# Chapter 1 Well-Being, Wisdom, Health, and IT: From the Big-Picture to the Small-Picture

Andrew Targowski Western Michigan University, USA

### **ABSTRACT**

"Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease of disease or infirmity." -Preamble of the charter of the World Health Organization

The purpose of this study is to define a comprehensive solution for the improvements of lives of Americans. It is assumed that health is one of the three major constituents of life. The other two are well-being and Health Information Infrastructure. A lack of one of these minimizes the chance for Americans, and in general humans in any country, to lead good lives. It will be a quest for the answer to the question of how to minimize civilizational negatives, particularly in the area of health and its quickly rising costs. Key goals and strategies are defined by improving well-being and health of Americans. Issues such as wisdom and intelligence of the society are evaluated in the context of mental health, prevention, and lifestyles. Special attention is given to the issues of health-care quality and costs and the role and architecture of the Health Information Infrastructure. The conclusion evaluates the chances for implementing the proposed solutions.

### INTRODUCTION

The purpose of this study is to define a comprehensive solution for the improvement of lives of Americans. It is assumed that health is one of three major constituents of vigorous life. The

other two are well-being and Health Information Infrastructure. A lack of one of these minimizes the chance for Americans, and in general humans in any country, to lead good lives. This approach is a civilizational approach that begins with the evaluation of life expectancy through millennia in

DOI: 10.4018/978-1-4666-3986-7.ch001

different timeframes and countries or civilizations in general. It will be shown that the Industrial Revolution's impact upon humans' lives was tremendous and business played the key role in delivering advanced goods and services for the well-being of Americans. However, its high productivity and growth leads us to the Death Triangle of Civilization in the second part of the 21st century. It triggers many issues in respect to the declining well-being and health of the Americans. In the further study it will be a quest for the answer to the question of how to minimize those negatives, particularly in the area of health and its too fast rising costs. The key goals and strategies will be defined as improving well-being and health of the Americans. Such issues as wisdom and intelligence of the society will be evaluated in the context of mental health and prevention. Special attention will be given to the issues of health care quality and costs and the role and architecture of the Health Information Infrastructure will be offered too. At the end, conclusions will evaluate the chances for implementing proposed solutions.

# THE CONTOURS OF WORLD CIVILIZATIONAL DEVELOPMENT

In the year 1000 A.D., average life expectancy at the world level was probably about 24 years—not much worse than in 1820 – 26 years. The rise was biggest from 24 to 36 years in Group A (Western-West Civilization [Western Europe and Western Offshoots]). Since then has risen to 78 years in 1999. In Group B (Latin America, Eastern Europe, Russia, Asia (excluding Japan), Africa) there were no improvement between 1000 and 1820. However, between 1820 and 1999 it had grown dramatically to an average of 64 years (Maddison 2001).

This very impressive growth of life expectation is supported mostly by world economic development. It was much better in the second

millennium of our era than in the first. Between 1000 and 1998, population rose 22-fold and per capita income 13-fold. In the first millennium (0-1000), population rose by a sixth and per capita GDP fell slightly.

In the 1000-2000 millennium, one can recognize two phases of civilizational. From 1000 to 1820 the upward growth per capita income was slow. For the whole world, the rise was about 50 percent. It was "extensive" growth, generated to accommodate a 4-fold growth of population. Since 1820 (Industrial Revolution), world civilizational was more "intensive," driven by industrial methods such as innovations and productivity. In effect, per capita income rose faster than population; by 1998 it was 8.5 times as high as in 1980, population rose 5.6-fold (Maddison 2001).

The pace of change within the world's regions has been uneven. There were major disasters in the 6<sup>th</sup> (Bubonic Plague) and 14<sup>th</sup> (Black Death) centuries in Europe. Until the 19<sup>th</sup> century population growth was interrupted by hunger crises due to harvest failure, waves of infectious disease, or war. A major instance of this type of crisis was the potato famine which doubled the normal death rate in Ireland over the six years 1846-51. "Excess" deaths were nearly one million or about 12 percent of the 1845 population (Grada 1988). In the 20<sup>th</sup> century, just after the end of World War I, the Spanish Flu (1918-1919) epidemic in Europe killed more people (50-100 million worldwide) than that war (20 million).

Until the Age of the Industrial Revolution, civilization was developing very slowly, in harmony with the *Malthusian Trap* (Figure 1) which means that the population growth was steered by the supply of food. According to Gregory Clark (2007, p. 1), "the average person in the world of 1800 was not better off than the average person of 100,000 B.C. Indeed in 1800 the bulk of the world's population was poorer than their remote ancestors." The material lifestyle in England and Netherlands was relatively good, but people in

## 26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/well-being-wisdom-health/77134

### Related Content

### A Threat Table Based Assessment of Information Security in Telemedicine

John C. Pendergrass, Karen Heart, C. Ranganathanand V. N. Venkatakrishnan (2014). *International Journal of Healthcare Information Systems and Informatics (pp. 20-31).* 

www.irma-international.org/article/a-threat-table-based-assessment-of-information-security-in-telemedicine/124117

### The Evolution of Comorbidities in Hospital Administrative Databases: A 15-Year Analysis

Alberto Freitas, Isabel Garcia Lemaand Altamiro Costa-Pereira (2017). *International Journal of Reliable and Quality E-Healthcare (pp. 29-39).* 

www.irma-international.org/article/the-evolution-of-comorbidities-in-hospital-administrative-databases/177301

### Advanced Video Distribution for Wireless E-Healthcare Systems

Anna Zvikhachevskayaand Lyudmila Mihaylova (2012). E-Healthcare Systems and Wireless Communications: Current and Future Challenges (pp. 349-374).

www.irma-international.org/chapter/advanced-video-distribution-wireless-healthcare/60198

### Retinal Blood Vessel Extraction From Fundus Images Using Improved Otsu Method

Jyotiprava Dashand Nilamani Bhoi (2019). *International Journal of E-Health and Medical Communications* (pp. 21-43).

www.irma-international.org/article/retinal-blood-vessel-extraction-from-fundus-images-using-improved-otsumethod/224001

### Guided Test Case Generation for Enhanced ECG Bio-Sensors Functional Verification

Hussam Al Hamadi, Amjad Gawanmehand Mahmoud Al-Qutayri (2017). *International Journal of E-Health and Medical Communications (pp. 1-20).* 

www.irma-international.org/article/guided-test-case-generation-for-enhanced-ecg-bio-sensors-functional-verification/187053