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Medtronic Clinical Trial to Evaluate ECG Belt for Optimizing Heart Failure Therapy — July 19, 2018 (1/2)



- Synopsis: Medtronic reported the launch of a new clinical trial evaluating the use of its ECG belt research system as a diagnostic tool for improving cardiac resynchronization therapy (CRT) for heart failure patients.
- Industry Need: Cardiovascular diseases (CVD) claim more lives than all forms of cancer combined. Based on industry estimates, 7.3 million people die of CVD, particularly heart attacks and strokes every year globally. As per a Mayo Clinic study (2015), digital health intervention among early-stage CVD population can reduce 40% relative risk and 7.5% absolute risk reduction in CVD events, hospitalizations, and deaths.

Medtronic Clinical Trial to Evaluate ECG Belt for Optimizing Heart Failure Therapy — July 19, 2018 (2/2)

- Value Proposition: The ECG Belt for CRT Response trial aims to enroll 400 patients at 10 US centres to compare patients treated with both the ECG belt diagnostic device and CRT against those treated with standard CRT alone. As per Medtronic's announcement, the aim of this technology is to give physicians immediate feedback that may impact clinical decision making at the time of implant and also during follow-up visits. By pairing CRT with the ECG Belt, the company intends to provide a more personalized and non-invasive approach to help heart failure patients.
- Frost & Sullivan views CRTs among one of the established treatment option for patients with heart failure risk, where the patients are often prescribed a implantable device to improve their heart's pumping efficiency. Considering this, Frost & Sullivan finds Medtronic's research efforts around validating ECG Belt device a natural complimentary solution to its expanding portfolio of heart CRT devices/implants, diagnostic tools (including MR-conditional CRT-Ds and CRT-Ps) and services for patients suffering from heart failure. Moving forward it will be interesting to track how successful Medtronic will be reporting meaningfully clinical outcomes by augmenting clinicians with real-time insights from the ECG Belt and demonstrate improvement on survival rates, quality of life, and reduced hospitalizations rates. More importantly, if clinically vetted and approved by regulatory authorities (e.g. FDA), the new ECG Belt device would provide a competitive edge to Medtronic against growing competition from emerging cardiac ambulatory monitoring wearable solutions.
- Target End-User: Hospitals, Cardiologists, Clinical trials

Garmin is set to follow Apple into the gym with Gold's Gym partnership - 18, 2018 (1/2)

Moorablaa



Applicable Product Categories: wearables			
Technologies	Wearable (Device + App)	Therapeutic Areas	Life style driven chronic health conditions (e.g. cardiac, diabetes)
Applications	Self-health management/ Fitness and Wellness	Geographic Focus	US
Segment Focus	Consumer Grade	Topics (News type)	Competitive Intelligence/ Partnership
Companies	Garmin; Gold Gym	Others	NA

ANALYST TAKE:

Applicable Braduct Cotogorica

- Synopsis: Garmin and Gold's Gym will work together to pull heart rate data from Garmin devices into Gold Gym's app, called "Gold's Amp". Gold's Amp is a workout app that combines personal coaching with curated music playlists. With the integration, users can see heart rate data displayed in the app.
- Industry Need: Lifestyle-driven chronic diseases are a major public health problem worldwide. Based on industry estimates more than 70% of all chronic disease deaths are attributed to CVD, obesity, diabetes and COPD. With proven application of wearables, patients with chronic conditions can leverage wearable-driven health insights to monitor their vitals and lifestyle to assist in the early detection of dangerous situations promoting a sense of preventive care practice.

