



CEES

2022
Trends &
Insights

PHM Publicis
Health Media



“What greater purpose is there for technology than advancing human health and wellbeing?”

- Gary Shapiro, President & CEO, The Consumer Technology Association



LETTER FROM ANDREA

CES is an annual rite for many and it's fitting that 2022's event puts health front and center. Perhaps no subject is more prominent in the world today and it's thrilling that the largest conference devoted to new and emerging technology is tackling this topic head on.

Health wasn't just in the spotlight at CES 2022, it was on the main stage, starring as the program's first keynote in the form of an address by Abbott Lab's President and CEO, Robert Ford, who summed up the state of health tech quite succinctly as entering a "human powered" age, where people will have far more control over their wellness, relationships with care providers and ownership of their data. We are decentralizing and democratizing healthcare, he said. I couldn't agree more.

While CES 2021 was entirely virtual, this year was a hybrid event with organizers making a valiant effort to execute an in-person program, complete with exhibit space. We, too, had hoped to attend in person, but Omicron had other plans and CES did its best to adapt. Programming shifts and speaker cancellations through yet another wrench into our coverage but even so, health tech and topics were aplenty with several key trends emerging.

Issues of health equity and women's health were woven into much of the conference sessions. Many of the personal devices are being touted as tools to reduce inequity in care and when paired with faster connectivity, should extend services to remote and underserved communities.

We're seeing a clearer focus on the consumer, extending patient care far beyond the clinic walls as virtual reality and augmented reality emerge from the world of gaming and help usher in the metaverse, where mixed realities hold the promise of brave new worlds for healthcare.

Finally, this proliferation of devices and use cases will translate into an explosion of data and privacy issues, and we'll unpack what this could mean for health and marketers.

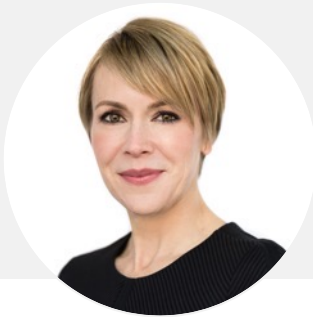
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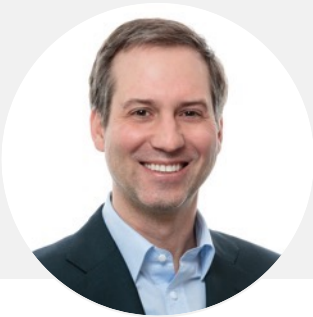
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PUBLICIS WELCOMES CNET'S BRIAN COOLEY FOR THE NEXT BIG THING

Summary:

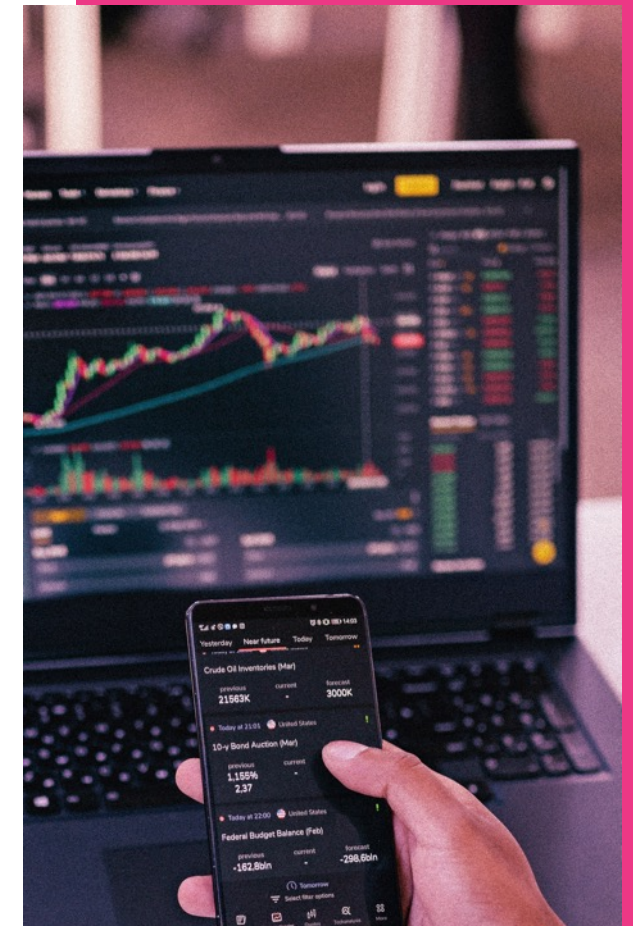
Every conference has its mainstays and Publicis Groupe is lucky to count CNET Editor at Large Brian Cooley as theirs. Each year, Brian offers his top takes on CES' themes and identifies the best of its new product introductions. In keeping with CES 2022's emphasis on health, Brian didn't just declare health a major theme, but identified how solutions have moved from personal devices to home-integrated technology, and how the changing role of retail health may play out.

