



MEDICATION MANAGEMENT

AGING WITH VITALITY

VITAL SIGN MONITORING

CARE NAVIGATION

EMERGENCY DETECTION & RESPONSE

PHYSICAL FITNESS

DIET & NUTRITION

SOCIAL ENGAGEMENT

BEHAVIORAL & EMOTIONAL HEALTH

UPDATED: AUGUST 2014

HEALTH INNOVATION FRONTIERS

DYK?

The 50+ “longevity economy” is the third largest in the world. In fact, only the United States and China are larger. Did you know that’s \$7.1 trillion dollars in annual economic activity?

SO WHAT'S YOUR 50+ STRATEGY?

Rarely has such an untapped opportunity existed for entrepreneurs, investors, and others in the private sector to generate revenues while meeting the greatest wants and needs of a substantial, influential, and important population.

As boomers age, their proportion of the 50 and older population grows rapidly—along with their health needs. The medical system's efforts traditionally are oriented towards sickness rather than health, and treatment rather than prevention—thus leaving a 'healthy living' gap. Large opportunities exist for new and meaningful investment aimed at meeting healthy living needs of all ages.

GUESS WHICH EMERGING MARKET WILL DRIVE ECONOMIC GROWTH IN THE US?

Imagine for a moment that you have access to a mammoth untapped market that is hidden in plain sight. It is worth billions.

Imagine further that this hidden market is like a new country on the map of the world—a bustling, rapidly expanding territory of *106 million people* associated with *\$7 trillion in economic activity each year*. No country except China and the U.S. would be a stronger force in the global economy.

Finally, imagine that many of the transformative disruptions in other markets—new business models, new players, and mobile and other technologies—have largely bypassed this country. Investors, entrepreneurs and incumbents wrongly assumed that this market couldn't be tapped, especially if it involved technology.

Such a place exists, and it is all around us. Call it the Land of Longevity—the size of the market involving Americans over 50. Productive older workers, second-careerists and retirees will within 17 years account for more than half of the U.S. gross domestic product. Older Americans will soon outnumber children, not only

because of population growth but because they are living longer. Few markets possess consumers who are so numerous and will be around for so long.

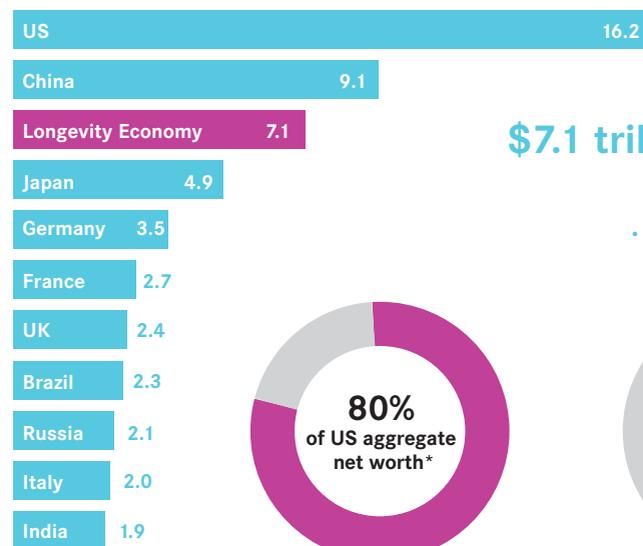
These consumers account for \$3.1 trillion in consumer spending, \$1.6 trillion in healthcare spending, control 80 percent of net worth, and dominate consumption in most CPG categories, as well as financial services, and travel and leisure.

Yet for all that, this huge market is in many ways untapped, and the priorities of this massive population are often unaddressed by market players.

