Healthcare Tech That Caught Our Eye at

— CES® 2017 —

At Omnicom Health Group, we keep up with the technology trends that impact the healthcare industry. There was no better place to see the latest and greatest than at this year's CES® held on January 5 to January 8 in Las Vegas. There was so much to see and so much to take in! VR, AR, mobile technologies, and smart devices all continue to have a big presence. But this year, an overarching theme was not about a "new" technology, but rather about the evolving and improving use of technology in digital health. The Digital Health Summit and the Exhibition Floor were great sources of inspiration. Read here about the healthcare technologies that caught our eye this year at CES® 2017. Tell us what you think at technology@omnicomhealthgroup.com.

Connected Health Services in the Connected Home

Wellness solutions enabled in the home can support you as you age or when you're dealing with a chronic illness. Preventive and predictive solutions can live in the connected home, providing a wealth of data about daily living. Timely responsiveness, or intervention, can change patient outcomes. Senior living is now better equipped to support the aging. CES® 2017 didn't disappoint with the number of connected home products and connected healthcare devices that can be enabled in the home.

Examples:

- Alarm and Philips led the way with connected health services.
- Care Angel provides artificial intelligence monitoring through digital and voice tech in the home.
- Whirlpool smart cooking is the kitchen of the future and can help with elder independence at home.
- Thermomix food processor takes the ingredients and cooks all courses of your meal.
- SevenHugs controls your home with one device.

Cardiovascular Digital Health

There was continued focus and improvements in using wireless medical and mobile devices to better cardiovascular health. Omron's company mission is dedicated to digital health to improve cardiovascular disease and going for

"Zero heart attack and stroke."

Examples:

- Qardio is making data meaningful for patients and not just regurgitating metrics.
- Omron blood pressure cuffs make it easy with watches and phones. Integrate with mobile apps. Integrate with other apps.
- AliveCor continues to advance mobile EKG technology.
- FitTech Summit showcased how fitness trackers have opportunities for improving stroke patient rehabilitation.

Sleep Health

Good sleep is central to good health. Bad sleep negatively impacts heart disease, obesity, and diabetes. Many people show up to work, but are not "present." 70 million Americans suffer from sleep or wakefulness issues. It's no wonder that CES® 2017 showcased technologies that can address this growing problem.

Examples:

- Know your sleep score and how you need to improve! Read about Dr. Oz and a national sleep survey with ResMed.
- Smart sleep pillows.
- Smart beds. Sleep number 360.
- Circadia adjusts sleep patterns and biorhythms while you sleep.

Brainwaves

Advances in head-mounted computers and robotics brought technologies that analyze our brainwaves. We saw applicability in neurology and mental health.

Examples:

- Brainwave monitoring for human learning and development analyses, which is an amazing opportunity ADHD or other neurological diseases.
- Renu is an acoustic kit to calm your brain.
- Measure your brain signals for meditation.
- "Feel-ables" – the next trend, instead of just wearables for physical metrics. Emotional analytics based on how you are feeling.
- HubbleHugo reads your emotion, mad, sad or glad.

Robotics

More robots! Friendlier robots! Robots that are affordable and accessible to improve daily living. Robotics took on a greater presence at CES® with real-world applicability, such as robots to assist and comfort patients or support for aging in the home.

Examples:

- Pepper, Lynx, and Kuri garnered attention at CES® 2017.
- Kuri is super cute and helps to manage your smart home!
- iPal is the companion for kids and the elderly.

MEMS Technology

What is this?

"Devices comprised of integrated mechanical and electrical components designed to work in concert to sense and report on the physical properties of their immediate or local environment, or, when signaled to do so, to perform some kind of controlled physical interaction or actuation with their immediate or local environment."

Or said a better way, these are really advanced electronic networks that connect multiple devices, often activated based on environmental conditions, all to serve a common objective. These networks are behind the advancements in IoT and their interoperability in healthcare.

Example:

Personal health monitoring enabled through MEMs.

Machine Learning

Machine learning, artificial intelligence, and big data will revolutionize all industries, but especially healthcare. All advancements enable predictive analytics to determine the state of your health and as well as enable preventive measures to improve outcomes.

Examples:

- Predictive and prescriptive digital health is only enabled when data is accessible and integrated. Patients represented at the Digital Health Summit said it best, "Give Me My **DAMn** data! Data About Me!" Patients are demanding their rightful access to data about their health *and* that it's integrated across various healthcare systems (eg, EMR, clinical studies, genomics).
- AI for my toothbrush?!
- Consumer intelligence puts the consumer at the center. Data-driven marketing connects consumers where they are and with the information they want.

Hydration Management

Keeping your body hydrated is not just important to athletes; hydration is critical to your health. CES® 2017 showcased smart containers, which can track your water consumption throughout the day.

Examples:

- Smart bottles and smart pitchers that connect your hydration metrics throughout your day.