Key Takeaways:

- Telehealth holds great promise but faces headwinds from insurers and regulators, as well as wide-spread availability issues for people in remote or underserved areas. To truly realize the power of remote health/telehealth, we must speed up the availability of 5G—and 2022 looks to be the year it happens.
- Wearables for health have long been a staple of CES, but with more devices than ever, there's also an opportunity to make better use of the data collected, and to mine this data for important health signals to drive prevention and early detection.
- Mobile augmented reality is set to take off and could play a key role in remote health monitoring and treatments.
- Pharmacists are poised play a much bigger role at the intersection of telehealth and home monitoring devices, thanks to proximity and availability.
- TVs have a growing role to play as home health hubs and hold enormous potential particularly for older populations less wedded to mobile devices. LG, in partnership with Independa, debuted a TV that is platform/service agnostic for telehealth consults.

Implications for Health and Media:

Telehealth and remote access changes the point of care game for marketers, who must learn to adjust their strategies in the point of care space to better align with the remote marketplace. Ubiquitous, reliable and near-universal access to healthcare professionals from anywhere is quickly changing consumer expectations, and health marketers need to be in lock step with these new behaviors.



"The future of interaction is anticipation"

- Brian Cooley



“We are bringing a future that is more reliable and precise... we can care for more than before and proactively manage health and take prevention.”

- Robert Ford, CEO, Abbott Labs

HEALTH TAKES CENTER STAGE

Summary:

Health wasn't just prominent at CES 2022, it was front and center with the first keynote—and first ever keynote on the subject of health—delivered by Robert Ford, Chairman and CEO of Abbott Labs, who crystalized the theme of this year's event: The convergence of health and technology, which promises to let consumers take control of their health. Ford calls this “human powered health” that allows people to “unlock the possibility of you.”

This, said Ford, speaks to us as the future of health and what it can mean for prevention and early detection. New tech such as bio wearables and sensors will track key signals in the body to help us understand where we are in our health journey and get ahead of deficiencies that can cause disease.

Key Takeaways:

- Implanted sensors and biometric devices will be key to proactive detections and take the guesswork out of disease management.
- But devices don't tell stories, humans do, and their stories save lives. Stories humanize health tech and increase buy-in from government, investors and consumers.
- Sensors in development will ultimately be able to track nutrition, diet and weight loss in real time. Alcohol sensors will track intake over time and driving ability while a biosensor for athletes will detect lactic acid buildup in the body.

Implications for Health and Media:

This isn't about just flipping how we think about health on its head, but about having the tools to actually achieve it. With advancements in tech, humans can take a preventative approach to care to help live a healthier life now and also prevent future disease. Living in wellness can be enabled through digital tech. We now just need to keep the advancements coming and drive change in how people look at care. For too long, society has focused on treating illness rather than preventing it in the first place. How do we drive this way of thinking further into society and get people excited about the possibility?

If we can match technology with human experience, we will be able to better unlock insights and signals from the data to fuel media and content strategies. Optimizing treatment and extending care beyond clinic walls opens up new avenues for communication directly to end-users in targeted ways.

HOW TECH IS TRANSFORMING THE PATIENT EXPERIENCE

Summary:

The democratization of healthcare is perhaps the biggest theme to emerge from CES 2022. The marriage of personal devices, faster data speeds and AI are breaking down barriers, changing the patient experience and streamlining workflows with a focus on changing both the experience and care. Healthcare providers, pharma and marketers will be more focused on the home as care breaks free from the barriers of a clinic or office.

