



**GLOBAL WELLNESS
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2015 WHITE PAPER

**“The Science of
Wellness:
Hype or Hope?”
Roundtable**

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What: The Global Wellness Institute™ (GWI), an international think tank that brings together leaders from the private and public sector to positively impact the future of the wellness industry, and *Scientific American Worldview*, the global biotechnology division of *Scientific American*, the world authority on science, technology and policy information for a general audience, partnered on an invitation-only roundtable on the topic of “The Science of Wellness: Hype or Hope?”

Where & When: February 11, 2015 at *Everyday Health’s* headquarters in Manhattan.

The Topic: Leaders from the medical, science, business, technology, research, media, workplace wellness and hotel/spa worlds participated in a conversation on the many ways that science and evidence-based medicine are impacting the wellness industry - and how wellness (and the growing medical evidence for wellness approaches) is impacting people, the medical establishment, private companies and public policy.

Co-Moderators: Jeremy Abbate, VP, Global Media Alliances, Scientific American; Publishing Director, Scientific American Worldview and Susie Ellis, president and CEO of the GWI.

Roundtable Participants:

Jeremy Abbate, VP, Global Media Alliances, Scientific American; Publishing Director, Scientific American Worldview

Dr. Brandon Alderman, Professor, Department of Exercise Science and Sport Studies, Rutgers University

David Brancaccio, Host, American Public Media's "Marketplace Morning Report" (NPR)

Anna Bjurstam, VP of Spas and Wellness, Six Senses Hotels Resorts Spas; Owner, Raison d'Etre

Alfredo Carvajal, President, Delos International and Signature Programs, Delos

Susie Ellis, Chairman and CEO, Global Wellness Institute

Dr. Steven Gundry, Director, The International Heart and Lung Institute Center for Restorative Medicine

Anne Hubert, Senior Vice President, Viacom Media Networks

Neil Jacobs CEO, Six Senses Hotels Resorts Spas

Katherine Johnston, Senior Economist, SRI International

Dr. Nazlie Latefi, Chief Scientific Officer, Pegasus Capital Advisors

Clare Martorana, EVP and General Manager - Consumer Health and Wellness, Everyday Health

Beth McGroarty, Director of Research, Global Wellness Institute

Mim Senft, Wellness Director, Plus One Health Management, Optum

Mary Tabacchi, PhD, Professor, Cornell University

Susanne Warfield, CEO, Paramedical Consultants, Inc. (PCI)

Josef Woodman, CEO, Patients Beyond Borders

Ophelia Yeung, Senior Consultant, SRI International

Experts identified ten top “ways forward” to build a healthier world

In the course of this wide-ranging conversation, the experts assembled pinpointed critical actions that must happen to “move the needle” on healthier populations, and make the science of wellness more “hope” than “hype.”

1. Unleash Simple, Provocative Public Wellness Campaigns

David Brancaccio (host of NPR’s *Marketplace Morning Report*, reaching 9 million listeners daily), kicked off a discussion about how some of the biggest “wellness successes” of the last century have revolved around powerful marketing messages (like the anti-smoking, “stop littering,” pro-vaccination, or “wear seatbelts” campaigns of the 20th century). For instance, Mimi Senft (Wellness Director, Optum) explained how public health campaigns helped decrease smoking from 50 percent in the mid-twentieth-century, to sub-20-percent today.

Brancaccio spotlighted “breathtaking” U.S. campaigns like anti-littering ads imaging a crying Native American, standing roadside, as a car drives by and a soda can is tossed out the window, which effectively stopped a nation of litterers in their tracks. And more recent New York City print ads visualizing the 16 packets of sugar residing in a can of soda, asking whether you want to drink yourself – and your children – fat? He argued we need more hard-hitting, “12 second announcements” around wellness because, “If you can distill a message and repeat it over and over, you can change the world.”