THE \$30 BILLION HEALTH AND WELLNESS MARKET FOR THE 50+

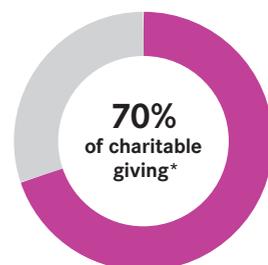
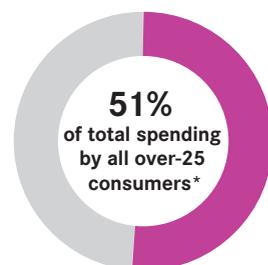
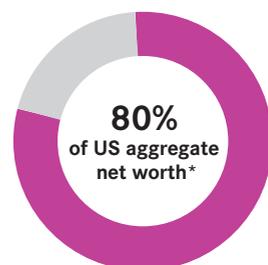
Just how large is this untapped market? Consider just the industry involving healthy living. In this second edition of the Health Innovation Frontiers Report (Sept 2014), the health industry research firm Parks Associates, working with AARP, estimates the opportunity to serve the 50+ with Health and Wellness products/services to generate \$30 billion in cumulative revenue over the next five years (2014-19), across nine areas of Digital Health Innovation.

This \$30B+ out-of-pocket consumer spend on digital health solutions is incremental to the estimated current aggregate revenue



The 50+ is responsible for over \$7.1 trillion in annual economic activity:

- \$3.0 trillion in consumer spending
- \$1.6 trillion in health care spending



of \$68 billion revenue from out-of-pocket spending on existing analog healthy living solutions by 50+.

While the overall market outlook for out-of-pocket consumer health spend remains the same around \$100B over five years, the shift from analog to digital health technologies signals a positive outlook of an innovation driven tech economy.

INVESTMENTS ARE MULTIPLYING IN DIGITAL HEALTH TECH THAT ADDRESS THE 50+

In a recent investment report published by Startup Health, the total Digital Health investments nearly tripled during the period 2010 to 2013.

Relatively, the funding in the digital health space relevant to people 50+ (defined as products and services of relevance to people 50+ across these nine categories of

health) represented 53% of all digital health investment dollars in 2013.

Rarely have such opportunities existed for entrepreneurs, investors and incumbents to generate revenues while meeting the greatest wants and health needs of a substantial, influential and important population. Rarely have such opportunities gone so broadly and so long untapped.

The impact of new market solutions in the Land of Longevity would be more than financial. As this research indicates, investment in new opportunities for health-related innovations would have a huge social return. Innovations in products, services and business models can benefit some 106 million people in ways that have been unaddressed by the broader health-related marketplace.

This report provides Investors, entrepreneurs, and incumbent companies the forecast, insights and guideposts in navigating this surprisingly overlooked market.

Investments related to the 50+ market continue to grow at the pace of investments in the larger digital health and wellness market

TOTAL FUNDING



59% increase in 50+ funding between 2012-13

4X increase in deal flow between 2012-13

53% of all health funding is in the 50+ market

AN ENTREPRENEUR AND INVESTOR FIELD GUIDE TO HEALTH FRONTIERS

How to make the most of opportunities in this market? Here's a field guide to the land of longevity, based on the latest analysis of health innovation frontiers. Some of the key opportunities and trends we see in the market:

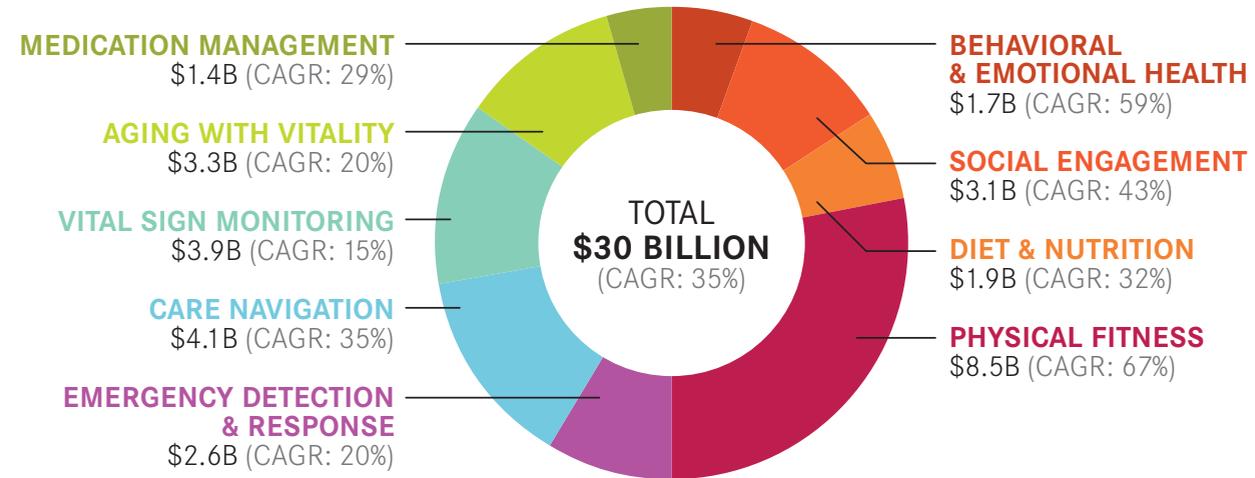
- **Be ready for the coming turnaround**
Consumer awareness of health solutions, for so long targeted at health system reimbursement, is about to shift. The entry of Apple, Google and Samsung signals an emerging marketplace belief that the US is on the cusp of a profitable consumer-driven health ecosystem that will thrive across new channels.
- **Leverage the trust gap**
Lack of a trusted consumer brand in this space creates an opportunity for non-traditional players to capture mindshare & market share around the Health and Wellness category.
- **Focus on the caregiver**
Solutions can overlook the involvement of an informal caregiver, who is often both a user and the buyer.
- **Bridge the technology/3P divide**
The regulated health sector—payers, providers and pharma—have been slow to react, leaving a huge gap for innovators who can break into traditional channels or provide compelling alternative business models.
- **Defend or extend—disrupt from the outside**
Services such as Yelp, Angie's List and Uber are moving into health-related territory. You can, too.
- **Span the silos**
For all the innovation in devices, sensors and wearables, holistic crossover remains elusive and walled gardens almost epidemic. Interoperability can be achieved technologically—but demonstrating ROI will take a compelling business model.
- **Consolidation is a good sign**
With more consolidation and roll-up of companies, fragmented solutions are coalescing, leading to more compelling models for consumer engagement. Example: melding of remote monitoring, medication adherence and social engagement in caregiving solutions.
- **Make innovations affordable**
Reach millions of older people on fixed incomes by developing new business models to subsidize cost. High adoption will follow.
- **Turn data into actionable knowledge**
For all the available data sets and efforts by government agencies to spur innovation, private sector players have taken little more than baby steps to contribute data or create actionable knowledge.
- **Make innovations usable**
Innovators have delivered on technology but not usability: universal, human-centered design. Poor design and aesthetics still limit usability among older consumers. Why target younger people where markets are already saturated when millions of others await cutting-edge technology more adapted for their use?
- **Beyond sensors**
We are witnessing a great explosion in biometric devices, trackers and sensors in, on and around you. What we need to see is more innovation in consumer behavioral science and data analytics, both at a personalized level, and at a population level.
- **It's behavior, not just biometrics**
The market has yet to realize the full benefits from ambient connectedness—the ubiquity of devices, trackers and sensors. Behavioral science and data analytics for individuals and populations—together with usability—hold keys to commercial success and adoption.
- **Boldly tackle Direct-to-Consumer**
While venture capital typically favors business models with low customer acquisition costs, enterprise health IT, medical devices, and shuns models involving behavior change, those who play it safe now will miss the boomer bonanza.
- **Change the conversation**
Overhaul the message: it's not aging in place, it's independent living. It's not being sick or stuck, it's about living life well or better. It's not impairment—it's enhancement. To drive awareness and adoption among the 50+, reframe marketing from focusing on the frail and aged—to healthier living.

NINE AREAS OF OPPORTUNITY:



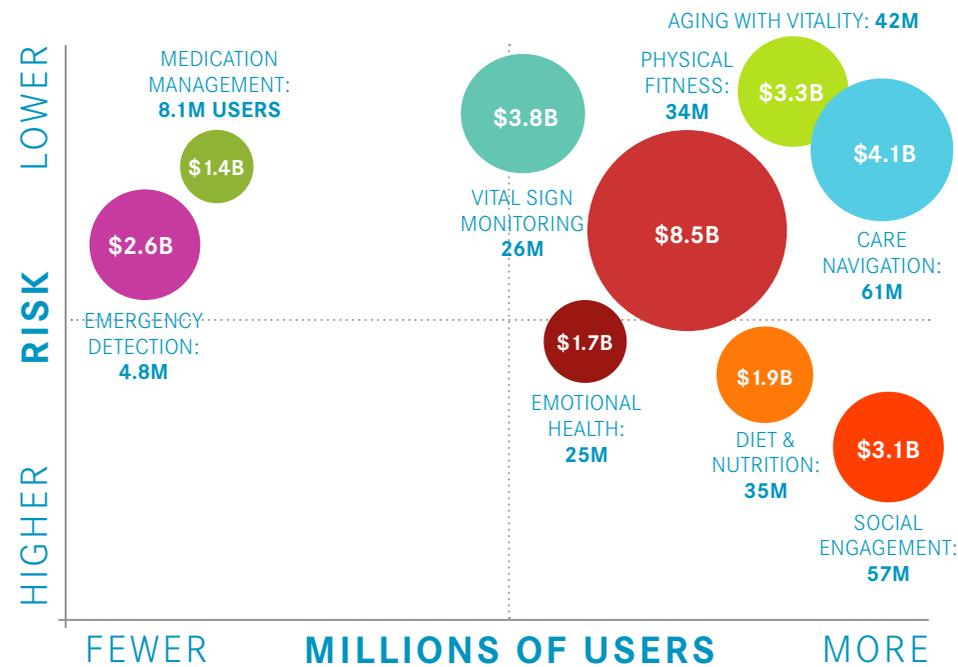
HERE ARE THE NUMBERS

TOTAL CUMULATIVE FIVE-YEAR REVENUE POTENTIAL FOR NEW HEALTHY LIVING SOLUTIONS: **\$30,000,000,000**



MAX REVENUE, MAX USERS, & INVESTMENT RISKS:

The investment risk for the nine market areas are measured by revenue opportunity variance (more attractive opportunities have lower risk levels).



A LITTLE MORE ABOUT EACH AREA

MEDICATION MANAGEMENT

Medication information, reminder, tracking tools, and compliance services

AGING WITH VITALITY

Hearing & vision health, preventive aging care, cognitive & brain health, and everyday life support tools/services

VITAL SIGN MONITORING

Health sensors, diagnostic devices, vital sign monitoring enabling technologies, monitoring solutions

CARE NAVIGATION

Care records/expense management, provider directory & marketplace, care review and comparison, care planning tools, care coordination solutions

EMERGENCY DETECTION & RESPONSE

Home sensors, PERS/fall detection, location tracking, activity monitoring

PHYSICAL FITNESS

Fitness devices, apps, programs, enabling solutions

SOCIAL ENGAGEMENT

Mobility assistance, “digital inclusion” solutions, online patient community and peer-to-peer support

DIET & NUTRITION

Nutrition content and education, diet and nutrition tracking tools, management programs, meal plan/delivery/cooking solutions

BEHAVIORAL & EMOTIONAL HEALTH

Companionship solutions, support group/community, behavioral modification/self-help solutions, stress/emotion management/therapies

THE



VISION

AARP's vision is to catalyze innovation and entrepreneurship in the market place around breakthrough products, experiences, and business models for health technologies benefiting the 50+.

At AARP we are collaborating with the industry in the following areas::

- **MARKET OUTREACH:** Raising awareness of the market opportunity, needs, and wants of the 50+
- **MARKET DEVELOPMENT:** Influencing ecosystem development for consumer centric health tech for the 50+
- **INNOVATION SHOWCASE:** Creating platforms for showcasing innovative technologies
- **MEMBER INVOLVEMENT:** Engaging AARP members in providing early feedback on emerging trends and innovation

HEALTH

INNOVATION

FRONTIERS

UNTAPPED MARKET OPPORTUNITIES FOR THE 50+



DOWNLOAD THE FREE 2014 REPORT

You can download a free copy of the full report from <http://goo.gl/YfWb6U>.
Other Health Innovation Insights can be found at <http://www.aarp.org/50plusinsights>.

AARP® is a 37 million-member-strong nonprofit, nonpartisan organization that helps people turn their goals and dreams into real possibilities. We strengthen communities and fight for the issues that matter most to families, including healthcare, employment security, and retirement planning.