Garmin is set to follow Apple into the gym with Gold's Gym partnership 18, 2018 (2/2)

- Value Proposition: Garmin now is extending its reach into the personal training and fitness realm by partnering with Gold's Gym, one of the top fitness franchises in the world. The first fruit of this collaboration is a new Garmin version of the popular Gold's AMP app that bundles in support for the latest Garmin fitness wearables. Released in 2017, the Gold's AMP app is a combo fitness coaching and music app designed to free the user from tedious and non-motivating workouts. The move allows users of the Gym's app to link devices such as the Garmin Forerunner 645 Music, Vivoactive 3 and Fenix 5, with heart rate data used to help flesh out specific workouts. Since AMP focuses on music-driven workouts, this will be combined with the data and be displayed on the mobile app as user's exercise. Coming later this fall, any data gathered through Garmin's range of wearables will be free to be logged and stored within both AMP and Garmin Connect, with a Gold's AMP Connect IQ app heading to compatible devices.
- Frost & Sullivan views this as a winning deal for Garmin the move would provide Garmin immediate access to more than three million members of Gold Gym across the globe for in-depth collaboration on personalized health data monitoring and insight driven data monetization services. This marks Garmin's wearable solutions first legitimate foray into growing fitness and wellness segment with a broader user base. In the future, Frost & Sullivan believes other consumer wearable OEMs will follow suit to claim their piece of the the growing fitness and wellness pie. In fact, Apple already has a application called GymKit on Cupertino's platform to help its users sync the Apple Watch with NFC-enabled gym equipment in order to gather more accurate data.
- Target End-User: Gyms, Fitness and Wellness centres, Behavioral therapies

Qardio and UFOA Launch Remote Monitoring Hypertension Program for NYC Firefighters — July 13, 2018 (1/2)



- Synopsis: The Uniformed Fire Officers Association (UFOA) of New York City, US, representing 2600 active members and 5000 retirees NYC firefighters announced its remote patient monitoring program expansion plan with Qardio (a digital health company) and Mount Sinai Health, giving more firefighters access to an mHealth platform to track blood pressure.
- Industry Need: There is a growing to promote preventive care practices and occupational health management concepts to curtail growing cost pressure on US health systems. The program targets a population known for its stressful and physically demanding work. As an example, the NYC firemen responded to about 600,000 alarms in 2017.

Qardio and UFOA Launch Remote Monitoring Hypertension Program for NYC Firefighters — July 13, 2018 (2/2)

- Value Proposition: The partnership comes on the heels of a nine-month hypertension pilot in which select firemen were monitored by researchers at the
 Mount Sinai Health System using San Francisco-based Qardio's connected care platform. This second phase will initially involve 1,000 UFOA members on
 a first-come, first-served basis. As reported by UFOA Vice President George Farinacci, home blood pressure monitoring using Qardio's Bluetooth-enabled
 blood pressure cuff has proven to be an easy yet powerful way to have UFOA members track their own health while doctors monitor their vitals without
 disrupting their lives.
- Frost & Sullivan believes wearable and mHealth enabled smart home monitoring solutions is the next phase in remote patient monitoring, enabling both patients and providers to monitor vital signs and detect health concerns before they get serious. Frost & Sullivan views Qardio's expanding collaboration with UFOA a great milestone to further vet its QardioArm and QardioMD solutions for clinical and industrial applications. This type of partnership also demonstrates the untapped growth opportunities for wearable OEMs across community awareness and occupational health programs to demonstrate the benefits of remote monitoring solutions and promote preventative care practices.
- Target End-User: Community health programs, employee health programs, occupational health hazard monitoring



Mobile Phones/ mHealth

Viz.ai secures \$21M from Kleiner Perkins, Google — July 18, 2018 (1/2)



- Synopsis: Healthcare AI company Viz.ai announced that it has raised \$21 million in Series A funding. The investment was led by Kleiner Perkins, with additional participation from GV (formerly Google Ventures)
- Industry Need:
 - Timely diagnosis and intervention of stroke patients is a long unmet need with current standards requiring lengthy diagnosis, delayed specialist intervention and treatment, often exposing the patients to higher mortality risks.
 - Specialized, AI image analysis algorithm enabled, direct-to-Intervention systems such as the Viz.ai's ContaCT, are a novel approach to speeding stroke care, through automatic analysis of CT scans and the resultant prompt notification to a specialist that a suspected large vessel occlusion has been identified
 - The system's capability to alert a neurovascular specialist during the time a first-line provider is reviewing the images greatly expedites the assessment and treatment process, thereby offering compelling advantage in speeding stroke care workflows.