Another roundtable participant noted that one thing that these very successful health campaigns had in common “was a very clear externality, for example, if I drink and drive, I don’t just kill myself, but also others.” And the roundtable concurred that new campaigns around issues like obesity or sedentary lifestyles need to inject that element of “externality” (i.e., how it will affect your children, the world’s healthcare costs).

The recommendation: New health campaigns and public service announcements (PSAs) around people- and economy-killers like obesity won the day, and the group agreed that smart “sloganeering” that simplifies concepts so that the average person can digest them, was mission critical. Clare Martorana (EVP & GM, *Everyday Health*) crystallized it: “We need to simplify and inspire.”

2. Intensify Focus on the Behavioral Sciences to Create a “Science of Lifestyle Change”

Experts gathered agreed that while new medical evidence for wellness approaches grabs the headlines, that what we most need is a more intense focus on, and new research in, the behavioral sciences and cognitive psychology if we ever want to un-riddle how to help people start, and sustain, lifestyle change (where we’re currently doing an abysmal job).

Dr. Brandon Alderman (Rutgers University) explained this crisis: “Scientists all agree that this generation will not outlive the previous one for the first time in human history...and (our inability to get people to) adhere to new diet and exercise regimes is the big problem. Even though exercise makes people feel very good, we’re all becoming much more sedentary.” Susie Ellis (GWI) echoed this thought: “It’s extraordinary with all that has been learned and done, that the world just gets fatter and sicker.”

The panelists discussed how extrinsic incentives and penalties have failed to work for most of the population and long-term. Josef Woodman (CEO, Patients Beyond Borders) recounted outcomes for a workplace wellness pilot undertaken by his previous company many years ago (that lines up with so many studies since): “We found out fast that healthy people were all over the incentives for lifestyle change, but the most resistant and unwell all said ‘no thanks,’ I would rather pay the \$35 a month to stay sick.” Another roundtable participant agreed: “Incentives and penalties can work short-term, i.e., to get people to take a health assessment, but don’t work long-term. We simply don’t understand how to truly help people make change, or how to create the environments that support change – we really know so little.”

Mimi Senft noted some (but not enough) movement was underway: “Some insurance carriers are starting to hire behavioral economists. But we need more research on how lifestyle

change ties into things like brain plasticity and choice architecture. That's where the 'science' can really come into workplace or spa wellness: how to effectively overlay new habits - just how many times you have to repeat something over and over to make it a habit."

And the roundtable agreed that lifestyle change strategies will never be "one-size-fits all," and that cultures will have to be created within cultures." Dr. Mary Tabacchi (Cornell University) also cautioned that to create wide population change means focusing on the least fortunate, least informed and hardest to reach people, who will ultimately cost the world the most money, but understandably, "don't have the inspiration to get inspired, because life is too difficult and they're focused on feeding their kids." And Mia Kyricos (Board Member, GWI; Chief Brand Officer, Spafinder Wellness) argued: "If you want to influence change positively, I feel 'science' and 'medical evidence' needs to be the subhead, not the headline. Most people are not moved when they're lectured at about 'anti-aging' or eating better. They need to be told what a better quality of life they will have, how they will enjoy their kids longer. Wellness messaging needs to hit the positive, the meaningful - and, yes, the fun."

The recommendation: No matter how challenging, the world must pay more attention to, and underwrite more research in, the cognitive and behavioral sciences and social psychology, to take first steps in creating an evidence-based "science of lifestyle change and willpower."

3. More and Better-Funded Studies on Wellness Approaches Needed:

A key discussion point was the state of, and growth in, medical studies for wellness approaches (from acupuncture to yoga). But it was broadly agreed that they represent the dramatically under-resourced "David" to Big Pharma's "Goliath". The GWI shared research that the average R&D costs for a new drug have reached \$2.9 billion,¹ while estimating that funds for wellness-focused clinical trials are often under \$100,000. And (Stage 3) drug trials have around 100 times more participants: roughly 50 for a wellness study, vs. 4,000 for a drug trial.

