



Healthcare Market Updates



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

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Wearables

Fitbit launches Fitbit Care platform for health care plans, expands Humana partnership – September 19, 2018 (1/2)

Applicable Product Categories:

Wearable

 Technologies	Wearable (Device + Platform)	 Therapeutic Areas	Lifestyle and chronic diseases management (e.g. activity, sleep, heart rate)
 Applications	Remote Patient Monitoring; Quantified-Self	 Geographic Focus	US / Global
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	Fitbit, Humana	 Others	NA

ANALYST TAKE:

- **Synopsis:** Fitbit launched a platform called Fitbit Care to connect health plans, wearables, employers, health systems and coaching. The company also said Humana has selected Fitbit Care as its coaching platform.
- **Industry Need:** When it comes to wearables technologies and healthcare, strong customer demand and surging sales are only part of the story. The other part is the highly volatile marketplace, where due to intense competition there is a revolving door of company entries and exits. This makes industry experts believe that healthcare wearable technologies are approaching a tipping point to transform healthcare delivery model through data- and intelligence-driven customer-centric platform services for meaningful preventive care use cases.

Fitbit launches Fitbit Care platform for health care plans, expands Humana partnership – September 19, 2018 (2/2)

- **Value Proposition:** Consumer health wearables company Fitbit plans to push further into healthcare with the launch of Fitbit Care, a connected health platform that combines coaching and virtual care with the aim of improving wellness and helping people manage their chronic conditions.
- The product combines Fitbit's wearables technology with the Fitbit Plus app and Twine Health's disease management platform with the aim of increasing patient engagement and care coordination, Fitbit said. The company [acquired Twine](#) in February. Humana has chosen Fitbit Care as the "preferred coaching solution" for its employer group segment, which could put the wearable on a lot more wrists. That segment includes more than 5 million members. According to Fitbit, Fitbit Care will be available through its business-to-business unit called Fitbit Health Solutions. Humana will use Fitbit Care for its employer group. Humana has more than 5 million members via companies (such as Go365 and the Humana Employee Assistance Program).
- Fitbit Care includes:
 - Wearables and devices for self tracking of activity, sleep, heart rate. This data serves as the basis for personalized care. Humana will offer members personalized watch faces.
 - Digital interventions via support tools, challenges, private groups and guided workouts. Enterprises can provide employees with motivational tools.
 - Fitbit Plus, an app that serves as a health coaching tool. The app also connects metrics with health care data, medications and trended activity.
 - Health coaching and virtual care. Coaches will work with participants to create personalized care plans. Coaches will connect with individuals via app, phone and in-person meetings - weight management, smoking and management of conditions like heart disease, diabetes and depression are core topics.
- Frost & Sullivan views this as Fitbit's continued efforts to foray deeper into B2B healthcare employee/corporate wellness and insurance programs. In past 2 years Fitbit has managed to bag several corporate wellness deals which include major customers such as New York Life, Pitney Bowes, SAP, and Sharp Healthcare. Given increasing competition driven commoditization in the B2C consumer health wearables space – Frost & Sullivan views this as a much-needed strategic imperative for Fitbit to ensure recurring revenue associated with Fitbit's data services/solutions, and move beyond its current device dominated business/revenue models that rests on device sales and the popularity of smartwatches like the Versa. With current industry focus on concepts such as population health and value-based reimbursement, Frost & Sullivan finds Fitbit Care platform-based solution a timely offering for providers and payers who are looking for ways to optimize outcomes while reducing healthcare costs. However, Frost & Sullivan also believes that, there is limited evidence around such wellness programs actually working in real world. Given this, despite Fitbit's popularity and employers and payers jumping on board, the future success or failure of this emerging wearables enabled self-health or quantified-health models need more clinical validation studies to make it mainstream.

