major challenge with all these devices is the need for a different device for every room of the home, which a sensor-only approach (Airbox Labs) aims to tackle by leveraging existing ventilation equipment. The use of analytics and machine learning by Wynd is now becoming imperative for the industry to be able to provide actionable data to users – use of particular cleaning agents is harmful, so ventilate after each use, or pollution levels are increasing in a nearby suburb and wind patterns will result in increase in your area, so close windows, etc.
- **Target End-User:** All consumers living in polluted areas and cities, especially those with respiratory conditions.

WEBLINK: <https://bit.ly/2PxE2Hl>

Other Interesting Articles

When available, other interesting articles will be covered here in short.

News Title	Link	Remarks
In China, Smart Speaker Adoption Is Booming	https://bit.ly/2Fq2Ooa	Smart speaker adoption increase is becoming a global trend.
Comcast wants to take on Google and Amazon as a smart-home hub	https://cnet.co/2PPNipE	Comcast introduces a new format for control – the television. So it's voice, tablets / smartphones and now televisions.
Voice tech like Alexa and Siri hasn't found its true calling yet: Inside the voice assistant 'revolution'	https://bit.ly/2Dxyt5r	“Until we invent something that wouldn't be possible without voice, we're just repurposing online content for our ears.” We don't necessarily agree with this – true, if a use case like that would be found, it will be revolutionary, but to discount the potential of voice over other interfaces may not be right.
Keppel Land ready to roll out AI-backed smart homes	https://bit.ly/2FoM6FF	After Dubai and US, Singapore too, is witnessing property developers tap smart home living as a luxury home USP – this one is in partnership with Habitap, a local smart home control company.
Legrand acquires smart home startup Netatmo	https://tcn.ch/2Fxm8mxk	With the world's largest switch and sockets manufacturer acquiring a smart home startup, we expect multiple connected products from Legrand. But what will happen of Netatmo's weather station and other products that don't fall under Legrand's portfolio is unclear.