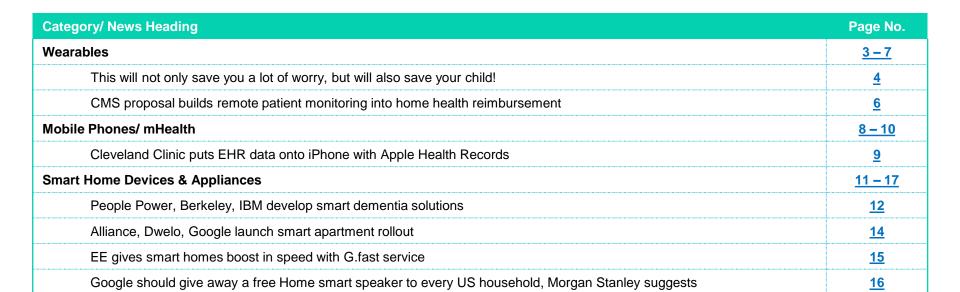
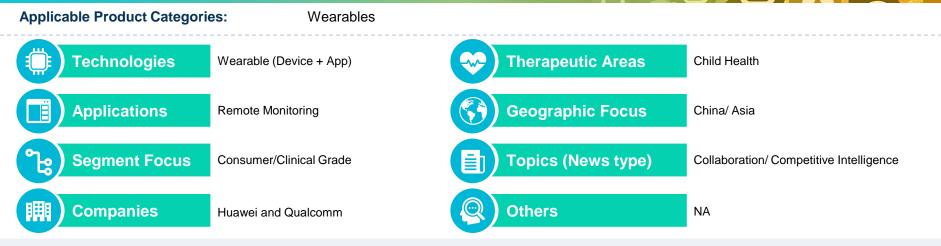


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This will not only save you a lot of worry, but will also save your child! (1/2) – July 3, 2018



- Synopsys: Huawei teamed up with Qualcomm to announce its first platform targeted specifically for 4G connected kids watches at the Mobile World Congress Shanghai.
- Industry Challenge: Based on industry estimates today, 1 in every 3 children and adolescents, aged 2-19, are overweight or obese triple the rate from just one generation ago. If current trends continue the number of overweight or obese infants and young children globally will increase to 70 million by 2025. As per a WHO 2016 report, the vast majority of overweight or obese children live in developing countries, where the rate of increase has been more than 30% higher than that of developed countries. Sedentary lifestyle and poor food habits among current generation kids are the major factors contributing to the increasing prevalence of childhood obesity.

This will not only save you a lot of worry, but will also save your child! (2/2) – July 3, 2018

- Value Proposition: The Qualcomm® Snapdragon Wear™ 2500 platform is designed to deliver a robust foundation with extended battery life, an integrated sensor hub with pre-optimized algorithms, low power location tracking, and the company's fifth-generation 4G LTE modem, and optimized version of Android for kids. Use of these sensors can help children stay active and fit while parents can monitor the health of their loved ones. Additionally, the platform supports gesture-based gaming and entertainment applications so children continue to enjoy their experience with the kid watch.
- Based on Frost & Sullivan research, a scalable approach of combining wearables, and principles from digital behavioural therapies have demonstrated
 positive results to increase activity levels among individuals, treatment adherence, and higher engagements across self-health management and preventive
 care programs. Considering the increasing prevalence of childhood obesity among kids, Fitbit Ace comes as a handy wearables-based digital therapy for
 worried parents. Frost & Sullivan views this a similar strategy of Huawei to that of Fitbit recent move into the childhood obesity space to beat growing
 competition in the crowded use cases and therapeutic focus.
- Target End-User: Parents, children hospitals, research and clinical trials sponsors, insurance and wellness programs

WEBLINK: https://ameinfo.com/technology/gadgets/save-a-lot-worry-child/

CMS proposal builds remote patient monitoring into home health reimbursement (1/2) – July 3, 2018