Target End-User: Health plans, Health systems, Employee Health Programs, Clinical Trials (for remote trial models)

Not to be overshadowed by the Apple Watch, AliveCor announces a new 6-lead ECG reader – September 18, 2018 (1/2)

Applicable Product Categories: Wearable

 Technologies	Wearable (Device + Platform)	 Therapeutic Areas	Lifestyle and chronic diseases management (Cardiovascular disorders / ECG monitoring)
 Applications	Homecare ECG Monitoring System	 Geographic Focus	Global
 Segment Focus	Clinical / Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	AliveCor	 Others	Apple

ANALYST TAKE:

- **Synopsis:** AliveCor recently announced its plans to offer a six-lead ECG compatible with a smartphone (pending FDA approval). This comes as a response to recent revelation from Apple Watch getting FDA-approved ECG reader, leaving unanswered questions about the future of AliveCor's KardiaBand and Apple engagement.
- **Industry Need:** As per WHO estimates, 7.3 million people die of cardiovascular diseases (CVD), particularly heart attacks and strokes every year globally. For example, heart disease has been the biggest killer in America since 1920 and involves spending of more than \$110 billion/year. However, among all the deaths caused by CVD, about two-thirds of them happen in out-of-hospital settings. This demands robust remote monitoring solutions such as wearables to promote preventive care practices. For example, as per a Mayo Clinic study (2015), digital health intervention among early-stage CVD population can lead to a 40% relative risk and 7.5% absolute risk reduction in CVD events, hospitalizations and deaths. This in turn is driving the demand for digital remote patient monitoring ECG solutions comparable to industry gold standards to promote preventive care practices.

Not to be overshadowed by the Apple Watch, AliveCor announces a new 6-lead ECG reader – September 18, 2018 (2/2)

- **Value Proposition:** AliveCor, which has offered a smartphone-connected ECG since 2012 and a wrist-worn version since 2016, revealed its next direction - a six-lead ECG compatible with a smartphone (codenamed - Project Triangle) . In theory, compared to one or two lead ECG monitoring systems on the wrist (e.g. Apple Watch), AliveCor's 6-lead ECG reader is anticipated to be more accurate because there are more sensors picking up more information. No formal name has been announced yet for the 6-lead product, but AliveCor will be working with the FDA on the regulatory pathway for it and hopes to bring it to over-the-counter consumers by 2019.
- **What's new with AliveCor's 6-lead ECG reader?**
 - Based on initial announcement, the device called 'Project Triangle', looks similar to AliveCor's existing Kardia Mobile device (albeit with a design update). But in addition to the two electrodes on the front of the device, there will be additional one on the back. The user places one thumb on each of the top electrodes and places the bottom electrode on their left knee.
 - AliveCor's chief commercial officer, Ira Bahr claims that, the new device will allow cardiologists to view electronic activity in the heart from six angles/leads to more accurately catch the warning signs of an upcoming heart attack. Additionally, as per Bahr, the new device will provide a wide range of medical conditions that cardiologists can find when looking at a six-lead project, often invisible on a single-lead product. For example, one important detection would be ST elevation — a key factor associated with the onset of a heart attack and which could get a person on their way to the hospital before they start displaying other physical symptoms.
- Beyond the hype around Apple's recent Watch 4 revelation, Frost & Sullivan views AliveCor's upcoming 6-lead ECG device as a more legitimate effort (in terms of incremental clinical innovation) that promises getting closer to the industry gold-standard of 12-lead ECG for homecare setting applications. Given AliveCor's continued commitment to innovation, Vic Gundotra, CEO believes their patents would make it difficult for any competitors to run ahead of their game. For example, AliveCor recently got FDA approval for bloodless Hyperkalemia condition giving it a competitive edge beyond the already crowded Atrial Fibrillation condition monitoring devices. From a clinically meaningful application of ECG monitoring systems, Frost & Sullivan believes AliveCor is on the path to emerge as a clear winner in terms of cardiologist choice for trusted ECG home monitoring systems. Having said that, Frost & Sullivan believes beyond the technological innovation, collaboration and market position with suitable healthcare industry stakeholders will be the key to future success.
- **Target End-User: Homecare,** Health systems, Insurance and Employee Health Programs, Clinical Trials (for remote trial models)