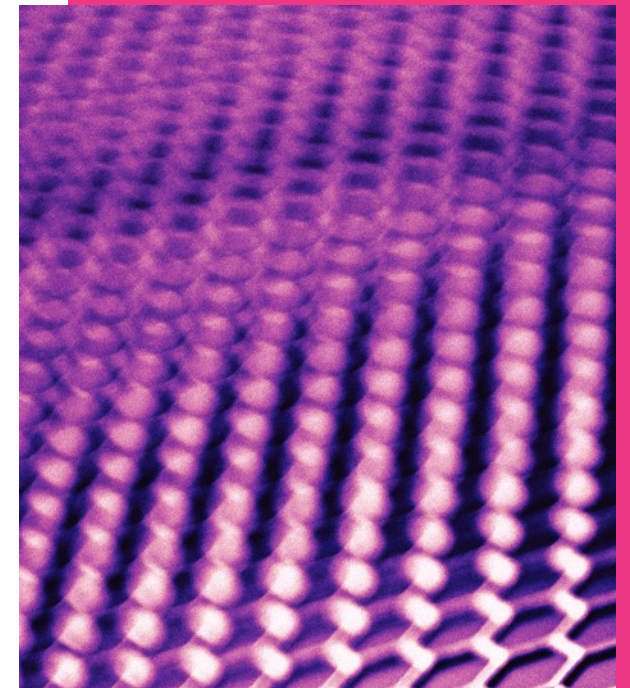
Key Takeaways:

- Digital transformation and telehealth went from shiny object to the only way to interact with patients because of COVID, 95% of physicians have done a virtual visit or interacted with virtual technology. We can now learn by memorializing workflows that worked well and integrating technology into routine of care delivery.
- Digital Transformation in Healthcare is shifting from patient monitoring outside the home towards workflow within the hospital to create a stronger care team approach and ease the burden on an existing workforce burnt out from COVID-19 and the growing challenge of finding enough people to provide care.
- Patients have expectations of healthcare as easier and more seamless and wonder why they must come into the office. We've moved to a hybrid care model. Instead of having 14 in-person visits, we can have a mix of in-person, virtual and asynchronous.
- AI has a place in healthcare and improving outcomes, but there are many complexities to overcome. The easiest role AI can play within healthcare is in caregiver education to navigate the healthcare system and its administrative complexities.
- AI within a clinical setting is more complex. As these tools are being developed, it's imperative for clinicians to have a seat at the table for them to be useful.

Implications for Health and Media:

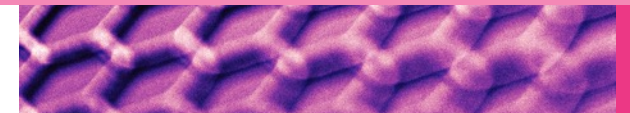
Weaving digital touchpoints and platforms into the care experience will drastically change the care pathway for many patients. Removing friction from the process will hopefully improve access and patient care as ease of access improves patient engagement and outcomes.

These new digital touchpoints and increased engagement will present new opportunities for health media to connect with physicians, patients and caregivers in new and unique ways. The challenge will be that many of the providers in this space are either new to health or are not media focused. The ideation for media partnerships and products will have to be driven by media agencies.



“Things have shifted from the medical side to the consumer wellness side. Things are moving very quickly.”

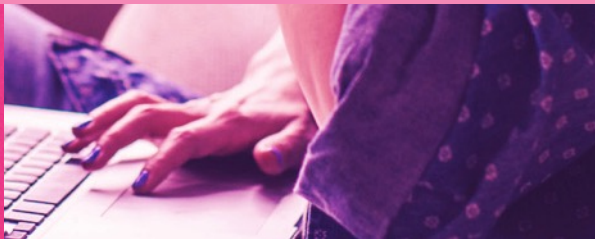
- Dr. Daniel Kraft, founder
digital.health





"The future of health is the absence of disease"

- Lynn Sterett -Principal Deloitte Consulting



HEALTH AT HOME IS THE NEW WORK FROM HOME

Summary:

CES is both a tracker of trends and a predictor. It's a smorgasbord of future-forward thinking that often serves as a marker of what's to come. While many of the most touted "next big things" fizzle (3D TV anyone?), this year's best of tech is rather firmly rooted in reality, and occasionally mixed reality (hello metaverse!).