Applicable Product Categori	ies: Wearables		
Technologies	Wearable (Device + App)	Therapeutic Areas	Lifestyle and Chronic health management
Applications	Remote Monitoring/ Home care	Geographic Focus	US
Segment Focus	Consumer/Clinical Grade	Topics (News type)	Regulation/ Reimbursement
Companies	NA	Others	NA

- Synopsys: Under a proposed payment rule released by the Centre for Medicare & Medicaid Services (CMS) on Monday (July 2nd 2018), home health providers would be able to include the costs of remote patient monitoring as an allowable cost in the home health agency's cost report.
- Industry Challenge: Despite the proven benefits of wearables in promoting home care and remote monitoring concepts, lack of robust regulations and guidelines have been the challenge both for clinical and consumer wearables OEMs to target the reimbursement money in the healthcare space. This is turn often curtails the care providers/physicians tendency to prescribe or recommend wearables as part of common care procedure for remote monitoring critical health vitals.

CMS proposal builds remote patient monitoring into home health reimbursement (2/2) – July 3, 2018

- Value Proposition: The CMS announcement come as a big positive move for vetted health wearables OEMs in the US market. The newly proposed rule defines remote patient monitoring in regulation for the Medicare home health benefit and will include the cost of remote patient monitoring as an allowable expense documented on the home health agency cost report for reimbursement. As per the announcement made by CMS Administrator Seema Verma, the new rule can be viewed as the natural upgradation to the Meaningful Measures Initiative by removing seven measures from the Home Health Quality Reporting Program. The burden reduction as a result of the Home Health Quality Reporting Program and other proposed changes are estimated to result in a net annualized cost savings of \$60 million for home health agencies
- Based on Frost & Sullivan view this as progressive move by the US regulatory authorities to modernize Medicare and promote innovation care delivery
 models such as home care by increasing access to remote patient monitoring. This will allow patients to share more live-time data with their providers and
 caregivers, which will lead to more tailored care and increased positive health outcomes. In terms of process efficiencies, this move is also expected to
 reduce work burdens on care providers by eliminating duplicative and unnecessary recertification requirements, while focusing quality measures on those
 that actually track positive health outcomes.
- Target End-User: NA

WEBLINK: https://www.healthdatamanagement.com/news/cms-proposes-reimbursing-home-health-agencies-for-remote-patient-monitoring



Mobile Phones/ mHealth

Cleveland Clinic puts EHR data onto iPhone with Apple Health Records — July 3, 2018 (1/2)





- Synopsis: Cleveland Clinic announced that its patients can now access their personal health data on their iPhones with the Health Records feature, which will have interoperability with the Epic EHR system
- Industry Need:
 - Amidst increasing calls across quarters to enable greater interoperability and sharing of EHR data as well as data generated through connected medical devices, and mHealth apps, the move is a welcome one which offers patients easy access and ownership of their own health data.
 - Additionally, it offers opportunities to enhance patient experience through better adherence as well as improve healthcare efficiency by reducing chances of missed appointments, easy accessibility and enhanced patient-provider engagement.
 - The development is part of an earlier announcement by Apple of its intended testing of Health Records feature with around 39 participating healthcare systems, and the availability of the new capability to all iPhone users with the latest iOS 11.3 update.

Cleveland Clinic puts EHR data onto iPhone with Apple Health Records — July 3, 2018 (2/2)

Value Proposition:

- Patients at Cleveland Clinic will be able to access their personal health data, using the Apple Health Records feature on their iPhone in addition to the Epic's MyChart patient portal app.
- Synced together and updated in tandem, the combined offerings of MyChart app and Apple Health Records, provides patients more comprehensive mobile access to their health data such as allergies, conditions, immunizations, labs, medications, procedures, and vitals.
- Additionally, the Health Records also allows patients the capability to organize their data from other providers, thereby enabling a more comprehensive view of their health status
- The app will allow patients to manage and schedule appointments, message their physicians as well as view upcoming and past appointments, physician notes and details about hospital admissions. Patients will also be able to request medication renewals and preventive care procedures through the app
- Frost & Sullivan believes that while many healthcare facilities today offer a proprietary web portal for patients to view their EHRs, those portals often don't allow users to share their information with other caregivers. Additionally, as healthcare providers also use EHR platforms from different technology vendors, data-sharing can sometimes be stymied by incompatibilities. The opening up of data silos by Apple is a part of a multi-step strategy, after initially enabling patients with easy control of their health related data in its Health Records thereby enabling an effective and actionable repository of patient health information. Now, with enhanced interoperability of patient data, the company is very well positioned to work as an intermediary between medical researchers, developers as well as pharma and med-tech companies which require health data for specific actionable development of their respective solutions. While, this promises to streamline healthcare outcomes, it comes with added risks of data fraud, patient health information (PHI) compromises and misuse. Additionally, while its good for the patient to know all the aspects of his own health, it also means more data to be sifted through by the clinician. The next challenge for Apple is going to be its ability to make that data more intuitive and meaningful for the clinician.
- Target End-User: Patients, physicians, insurance providers, wellness programs

WEBLINK: https://bit.ly/2u5hXIG



Smart Home Devices & Appliances





- Synopsis: (a) People Power will use a grant from the NIA, and in partnership with UC Berkeley will study the emotional impact of IoT solutions on people with dementia and their caregivers, in hopes to design a commercial service that suit their needs. (b) Karantis 360 will use IBM's expertize to commercialize a cloud-based assisted living system for people with dementia and the elderly.
- Industry Trend: Some estimates indicate between 5 to 7% of adults aged 60 and above have dementia, and those aged above 85 years have a much higher prevalence. The elderly population is also growing faster than the rest – according to the World Population Aging report, the share of population aged 60 and above will increase from 12% in 2015 to 15% in 2025, whereas that of the children aged 0-9 years, and those between 10-24 will actually decrease in the same time period. The share of those aged between 25 to 59 will actually remain constant. In that sense, the prevalence of dementia is set to increase significantly, demanding solutions that can help take care of this population.

People Power, Berkeley, IBM develop smart dementia solutions (2/2) – June 29, 2018

olutions (2/2) O

- Frost Perspective: These two initiatives are part of a growing trend of companies developing and testing solutions aimed at the elderly or those with dementia, using IoT or smart home sensor-based concepts. Most of these companies tend to be smaller ones, and the trend is actually resulting in a fragmented market. These are concentrated more so in the developed countries, which is more of a reflection of the state of infrastructure development necessary for enabling this technology.
- Several companies are currently limiting themselves, like the People Power solution, at installing sensors and providing basic applications, thus not leveraging the true power of these technologies enabled by data analytics and artificial intelligence. Karantis 360's solution leverages analytics to highlight patterns that deviate from the normal, and send notifications –yet this too has become commonplace.
- What is truly required, is for the home to become smart enough to take charge, and call an ambulance if it detects a fall followed by no movement, for
 example. Or for an entire community's smart homes to collectively 'look' for a wandered dementia resident. These approaches may sound too futuristic, but
 it is probably not as far out as we may think.
- Frost & Sullivan believes these solutions to be the basic building blocks necessary for tomorrow's advanced solutions, ones where companies are gathering the relevant experience to better design future solutions.
- Target End-User: Dementia sufferers, elderly and their caregivers.