WEBLINK: <https://tcrn.ch/2Dioz8n>

Microsoft may unveil the Surface Watch at its next big event in October – September 20, 2018

Applicable Product Categories:

Wearable

 Technologies	Wearable	 Therapeutic Areas	NA
 Applications	Smartwatch	 Geographic Focus	Global
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	Microsoft	 Others	-

ANALYST TAKE:

- **Synopsis:** Microsoft has sent out press invites for a mystery Surface event to be held on 2nd October. And while a Surface Phone is highly unlikely, there is talk of a Surface Watch. Especially considering the tagline of the event reads “A moment of your time”.
- **Value Proposition:** Based on media sources, the company has been testing a watch prototype which is expected to feature the Windows operating system and it will come with an Oxynitride Aluminum body (apparently harder than regular metal).
- A patent published in September 2017 by Microsoft reveals that the company is also considering a modular smartwatch. The filing shows a timepiece with all the typical functions of a “standard” smartwatch accessible via a windows-type user interface. The images show a band formed of a number of modular segments that could be snapped on and off. They could be used to boost battery life, add additional sensors or memory.
- Given the speculative nature of this news, Frost & Sullivan anticipates Microsoft Surface watch to focus less on health and more on day-to-day application functionality. Also, not to forget that Microsoft learnt a good lesson during 2017, when they decided to discontinue the “Band” series fitness wearables.
- **End-User:** Healthcare Consumers

WEBLINK: <https://bit.ly/2NXm93b>



Mobile Phones/ mHealth

Inui Health, formerly Scanadu, launches clinical grade home urine testing platform – September 18, 2018 (1/2)

Applicable Product Categories:

Mobile Phones

 Technologies	mHealth app, AI algorithm for image analysis	 Therapeutic Areas	Diabetes, Hypertension, Urology, Gynecology, UTI, Kidney Disease
 Applications	Colorimetric analysis of urine test kit	 Geographic Focus	Global
 Segment Focus	Clinical Grade	 Topics (News type)	Care Delivery Innovation; Competitive Intelligence
 Companies	Inui Health (Scanadu)	 Others	Healthy.io, Scanwell

ANALYST TAKE:

Synopsis: Inui Health announced FDA clearance for its smartphone-enabled home urine testing platform that can conduct five common tests for Protein, Ketones, Leukocytes, Nitrites and Glucose and offer insights into a variety of conditions such as diabetes, hypertension, urinary tract infection (UTI), kidney disorders, preeclampsia symptoms and general health.

Industry Need:

- Home based POCT testing has increasingly made diagnosis and care workflows more efficient and streamlined. While, portable kit based tests used to enable the user perform the diagnostic tasks at home, the analysis and final test results still used to be dependent on expert analytical skills of a trained clinician. Hence, the final test results used to be delayed, thereby delaying the final diagnosis and intervention.
- Conducting such tests in a lab has been highly cumbersome and time consuming, increasing pressure on the already stretched primary and secondary care system and leading to wastage of healthcare dollars and resources.

Inui Health, formerly Scanadu, launches clinical grade home urine testing platform – September 18, 2018 (2/2)

Value Proposition:

- The Inui Health test kit consists of a single-use cup for filling up urine, a measuring paddle for dipping in the fluid, a grey background sheet to place the paddle and a smartphone based app to perform colorimetric analysis and offer test results
- While this is comparable to some other similar offerings recently approved by the FDA like Healthy.io and Scanwell, the system claims to differentiate itself in the following aspects –
 - Number of disease conditions — Inui Health highlights risks in conditions such as diabetes, hypertension, urology, gynecology, UTI, and kidney diseases. While the Scanwell system specifically targets UTI, Healthy.io focuses on conditions such as diabetes, urology, gynecology, CVD.
 - Instant access to the test results enabled by the systems AI and data architecture, as opposed to other systems which have to go through a provider before the patients can see them.
- The system also offers HIPAA compliant data sharing with clinicians and will be available at \$34.99 for a pack a 3.
- Frost & Sullivan believes that the system will see high penetration among all types of patient population due to its simple, easy to use solution. Moreover, integration of such tests with the readily available products such as a smartphone, will further ease the workflows. This in turn also helps improve patient care coordination, adherence, outcomes and curbs healthcare expenditure. Furthermore, the ability of the solution to readily share the test results with the doctor, further improves the care outcomes through prompt diagnosis and intervention.
- **Target End-User:** Hypertension and diabetes patients, pregnant women