Key Takeaways:

- Telehealth has gone mainstream with a majority of US consumers saying they've used telehealth in some form, according to Parks Associates and 83% say they'd like to use telehealth after the pandemic is over, reported Deloitte.
- The promise of in-home devices and wearables is to move people from sick care to well care, using data and technology to trigger digital nudging to drive behavioral changes to improve outcomes.
- Healthy home tech is in demand – 55% of consumers now own at least one connected home monitoring device.
- Integrated health tech is on the rise, per CEDIA – particularly sensors to monitor indoor air quality, water quality and other areas that effect health in the home environment. Consumers are increasingly willing to pay more for such technology, to gain peace of mind.
- Aging in place demands home health tech for across a variety of use cases, including care, diagnostics, monitoring and mobility assistance. While the amount of data is increasing, we need to accelerate the interoperability of this data to make it meaningful and actionable.

Implications for Health and Media:

Healthcare is shifting from ambulatory to the home, this is the next battlefield for health, and it's increasingly focused on prediction, prevention, and personalized care. As we think about driving behavior change, consumer wearables and other health and wellness indicators can have a dramatic impact as patients take a more active role in their health and wellbeing, As the the demand for analysis and education increases, media will play a stronger, more connective role in education and solutions.

DATA AND PRIVACY

Summary:

The proliferation of devices and emergent platforms has companies and consultants crowding about a new raft of consumer data in health. All of this, as we know, can be problematic and governments are moving to consider new privacy laws—which is easier said than done. Policy makers and industry professionals were on hand at CES to discuss the challenges with potential privacy laws, the difficulties in bringing them through Congress and how broad privacy laws could potentially limit innovation, especially in the health category.

Health already adheres to many of the privacy laws because of HIPAA requirements, but the main concern is that data privacy has the potential to stunt advancements in clinical research and care. The rise in personal monitoring devices has driven the rise in patient data. The rise in this data and its use in patient care could improve outcomes, but if privacy laws limit the portability or interconnectivity of this data, it may also slow progress.

Key Takeaways:

- There is an overwhelming need for a federal privacy law.
- Since 2019, we've had a little over a dozen comprehensive privacy bills introduced in Congress.
- The Online Privacy Act is legislation from Congresswomen Anna Eshoo and Zoe Lofgren, both of California. This would create a new agency within the government and the view is that while the FTC has done an amazing job without explicit Congressional authority on privacy, it isn't seen as the privacy regulator by tech companies. The belief here is that privacy is so distinct it requires a new agency.
- When It comes to privacy legislation, there are three areas of mixed agreement—data rights of consumers, company obligations around data collection and protection and enforcement.
- There is a growing opinion around a "minimalization principal" when it comes to data collection, essentially forcing companies to only collect data they have an existing use case for vs. collecting data for potential future use.

Implications for Health and Media:

The deprecation of third-party cookies and privacy in media is probably the biggest topic of the past 18 months. Pharma is in a good position because of its adherence to HIPAA requirements and is already limited in the data collected from patients. The consumer health monitoring space is growing and presenting new data sources that could be leverage for media purposes. The privacy laws that are currently being proposed in Congress could potentially limit the ability to take advantage of this new data source.



"In Health, we need to ensure that the regulation respects that there are certain instances where it's important that data gets to the right people."
- Carlos Nunez, Chief Medical Officer ResMed



EXPLORING NEW FRONTIERS, HEALTH TECH LOOKS TO THE STARS

Summary:

CES is oftentimes fantastical and 2022 showed how space exploration is bringing unique insight into advances in health. A discussion of low orbit space flight revealed how we can use space as a lab to innovate in health tech. This is already happening with initial tests of technology and equipment to monitor human biology—outer orbital space is one of the most hostile environments imaginable and its strain on the body requires unique types of technology to monitor, diagnose and treat humans while in outer space.