Viz.ai secures \$21M from Kleiner Perkins, Google — July 9, 2018 (2/2)

Value Proposition:

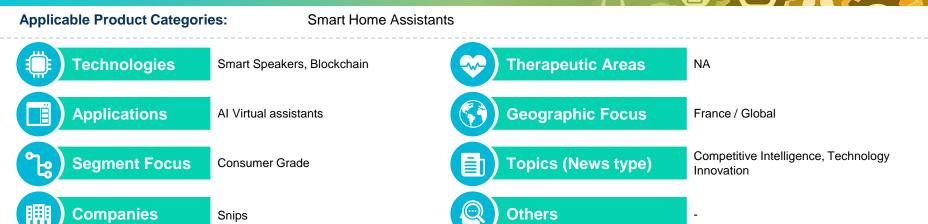
- Viz.ai's ContaCT, a clinical decision support (CDS) tool, received FDA de novo 510 (k) clearance in February 2018 and CE mark in January 2018.
- Its software uses an AI algorithm to scan CT images for indicators associated with stroke, and then sends a text notification to a neurovascular specialist if it identifies a potential large vessel blockage. Because the tool alerts the specialist during the time a first-line provider is reviewing the images, patients may receive attention from a specialist earlier than they would normally.
- As per the latest release, the company will be using the additional funding to expand its offering into new markets, and to extend its product portfolio
 to conditions outside of stroke.
- Frost & Sullivan believes that the Viz.ai investment by Google, is aimed at bolstering its AI capabilities in healthcare as part of the tech giant's healthcare AI research initiatives to determine how the tech giant can have the greatest positive impact in the healthcare industry. In the smartphone industry, Google has channeled its AI into helping smartphones evolve into machine learning devices. The current investment is in line with Google's focus on preventative care and its ability to further bolster the smartphone's capability to improve healthcare processes. The company's other AI related healthcare efforts include its India launch of a trial that would apply its AI software to screen eyes to detect early signs of diabetic retinopathy. Additionally, the system is being used to identify the risks of heart diseases, forecast outcomes such as the length of a patient's hospital stay and their odds of readmission as well as breast cancer. While, most of the discussed applications are still in early phases of development, the Viz.ai system, being an already approved system in US and Europe, would offer great insights to the company in terms of product development and positioning for its other efforts and further develop a robust portfolio of benefits aimed at improvement of healthcare workflows.
- · Target End-User: Neurovascular specialists, clinicians, laboratories

WEBLINK: https://bit.ly/2Nw4HPp



Smart Home Devices & Appliances

French Startup Snips Unveils Blockchain-Based Al Voice Assistant for Smart Homes – July 12, 2018



ANALYST TAKE:

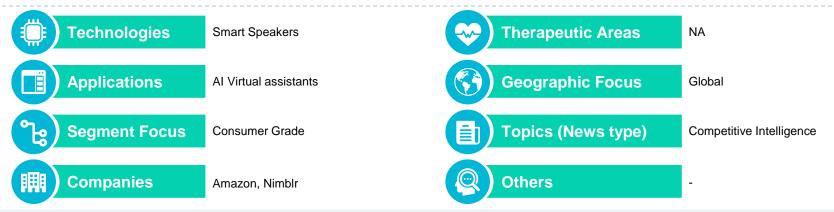
- Synopsis: Snips AIR, to be first virtual assistant that is blockchain-based, promising higher user privacy protection.
- Industry Need: Recent. Instances of Amazon Alexa's unauthorized recording and sharing of a private conversation, or that of smart home devices being used for domestic abuse have reduced the trust in these devices. Healthcare as an industry ranks #1 for cyberattacks when these smart assistants start handling data, privacy will become not only important but a legal requirement (HIPAA protection in the US, for example).
- Value Proposition: The device will store 100% of all user data on the device, instead of the cloud. A mesh of multiple devices instead of a single device work together, locally, instead of connecting to the internet.
- Frost & Sullivan believe the balance between user privacy and convenience is akin to a rope-walk while the Snips approach makes sense from a privacy perspective, having a smart speaker in the house only for home automation, weather, mutli-media, cooking (and other areas) limits the potential of the technology. How exactly the memory requirements for these function will be addressed, is also an unanswered question.
- Target End-User: Smart speaker owners (existing and potential).