WEBLINK: <https://bit.ly/2xFCf7m>

Walmart, neuroscience design firm partner to launch nutrition behavior app in stores — September 18, 2018 (1/2)

Applicable Product Categories:

Mobile Phones

 Technologies	mHealth App	 Therapeutic Areas	Nutrition, General Wellbeing
 Applications	Behavioral Health	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Care Delivery Innovation
 Companies	Walmart; engagedIN	 Others	NA

ANALYST TAKE:

Synopsis: Fresh Tri, a healthy behavior app developed through a partnership between engagedIN and Walmart, will be rolled out for Walmart employees staffing 4,700 retail locations.

Industry Need:

- Employee health and wellbeing is a major focus area of top corporates around the world who have been spending billions of dollars on corporate health plans over the years. Hence, preventive health through behavioral support is a key focus area for investment.
- Behavioral health approaches such as gamification, empathy and suggestive feedback have been found to be highly effective techniques in user motivation to stick to the recommended diet regimens, medication plans and treatment paths ultimately enhancing health outcomes.

Walmart, neuroscience design firm partner to launch nutrition behavior app in stores — September 18, 2018 (2/2)

Value Proposition:

- Frost & Sullivan analysis reveals that Walmart has strived to transform how its customers approach retail healthcare and has leveraged its Health & Wellness products and services such as pharmacy, clinics, immunizations, etc. to expand into new programs and products based off their consumers' needs such as health literacy tools, insurance assistance, screenings, etc.
- The Fresh Tri app from engagedIN, which has already been tested with Walmart associates and customers in line with its abovementioned strategy, has been rolled out to its employees staffing its 4,700 retail locations with the ultimate aim of improving employee health through adherence to healthy eating habits through influencing eating behaviors by iterative feedback.
- **Target End-User:** Walmart Employees and Associates

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



Smart Home Devices & Appliances

Amazon Has Big Plans for Alexa in Homes, Cars – September 19, 2018 (1/2)

Applicable Product Categories:

Smart Home Appliances

 Technologies	IoT, Voice Virtual Assistants	 Therapeutic Areas	NA
 Applications	Smart Appliances	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	Amazon	 Others	-

ANALYST TAKE:

- **Synopsis:** Amazon expanding device play beyond the Echo, to reveal eight Alexa-powered devices by end of the year. The line includes a microwave oven, an amplifier, a receiver, a subwoofer and an in-car gadget.
- Smart appliances are being introduced by every major appliance maker including GE, LG and Samsung, along with voice assistants (LG has Google Assistant connectivity, Samsung has Bixby, for example). Amazon Alexa has a different take – it's not only entering the smart home appliances space, in a small way with a microwave oven for example, but it is planning to connect home environments, to the outside world! Focusing its efforts beyond just the home, Amazon wants to build a larger market for itself, by targeting areas beyond the home.