Space is the ultimate remote care scenario, propelling us far beyond the constraints of telemedicine. The future of healthcare may start to come to life through space exploration.

Key Takeaways:

- An organization called TRISH is working to identify health tech that can be used to manage the health and wellbeing of astronauts, but likely won't be confined to this group for long. We've already seen the appeal of inner space as a tourism destination, and we can assume outer space won't be far behind.
- Some medical advances useful for space involve intensive monitoring of health, both physical and mental. Some of the most interesting products rely on biosensors and VR to take the place of the large-scale machines in use on earth.
- Josh Ruben, co-founder of Z3BR shared an eye movement analysis tool using small VR headsets while eye movement tech can be used to look at non-traumatic brain injury and other ailments.
- The US military is looking at this type of small-scale device to assess medical needs in combat zones, and the tech has possibilities for home care, as well.
- Technologies that are designed for space need to be precise, reliable, small scale and not reliant upon WIFI. This work can help set the standard for providing care in more remote areas of the world where WIFI is not reliable or even possible.

Implications for Health and Media:

Inner orbital flight presents opportunities to better understand human biology and human behavior from a health perspective. The increasing reality of this type of tourism and the commercials aspects mean the possibilities for media and marketing for health are limitless. [The Orbital Reef](#) has even announced its own production studio for producing zero-gravity content.

Outer orbital digital health and tech development can help solve for issues of health personalization and health disparity/access. For media, helping marketers think bigger than even telehealth in terms of reaching people in new ways has the potential to drive better and more equitable health outcomes. Small-scale tech and bio sensors help patients and HCPs understand a body's responses and present endless opportunity for wellness through insights that further connect the right messaging and content for patients seeking answers.

HEALTH CAN BE FUN AND GAMES

Summary:

Gaming has driven a lot of innovation in education and finance, and we're now seeing this innovation come to healthcare.

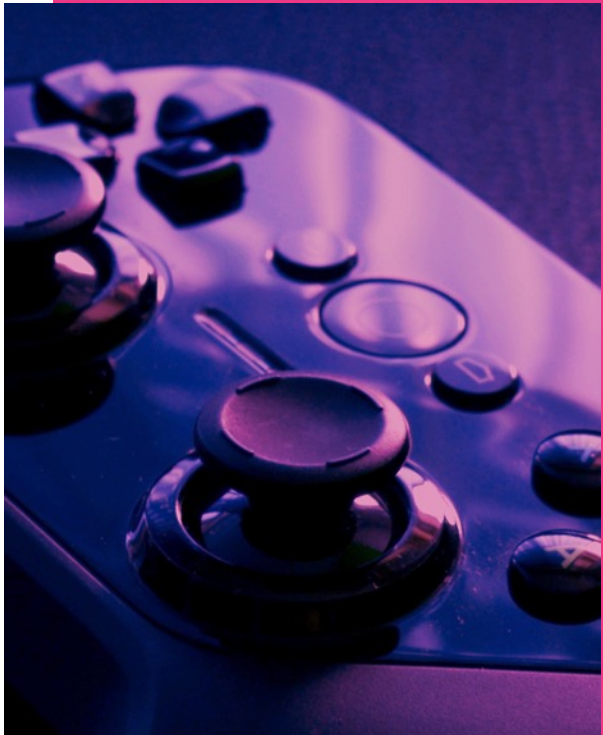
The convergence of personal health devices platforms, feedback mechanisms and gaming audiences is creating new opportunities for the healthcare to connect with patients and communities. This convergence shows tremendous promise in providing the healthcare industry with new mythologies for improving education, building community, driving behavior change and ultimately improving outcomes.

Key Takeaways:

- Gaming is a communal experience. From a marketing lens we are seeing consumers spend more and more time within these communities. As game screens gain a bigger share of consumers attention, gaming becomes a prime opportunity to connect with consumers.
- Within health, there is an exploration of the integration of consumer devices, gaming and health.
- Gaming has shown itself to be a great incentive for changing behavior. There's a growing belief that those behavior changing signals can be used to improve health and health outcomes.
- Applying gaming to a health context can not only improve health outcomes but can also improve engagement and community building.