¹ The Tufts Center for the Study of Drug Development, 11/2014

Without more, better-funded trials on wellness approaches, highly respected medical organizations like [Cochrane](#) will continue to withhold positive recommendations in their meta-reviews on practices like meditation or massage, even when there's positive, preliminary evidence. And we'll continue to read their endless, inevitable verdicts: "While several trials were promising, they were small, and more research is needed."

Several panelists cautioned that large, well-funded pharmaceutical trials also have their limitations. One noted: "We need to differentiate between true science and evidence-based medicine as practiced. Science is isolating variables and identifying the mechanism and making it reproducible. Evidence-based medicine (that approves new drugs/procedures) often means taking a large cohort of thousands of patients and proving that the intervention is better than what's currently done for that population - and if the illness is severe, that bar isn't set very high."

And Susanne Warfield (CEO, Paramedical Consultants, Inc.) explained that positive clinical evidence for wellness approaches can have a less-than-positive fallout. "As soon as one asserts something works, the medical side wants to take charge of it in terms of licensing. It's a double-edged sword: you want strong evidence that something like meditation works, but then the whole licensing issue arises...along with the complex issue of how such a practice could be regulated."

Jeremy Abbate argued, however, that regulation is a crucial issue, calling attention to the recent debacle over supplements that didn't contain what they claimed (and could have been harmful). "Regulation is very important, but it's a whole different animal when you're talking about a product that has to go thru FDA scrutiny, vs. a practice like yoga where there is no tangible 'product.' So it's not only the analogy of David and Goliath that applies to wellness vs. pharma, it's also "apples and oranges."

Dr. Alderman added that while more trials on wellness approaches were key, that "funding rates on all health studies (whether from organizations like the National Institutes of Health or the National Science Foundation) are at an all-time, abysmal low. All scientists have to do more with less."

The recommendation: More private, and public-private funding of wellness studies needs to get organized, because it's scientific evidence that convinces policy-makers and the medical establishment.

4. A Better Understanding of the Nature of – and More Appropriately Designed - Wellness Studies:

The leaders gathered also discussed several unique challenges for clinical trials on wellness approaches, and how attempting to superimpose the dominant medical paradigm of the double-blind, controlled trial can sometimes be like “fitting an apple into an orange.”

Jeremy Abbate noted several unique aspects of wellness trials: “A placebo model certainly doesn't work for a meditation or exercise study, as the participant certainly knows they're experiencing it. And wellness interventions are often performed by practitioners, so can't be uniformly replicated or regulated like a pill.” Beth McGroarty (GWI research director) added that the typically short (because under-funded) trials on wellness fail to capture the most meaningful outcomes for what are mostly long-term, prevention-focused approaches. She also pointed out that all personalized medicines, like TCM and Ayurveda (with individualized diet and prescriptions), defy the randomized trial model entirely, along with the fact that most studies on wellness approaches are performed on sick people (in a hospital setting), providing a limited view of their efficacy.

And Professor Tabacchi (Cornell University) noted that clinical trials, which isolate the impact of a single mechanism, can't speak to true wellness, which is by nature holistic, and includes food/nutrition, exercise, mindfulness/mental wellness, etc. Another challenge: the Western medical establishment's bias against non-Western medical institutions, which is where a high volume of wellness studies are undertaken.

Neil Jacobs (CEO, Six Senses) pointed out that this drive for sufficient medical evidence on wellness approaches was a “very American/Western conversation.” “This is not something that preoccupies people in a Beijing or Delhi, where their 5,000-year-old systems of medicine have proven effective. The interesting piece for me is that in West we *intuitively* know that so many of these approaches work, even though we may not have all the evidence we'd like.” And Jacobs went on to stress that wellness is a much more consumer, than evidence-driven,

market. “We know the trillions of dollars being spent on wellness, we know how many High/Main street yoga studios exist now compared to ten years ago. Perfect evidence or not – this train has left the station and is not coming back.”