Amazon Has Big Plans for Alexa in Homes, Cars – September 19, 2018 (2/2)

- **Value Proposition:** As the article points out, Amazon's true value from the Alexa tech is limited in comparison to Google Home (and as most users of these services still experience). If the long-term strategy is to build a mass market familiarity with applications in home and outside, while continuing to improve the technology to match up to Google's or potentially even surpass it, then this may seem like a smart idea. However, even if Google may not currently be adopting similar strategies, with their superior tech, they could invade the market and capture a major share if they choose to, and if Amazon doesn't improve its tech soon enough.
- It is unclear at the moment what role a smart microwave oven would play, and how it would compete with traditional appliance makers who are far more adept at this game than Amazon is. Of the currently known devices of the eight planned, this one seems a misfit. The picture may become clear when Amazon officially announces these devices and what their roles are. Yet, Frost & Sullivan believes this is a differentiating strategy adopted by Amazon, to not only offer a ecosystem platform enabled by voice, but also provide the devices that can be part of the smart home ecosystem. It may be too early to comment on the pros and cons of such a strategy.
- We wonder, if one of the future devices that Amazon introduces is a consumer focused health device, integrated in the smart home environment.
- **Target End-User:** Smart home users, home builders.

WEBLINK: <https://bit.ly/2xD48Ne>

Google, homebuilder partner on smart homes – September 10, 2018

Applicable Product Categories:

Smart Home Appliances

 Technologies	IoT, Sensors, Appliances	 Therapeutic Areas	NA
 Applications	Smart Homes	 Geographic Focus	US
 Segment Focus	Consumer Grade	 Topics (News type)	Competitive Intelligence
 Companies	NA	 Others	-

ANALYST TAKE:

- **Synopsis:** Google partners with KB Home, homebuilders in Los Angeles, CA, allowing residents to choose from several of Google Home compatible devices and features, and to setup automatic routines customized to their preferences.
- After Amazon partnered with a homebuilder (Lennar), Google followed this route to market as well, to provide built-in smart home automation through the builders. Frost & Sullivan believes this is a smart route to market, one that guarantees some share of the new homes market. The critical part of the strategy however, is to have a wide variety of features and devices available to build a strong value proposition, which builders can then leverage for their customers as well. Google and Amazon, both having built large ecosystems of compatible devices are well positioned to offer such a value proposition. Appliance makers are more likely to benefit from this trend by simply partnering with Google to have homes pre-fitted with their appliances. Future healthcare applications can be integrated in to the same platform, to provide more enhanced features for the residents.

WEBLINK: <https://bit.ly/2xg0RTQ>

Report: Google's Nest looking to expand into healthcare – September 20, 2018

Applicable Product Categories:

Smart Home Appliances

 Technologies	Sensors	 Therapeutic Areas	Respiratory, Other
 Applications	Diagnostic Health Apps	 Geographic Focus	US / Global
 Segment Focus	Consumer / Clinical Grade	 Topics (News type)	Competitive Intelligence
 Companies	Google Nest	 Others	-

ANALYST TAKE:

- **Synopsis:** Startup Senosis Health, which was known to have been bought by Google last year, is now revealed to have been acquired by Google Nest, raising suspicion around Google's smart home healthcare play.
- Senosis Health used enhanced cameras, microphones, accelerometers to turn smartphones into diagnostic tools, and had a few apps ready, when it was acquired by Google. If Nest was indeed the secretive true buyer, it could be developing a healthcare play in the smart home, to go along with its existing line of smart home products around energy and security areas. Frost & Sullivan notes that this would be the first ever direct healthcare play in the smart home by a connected home product company, that does not play around the fringes of healthcare aspects, but tackles core areas of diagnosis and monitoring. If and when introduced, Nest could be targeting aging-in-place / independent living demographic customers with solutions that have the additional value add of healthcare solutions on a single platform, very much in line with Frost's vision for a smart home healthcare solution.

WEBLINK: <https://bit.ly/2MR7Ecy>

Other Interesting Articles

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

News Title	Link	Remarks
Designing Smart Home and Wearables IoT Applications – Part III	https://bit.ly/2OC3CWW	Interesting use cases for wearables in the smart home environment, thought from a technical perspective.
How MedTech Will Accelerate the Smart Home Billion-Dollar Market & Revamp Care	https://bit.ly/2MP8YMY	Recorded webinar by Frost & Sullivan analysts on the healthcare opportunities in smart homes.