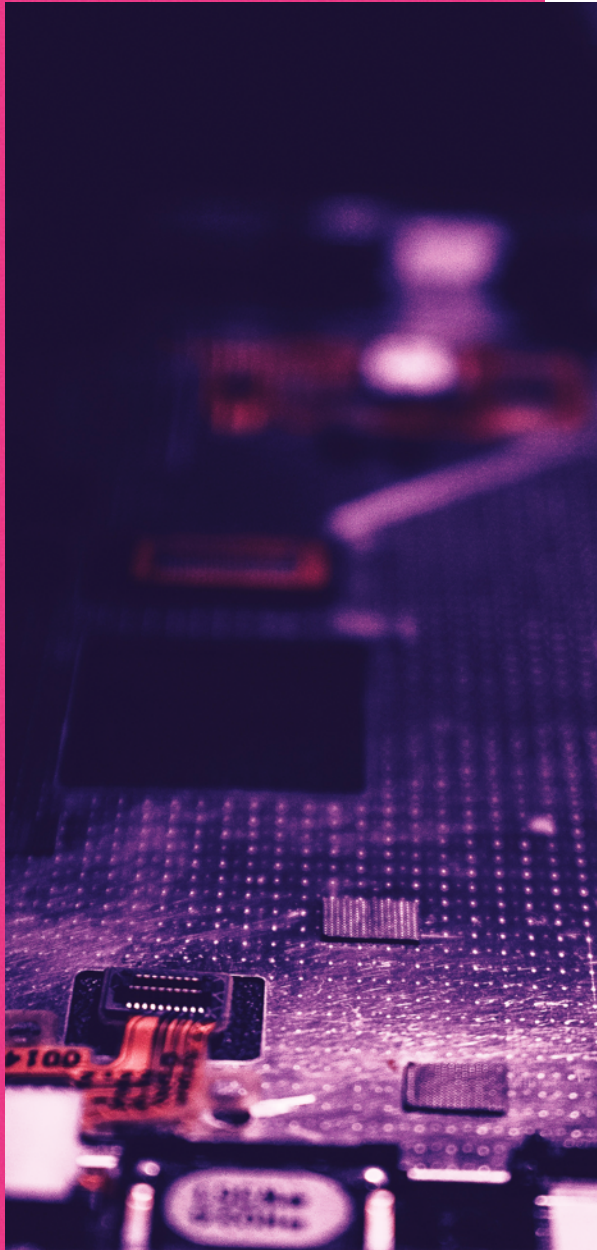
Implications for Health and Media:

Gaming and gaming platforms are gaining an ever-growing portion of consumer attention and with a growing adult population, are no longer a space just for kids. Games are new social platforms and as such, have become a prime place to interact and connect with consumers and provide unique integration experiences for marketers looking to drive brand awareness.



"This is the future of health, wearable technologies that provide feedback continuously vs. the one time of year you visit your doctor."

- Dr. Ramses Alcaide, CEO, Nuerable



HOT TECH

CES is at its heart, a tech show with a penchant for gadgets and 2022 is no exception. Much of the innovation centered around health as informed by the pandemic. There were devices to monitor air quality, sensors to detect breathing irregularities, radar-equipped light bulbs that monitor sleep and body temperature and of course, body sensors to give your fitness routine a boost.

- LG Inependda [turns the TV into telehealth portal](#), bringing full-screen features, fitness classes and an intuitive user interface into the home, appealing to an older target audience.
- Withings [demoed a smart scale](#) (in development) that functions as a full body scanner that measures, muscle and fat mass, vascular age and nerve activity. It then promises to analyze and synthesize the data to create personalize health plans.
- The Movano Ring [lets you wrap a bunch of fitness sensors literally around your finger](#). The wearable tracks activity, sleep, heart rate, respiration, temperature, blood oxygen levels and more.
- FaceHeart Vitals [uses AI to turn a mobile or smart device into a tool to measure vital signs](#) including heart rate, blood pressure, blood oxygen level, respiratory rate and stress index with medical grade accuracy.
- Breathing BULO [measures lung health and provides personal breathing exercises](#).



To learn more about our 2022 CES program or if you have any questions on our Trends and Insights, please email laura.heller@publicishealthmedia.com