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Smart Home Assistants



ANALYST TAKE:

- Synopsis: Amazon Alexa's integration with Nimblr's Al assistant Holly will allow patients at some medical practices to schedule appointments via voice.
- Industry Need: Nimblr uses AI to streamline physician practices' front-desk processes voice based appointment scheduling has helped a practice reduce the no-show rate by 72%, resulting in saved time and increased revenue.
- Value Proposition: Using voice commands or text, patients can schedule as well as reschedule or cancel their doctors appointments, resulting in increased convenience.
- Frost & Sullivan believes this to be a value added feature for Amazon to push Alexa in to more homes, while a great solution for physician practices to manager their appointment schedules. Amazon's recent moves in to healthcare (including the rumored partnership with Xealth, for medical device eCommerce, and acquisition of PillPack) only demonstrate its commitment to healthcare, this being just one of the many initiatives it is considering.
- Target End-User: Patients of physicians practices.

WEBLINK: https://bit.ly/2JEPEAs

The smart home of tomorrow will call 911 for you – July 16, 2018



Applicable Product Categories: Smart Home Appliances



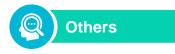




NA

Global





ANALYST TAKE:

- Synopsis: In emergency situations, \$3 / month personal safety app by Noonlight can summon help, without dialing a number.
- Industry Need: Several situations demand calling for help, when the individual is unable to do so from fall detection, to unsafe neighborhoods. In the samrt home, fall detection for the elderly, or no movement for set time, or intrusion detection are just some examples.
- Value Proposition: Partnerships with Amazon Alexa, Google Home, Apple Health app, Nest smoke detector, Canary security camera and Biostrap health
 wearable, allow Noonlight to integrate its tech in to these services. The app sends a notification to its call center, where representatives can then contact
 emergency services.
- Frost & Sullivan believes that this is an innovative and necessary service, with several applications from fall detection to home security. At a nominal \$3 / month subscription fee, it is a critical service especially for the vulnerable, such as the elderly staying independently.
- Target End-User: Smart home device users.

WEBLINK: https://cnnmon.ie/2mnAsym

Vodafone UK Unveils New IoT Range – July 18, 2018



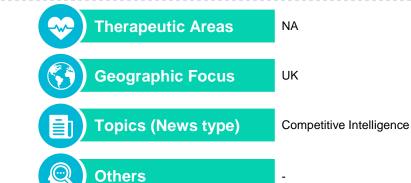




Applicable Product Categories:

Smart Home Devices







Vodafone

- Synopsis: Vodafone UK is expanding its V by Vodafone range of IoT applications, with the launch of two new wearables and a smart home hub.
- Industry Need: In a growing IoT environment, the need for a single platform to manage all devices and services is becoming all the more important. Smart speakers (Amazon & Google for example) are one such avenue.
- There are few children focused wearables, and smart home hubs is a slowly crowding market (but limited to geography). However, SOS type wearables have been around for a while (called the personal emergency response systems) and is in fact a very mature industry, designed for the elderly population.

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

· Value Proposition:

- V-Kids watch is a smartwatch for children with SOS features, geofencing, GPS tracking and games.
- V-SOS band is for vulnerable members for fall alerts, as well as SOS buttons that send notification with time stamp and geographic coordinates.
- The V-Home solution includes "a security camera, a multi-sensor, an indoor siren" and the V-Home hub to connect all devices on to a single platform, controlled via a single smartphone app.
- Frost & Sullivan believes that the value of the solution above lies not in the individual products, but in the ability to connect them and control them on a single app. Similar to us having several passwords (>10 for most internet users) today, the smart home area is getting crowded with several devices and services with their own apps a single app for controlling everything (on smartphone or via voice) is where the value lies. Eventually, the ecosystem with the most preferred apps, devices and services will win.
- The network service providers are a leading contender in this race for smart homes, attempting to provide connectivity as well as control solutions. Given their reach in terms of penetration of connectivity services, they provide the fastest access to market, hence are becoming an excellent partner of choice.
- · Target End-User: Smart home owners.

WEBLINK: https://ubm.io/2JEluxa