The recommendation: While all clinical trials should of course adhere to the scientific method as closely as possible, the medical establishment (and the world) needs greater openness to analyzing (and valuing) outcomes from studies that sometimes necessarily fall outside the double-blind (and even randomized) testing models.

5. Doctors Need to Expand Their Understanding of the Wellness Concept & Consult the Evidence:

Despite growth in integrative medicine, the medical experts at the roundtable agreed that the vast majority of physicians still narrowly equate wellness with testing (i.e., mammograms, osteoporosis checks, etc.), at which point, as Dr. Steven Gundry (Int’l Heart & Lung Institute Center for Restorative Medicine) wryly noted, “we’ve already missed the boat.” And Dr. Alderman argued that, “In many medical departments, ‘wellness’ has a negative connotation, and because it involves a holistic approach (for example, departments that emerged in the 90s that combined exercise, nutritionists, etc.), wellness has been viewed as “weak science.”

And while almost all doctors turn to evidence-based medicine databases (PubMed, Cochrane, etc.) to evaluate best courses of treatment, Dr. Gundry curtly responded that “almost none” consult those same databases for studies on wellness approaches. And he further explained that the lion’s share of a U.S. doctor’s required continuing medical education comes via drug companies. “Most of the medical education a doctor gets after leaving school is a five minute encounter with a gorgeous young person (a pharmaceutical rep). Doctors are required to have 100 hours of continuing medical education (CME credits) a year, but 99 percent of the info they acquire is channeled, one way or another, via drug company spokespeople.” And he explained there’s obviously no force on the ground for (and no CME on) things like exercise or meditation, because there’s obviously no “Big Wellness” with big dollars.

Dr. Gundry also shared his just-submitted research to the American College of Cardiology, reminding the panel just how powerful the medical evidence for wellness can be. For twelve years his clinics have been using sophisticated, standardized blood tests to track the effect of

diet adjustments and certain supplements on 10,000 people with coronary artery disease (the impact on inflammation and vascular reactivity, etc.). Their findings: only one percent in the diet and supplements program needed a new heart procedure in three years, vs. a 50 percent average for those receiving standard care.

The recommendation: Medical systems, insurers and policy-makers must support more physician education around – and the “prescribing” of – wellness approaches like diet change, exercise, etc.

6. More Media Responsibility in Communicating Wellness Info:

If people are unlikely to get wellness information from doctors, a lively discussion ensued about how they’re devouring it at media channels, where there’s an explosion of reporting on the latest wellness studies (no matter how small) and “miracle” breakthroughs.

As Katherine Johnson (Sr. Economist, SRI) put it: “Right now the only channel broadcasting the medical evidence for wellness is the media, and the average American will conflate ‘wellness info’ with what they hear on a Dr. Oz or Oprah. There’s so much confusion and noise, and little, true knowledge of what medical evidence is most strong.” Anna Bjurstram (VP, Six Senses; owner, Raison d’Etre) added: “It’s so hard to put faith in all these “based on science” claims when there’s so much contradiction. Today we’ll hear goji berries are the answer, but, remember, the food advice we’ve been served historically has also claimed to be ‘based on science,’ and in the 50s that meant eat a lot of sugar, corn and starch.”

The rise of digital, the panel agreed, has been a double-edged sword: empowering people with unprecedented sources of health information (Google just reported that one in twenty searches is health-related), but also confusing people with contradictory, often un-contextualized new findings.

Clare Martorana explained that when we talk about “media” and wellness info, we have to understand the digital divide. “We have 50 million people a month seeking health and wellness info at *Everyday Health*. Other big health properties (and our partners) like Mayo are driving hundreds of millions. People are seeking this information so intensely, well beyond

print, TV or doctors.” Jeremy Abbate added: “We talk about the patient empowerment movement, and digital is a whole new world where the traditional faucets of medical information have gotten circumvented...opening up channels to communicate with people we never would have communicated with, and help them find solutions in an empowering way.” Mantorana also argued that there is an unleveraged research opportunity in taking all this consumer health information and personal evidence raging on digital and applying it for new medical insights.

