

Ensuring the Best Care for Our Increasing Aging Population: Health Engagement and Positive Technology Can Help Patients Achieve a More Active Role in Future Healthcare

Brenda K. Wiederhold, PhD, MBA, BCIA,^{1,2} Giuseppe Riva, PhD,^{3,4}
and Guendalina Graffigna, PhD

THE AGING POPULATION (those aged 60 and over) continues to grow at a faster pace than at any time in human history. It is projected that by 2025 there will be 1.2 billion people in the world who will be 60+ years of age. This trend will only continue to grow as we advance further into the 21st century, as there will be an estimated 2 billion people aged 60+, 1.6 billion of them living in developing countries. In European countries, those 65+ years of age will make up 23.5% of the population by 2030 according to the World Health Organization.

It is obvious that older generations will continue to make up a greater proportion of the world population in the 21st century. Unfortunately, healthcare systems throughout much of the world are still based on 20th-century processes. This is leading to an ever-growing burden on our healthcare system. To meet the challenge of providing high-quality healthcare while keeping the costs and burdens within reasonable levels, we advocate shifting the current healthcare structure from a "disease-centered model" to a "citizen/client model" oriented to sustain patients' participation in the management of their care.

Due to advances in treatment and people living longer, chronic diseases are becoming more common amongst our population. This is contributing to the increasing burden on our current healthcare system. In fact, more than 83% of money spent on European Union healthcare each year goes toward the treatment of chronic diseases such as heart disease, stroke, cancer, and more. This trend is expected to continue burdening the health economic system over the next 10 years.

In order for us to reduce this burden and sufficiently meet the needs of this growing segment of the population, healthcare organizations must have people take a more active role in their own health and well-being. A critical step toward this goal is patient engagement.

The academic and managerial interests in patient engagement are vertiginously growing daily and are becoming a

must for researchers, industries, and policy makers in healthcare arenas worldwide:¹ from the January 1 to May 12 2013, 28,300 new web indices appeared on Google.com with the key words "patient engagement." Consistently, the US Department of Health and Human Services recently identified the goal of improving patients' understanding of their health and related conditions so they take a more active role in their healthcare as the second of five health policy priorities.

Here, we suggest conceptualizing patient engagement as the experience resulting from the conjoint emotional (feel), cognitive (think), and conative (act) enactment of individuals in their management of the health issue.¹ The lack of synergy among these dimensions inhibits patients from full engagement, limiting the benefit of healthcare programs.

Technology may offer a solution to this shortcoming. "Positive Technology"² focuses on the use of technology for improving the quality of our personal experience, suggesting specific strategies to modify/improve each of the different dimensions involved, and generating motivation and engagement in the process.³

The use of Positive Technology tools and strategies allows the expansion of healthcare beyond the traditional doctor's office and hospital to include advanced simulation technologies such as virtual reality or augmented reality, and spontaneous peer networks that encompass and utilize Web 2.0 properties (blogs, online communities, etc.) that are main fixtures of 21st-century living.^{4,5}

Such a change from a disease-centered to a citizen/client model based on the engagement of patients in the management of their care thanks to positive technology will also benefit elderly people who are not as mobile and who cannot easily obtain the proper care from the current doctor's office/hospital setting where healthcare is commonly administered. This will allow the technological innovations constantly being

¹Virtual Reality Medical Institute, Brussels, Belgium.

²Virtual Reality Medical Center, San Diego, California.

³Applied Technology for Neuro-Psychology Lab.—ATN-P Lab., Istituto Auxologico Italiano, Milan, Italy.

⁴Interactive Communication and Ergonomics of NEW Technologies—ICE-NET Lab., Università Cattolica del Sacro Cuore, Milan, Italy.

developed to provide greater help and care in enabling these people to live more normal, happier, fulfilling lives, further benefiting our community.

Patients' engagement will transform our healthcare system at every level, from an individual and community level to an organizational, socio-economic, and political level. By encouraging a patient and community's sense of control over disease, this will give a greater feeling of empowerment over disease, which will only aid further advancement toward new and better treatment of current and future diseases.

We believe it is vital to both the economic structure and the performance record of healthcare throughout the world that the healthcare system is changed from its current doctor's office/hospital model to a model where the community is actively engaged in its own treatment, its own well-being, and in administering new technologies. This change will make our elderly population's lives easier and more fulfilling while reducing the economic burden on our stressed healthcare system.

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