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

Alliance, Dwelo, Google launch smart apartment rollout – June 29, 2018



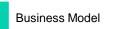
Applicable Product Categories: Smart Home Devices

Consumer Grade





Geographic Focus



NA

US



Companies

Alliance Residential Company, Dwelo, Google (Nest thermostat)



Topics (News type)

Therapeutic Areas

ANALYST TAKE:

- **Synopsis:** Alliance launches its smart home technology package, in partnership with Google and Dwelo, to be installed in more than 25,000 homes across the US.
- Industry Need: Installing home automation devices without expertize is a challenge impeding the growth of this area. Pre-fitted homes / package home automation solutions can provide a convenient option to buyers, while allowing builders / sellers to differentiate their offerings.
- Value Proposition: The consumer smart home industry is still shaping up, with new kinds of business models evolving to serve specific areas. The most common route to commercialization is the partnership approach between residential development / building companies and technology companies which provider the sensors.
- Frost & Sullivan believes a cross industry partnership is crucial to encourage adoption of smart home devices.
- Target End-User: Potential Home buyers looking for smart home solutions.

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

EE gives smart homes boost in speed with G.fast service - June 28, 2018



Technologies Sensors Therapeutic Areas NA	
Applications loT Geographic Focus UK	
Segment Focus Consumer Grade Topics (News type) Technology Enablers	
Companies EE Others -	

ANALYST TAKE:

• **Synopsis:** EE is launching a 300 mbps ultra-fast broadband service, for customers across the UK – 13 million users.

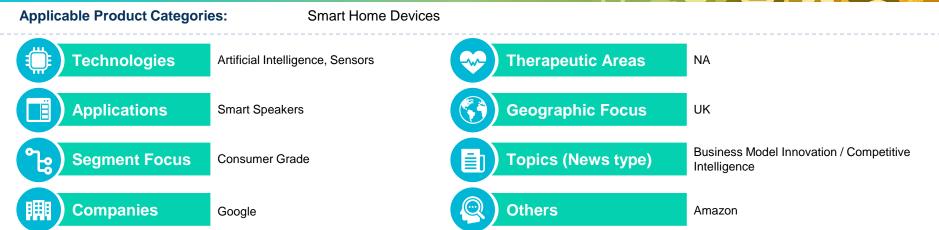
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- Industry Need: Smart home services will be completely reliant on broadband connectivity. For healthcare services such as telemedicine, this is even more crucial. Realizing this, the Federal Communications Commission too, is batting for higher broadband penetration, especially in the rural areas.
- Value Proposition: Frost & Sullivan welcomes this development as crucial, one that is bound to improve the adoption of smart home services, and in turn, of healthcare services delivered in the smart home.
- Target End-User: Smart Home services users.

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

Applicable Product Cotogories

Google should give away a free Home smart speaker to every US household, Morgan Stanley suggests (1/2) – June 28, 2018



- **Synopsis:** Morgan Stanley analysts recommend that Google give away a free Mini speaker to each US home, a move that will cost it \$3.3 billion. In return, Google will get a large market to target for retail ad sales.
- Industry Need: Smart speaker sales have soared over the last year, and the two main competitors (in the US market) are Google and Amazon, with their Home and Echo speakers, respectively. Both companies are building their own ecosystem of other smart products that work with their speakers to allow seamless, voice-interactive control over home automation. With some pros and cons on each side, both companies are looking for ways to differentiate and increase sales.

Google should give away a free Home smart speaker to every US household, Morgan Stanley suggests (2/2) – June 28, 2018

- Value Proposition: The analyst estimates Amazon to take the lead in the smart speaker category at year end of 2018, with Google holding only 33% of market share (versus 62% for Amazon).
- While prima facie it does make sense to do so, there are some concerns with this approach. Not every household will welcome a smart speaker in their home, owing primarily due to the privacy concerns. With recent news regarding Amazon's Alexa recording a private conversation and sending over to a random person, trust in these devices has dropped a little. Although the analyst takes this into account, estimating over 70% households to actually own a smart speaker whether they continue to use it enough for Google to recoup its investment is questionable. As with smartphone apps, where engagement is a challenge, whether smart speakers are used for retail searches by all those who own them, versus for specific tasks such as home automation or listening to music is currently not known.
- Frost & Sullivan believes the approach does warrant further research, but not before questions like these are satisfactorily and favorably answered.
- Target End-User: Smart speaker users.