Susie Ellis (GWI) also pointed out that the Internet has made possible evidence-based medicine databases that give people the same access to the world of medical studies that doctors have, and also allow people to return results based on the quality of the evidence. “Given all the confusion around the spawning wellness studies presented in the media, it’s surprising how few people know about these databases. And that’s why the GWI launched WellnessEvidence.com: it’s the first portal that makes it easy to search the most authoritative sources of evidence-based medicine for 20+ of the most common wellness approaches – from music therapy to smoking cessation.”

Anne Hubert (SVP, Viacom Media Networks) also pointed out that there are now so many more “voices” in the global wellness discussion beyond research, doctors, journalists or experts. “There is just so much marketing and selling of wellness (look no further than Tim Cook telling you the Apple Watch will alert you when you’re sitting too long, McDonald’s promoting Egg McMuffins with real eggs, or CBS rebranding as CBS Health). So many wellness voices and brands are being absorbed into the organism of pop culture, and peoples’ consciousness, so broadly.”

The recommendation: More media responsibility, and more peer reviewing, curation and contextualizing of wellness studies by medical professionals, is needed.

7. Stop Putting Wellness in the “Alternative Medicine” Bracket, If You Want to Serve Millennials:

Entrenched healthcare systems and older generations have viewed medicine and wellness as separate, even antagonistic, domains, but the experts gathered agreed that the millennial (and younger) generations view health in an unprecedentedly holistic way.

Anne Hubert of Viacom, where much work is centered around millennials, argued: “That generation really does look at whole topic of health very holistically, and for them wellness (diet, exercise, etc.) is a core part of what health means...It’s not an alternative. It’s not secondary. It’s very much a piece of the healthcare puzzle for them.” Jeremy Abbate added: “I see millennials as not mired in the burdens of the siloed nomenclatures (i.e., “medicine,” wellness”) of the past.”

Recommendation: Medical systems and marketers that want to reach younger generations need to embrace that new reality. And the roundtable strongly agreed that because health habits are set almost from the womb we need to reach people on every front when they’re very young. Wellness is not alternative medicine when looked at from a global perspective – and that is increasingly *the* perspective.

8. Recognize That Private Companies Are Often Leading in Applying Science to Wellness:

Wellness is a \$3.4 trillion,² consumer-driven market, and the group discussed how it’s often private companies and public-private partnerships that are applying “science” to new wellness concepts the fastest and most creatively – and often out in front of the medical and policy worlds.

For instance, Alfredo Carvajal (President, Delos International and Signature Programs, Delos) shared how his company is bringing evidence-based, active and passive wellness features into all the places that humans live...from homes to offices. And how their initiatives involve private-public partnerships with very respected medical organizations: from Delos building a lab with the Mayo Clinic to test and develop new “healthy for humans” architecture/design features, to helping form a new, global WELL Building Standard (generated with organizations like the Mayo and Cleveland Clinics and construction powerhouse Webcor) that gives architects and construction companies worldwide the standards to build spaces that are healthy for humans – analogous to what LEED accomplished for sustainable-for-the-Earth building.

Dr. Nazlie Latefi (Chief Scientific Officer, Pegasus Capital Advisors) explained how one of the companies in their portfolio, Lighting Science, has developed innovative technologies that

² Global Wellness Institute, “Global Spa & Wellness Economy Monitor,” 2014

can match indoor lighting to natural outdoor light, to keep peoples' circadian rhythms in line. "We believe that the human body is an ecosystem in and of itself, and that the built environment is a crucial extension of our bodies."

And the panelists discussed extraordinary, billion-dollar, new "healthy cities" being built around the most expansive concept of wellness imaginable: incorporating hospitals, all-ages education, every kind of fitness, and even growing one's own food. (From the already-built Lake Nona (Orlando, FL) - to new projects coming in Vietnam, Lombok, Spain and Beijing (the latter through a partnership with the University of Peking).

Recommendation: As Alfredo Carvajal put it, "Policy and medicine move too slow, and we cannot wait for WHO to create a wellness division. Private companies and public/private partnerships are not waiting for anybody. We need corporations to invest in wellness, and people who want to create a healthier world need to look to them for investment."

9. Workplace Wellness Needs to Move Beyond the ROI Obsession and Focus on Culture Change:

A key discussion point was how companies are adopting workplace wellness programs at an explosive rate, but how so many things are holding them back.

One discussion thread was how there's an avalanche of reporting on workplace wellness programs' ROI, but it typically doesn't measure results/returns against specific program components. One participant noted: "The media is obsessed with employee wellness program ROI, and the RAND study, which everyone saw, is a good example of that. But what doesn't get discussed is, when you say 'workplace wellness programs' what are you really talking about? Is the program limited to a 'lunch-and-learn,' or is there onsite coaching, registered dietitians and ongoing mindfulness classes?"

David Brancaccio discussed a few encouraging and discouraging things set to make headlines in the business media (and at NPR), suggesting that employee wellness may be turning into a "have/have not" situation. He recounted his colleague Dan Gorenstein's recent story about the number of companies embracing wellness programs being on track to double this year. But he's also investigating a story on how companies are increasingly profiting from penalties exacted from the most program resistant/high-risk workers...meaning that companies are

realizing that they can rake in money while nobody's behavior changes. At higher corporate echelons, meanwhile, executives in sectors like financial services (at companies like Goldman Sachs) are embracing meditation, while Jon Kabat-Zinn led a daily mindfulness program for world leaders at the last World Economic Forum in Davos.

The recommendation: Stop obsessing over ROI, until your workplace wellness initiatives are meaningful, and focus on honest, top-to-bottom culture change. With workplace wellness, think “beyond the program.”

10. Governments Need to Grasp That Health Is Wealth:

Policymakers often perceive “wellness” as a matter of individual decisions and personal wellbeing, but the leaders gathered agreed that the physical and mental health of national populations - and those nations that do the best job of executing on preventative health approaches - will increasingly become the economic and political powerhouses.

Josef Woodman explained that countries like South Korea, who do a good job with prevention, have been able to keep their healthcare spending around 8.9 percent of GDP, while still covering all citizens. “Which means they have 8 percent more than the U.S. does to take care of things like education and infrastructure. Wellness is a huge, systemic issue that will increasingly decide not just the economic health of nations, but of our planet.” Alfredo Carvajal agreed: “Unwell populations aren't just a social issue, they're an economic one. Health *really* is wealth, and we're reaching a point where we can't afford so much sickness, and are becoming poor.”

Recommendation: While government policy can be the toughest “nut” to crack, and legislation moves slow, the roundtable agreed that more policy-makers must be convinced. Jeremy Abbate drilled home the fact that “policymakers have so much power to set the health agenda, and their decisions about what to prioritize affect the broadest swath of people in society. And you're going to need evidence and science to help them prioritize.” Suzanne Warfield, who deals with legislators daily, argued that advocating for, and educating them on, prevention and wellness, whether at the national or state level, has to be relentless. The message needs to be loud and clear: countries focusing on prevention, and who can get healthcare spending under 10% of GDP, will increasingly have a global advantage.

Co-moderator Jeremy Abbate summed up the roundtable:

“I’ve never been at a forum where such a multiplicity of perspectives was represented. There is so much to accomplish, and to move forward it can’t be medicine vs. wellness, it has to be ‘health.’ Because we’re all in this together, and we can all see, and help solve, different pieces of the puzzle. And this is a conversation I want to continue with more silos and stakeholders everywhere...”



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