

FUTUREtakes

Transcultural Futurist Magazine

ISSN 1554-7744

Vol. 3, no. 4 (Winter 2004-2005)

Look what you missed!

Megaforces Changing Health Care How will we receive care in 2025?

synopsis of the October 27, 2004 WFS Washington DC Chapter dinner program presented by Dr. Bill Rowley; summarized by Darlow Botha

What megaforces are changing healthcare as we know it, and what kind of healthcare might we expect in 2025? When will diseases like diabetes, cancer and heart disease be eliminated? Can we live until the ripe old age of 125? What would the world be like if the focus of health care shifted from treating diseases to preventing them and creating health? How can our health care system evolve to effectively cover all Americans while being cost effective and of high quality? Or, is healthcare doomed to become even more dysfunctional and expensive in the coming years? Do we even know what we want with healthcare? These questions were among the issues addressed by Dr. Bill Rowley, a noted healthcare futurist, at the chapter dinner program on October 27, 2004.

RAPID TECHNOLOGICAL ADVANCES

Dr. Rowley addressed a comprehensive range of questions and issues of health care, from now through the next twenty years. Tremendous advances in technology impact health care – an 18 month doubling in computer technology affects many other technologies, importantly the information technology that determines how we acquire and apply our knowledge. He explained the time scales of change – less than two years for computers, 10 years for applications, 10 years to decades for societal changes, and centuries to eons for human nature.

SUPERLONGEVITY

We have already seen how advances in both medical care and knowledge of the human condition, along with increasing insight into physical (diet), mental (stress, mental attitude), and societal (a sense of belonging and purpose) aspects of health, have increased human life span significantly. Cellular biology continues to unfold the modes of aging, illustrating the potential to reverse many of the trends. Improved public health measures, nutrition, and medical knowledge over the last century can be viewed as stage 1 on the way to super longevity. The next stage is envisioned to last through most of this century, maybe extending the average lifespan to 175 years through continuing advances in science and research on all fronts. In stage 3 we can imagine near-immortality exceeding 300 years! It is even envisioned that nanobots will roam through the body, policing, even repairing degenerative processes!

INCREASING LEVEL OF CONSCIOUSNESS

Asks Rowley, who wants it? Who will get it? And – will society use this power wisely or abuse it? We have philosophical models: Maslow's hierarchy of needs; Spiral Dynamics' 8 states of development, from instinctive-survival to holistic; one from Ken Wilbur relating the individual (interior and exterior) to the collective (cultural and social), which offer the possibility of understanding the implications of radical changes in longevity.

BUT WHAT IS HEALTH?

We haven't really answered this question, even though we spent \$1.8 TRILLION on Health and Health Care. Is health solely the absence of disease? How will future societies view health and health care? Rowley offers a view of health as a wholeness on all levels – mental, emotional, spiritual, social, and environmental, in addition to the physical. The new view of health must encompass all of these aspects.

Says Rowley, we must build on societal creation, the external environment providing the opportunity for the internal environment to build a high level of control supportive of health in the broadest sense, eliminating the self-destructive effects of bad diets, smoking and drinking. The traditional approaches must also focus on poverty and the community that greatly affect the quality of life, which in turn impact both internal and external positive experiences of self-worth and motivation to responsibility and stewardship to community at all levels. These are all factors with far greater impact than the absence of disease.

In this manner, the focus of health shifts – from I to we to us to all of us. As important qualities, Rowley suggests equity, fairness, solidarity, sustainability, and individual preference, with the insight that health is really a synergistic interplay of many factors. Thus, health is the responsibility of everyone in our global society, because in the end we are all interconnected and interdependent.

TECHNOLOGICAL ADVANCES IN HEALTHCARE

Technological advances include the understanding of biology at the cellular level, the development of diagnostics allowing remedies individualized to the patient and his/her unique genetic and physical make-up.

Rowley explores many aspects leading up to 2025, developing scenarios for prospective medicine, biomonitoring with emphasis on home-centered care with built-in monitors, especially for the elderly and frail. Collaborative teaming (including the patient!), and the idea of a "life coach," who might even be robotic or at least assisted with information technology, all constitute components of Rowley's vision of the future.

BROADER INSIGHTS

Rowley offers additional insights into the unexpected and far reaching aspects of new technology. As we have eliminated diseases such as smallpox, we may be able to cure or mitigate some of our difficult diseases by 2025.

He lists the political, economic, legal and social aspects of medicine, discussing malpractice costs (less than one percent), medical errors and compensation, and the adverse effects of defensive medicine. Statistics of the current system include 45 million (15% of the population) uninsured and the costs to

society – \$34.6 Billion paid by governments, \$6.1B eaten by hospitals, and an estimate of the economic value of forgone health at over \$100B. Annual deaths total 225,000, resulting from unnecessary surgery (12,000), medical plus other errors in hospitals (27,000), hospital-acquired infections (80,000) and adverse reactions to medicines (106,000).

NEW CHALLENGES

Challenges on the horizon include balancing the conflicting values involved in medical records, the application of evidence-based medicine, and accommodating an understanding public that is assertive and fully involved. However, health care is an intricately entangled web of economic, professional, political and social forces that will require a clarity of vision and resolve to adjust to the demands imposed by 125 million Americans with chronic diseases, of which those with 5 or more chronic conditions account for 1/2 of Medicaid spending, 2/3 of Medicare spending, 3/4 of private insurance spending, 2/3 of prescription drugs, to a total of 80% of health care visits.

In discussing the increasing longevity of people, living healthier lives, accomplished by this expensive management of chronic diseases, Rowley gives a measure of this expense in the number of workers paying into Medicare and those receiving care (a ratio of 16.5 in 1950; dropping to 3.4 in 2000, projected at 2 in 2030). He notes that the costs are high because of new drugs and technology, population aging, administrative expenses and in general, lack of incentives to control costs, especially of inappropriate and unnecessary care. The Medicare crisis dwarfs that of Social Security.

As Rowley indicates, this requires us to improve the system by addressing these challenges without preconceived notions. There will be continuing struggle between our expectations and our abilities to pay for them, while overcoming the inertia of those who have vested interests in the current non-system of medical care.

CHARACTERISTICS OF A NEW HEALTH SYSTEM

In closing, Rowley asks the question “what do we want in health care?” and answers that we don’t really know. We certainly have to answer questions about the value of spending \$20,000 per month on drugs that may extend life for only a few months. Furthermore, an entitlement mentality is no longer sustainable. We must begin to understand how to address the need for balancing the many conflicting factors – economic, political, social, moral – involved in creating and sharing in a healthy society.

Q&A, AND COMMENTS (as best captured)

Q: What will be the next cause of mortality after cancer and cardiovascular disease are largely eliminated?

A: Among other things, organs and other parts will just wear out. In the old days, health declined rather linearly with age, and disabilities increased progressively with age. Now, on the average, the decline of health with age is relatively minor at first, but this near-plateau is followed by a precipitous drop.

Q: In light of the points that you presented this evening and the higher longevity rates in Europe relative to the US, is there any possibility that people here will see the light and adopt the more balanced, health-supporting lifestyles of Europe? Or, is it more likely that we are going to export our ways to them?

A: There are cultural and societal differences. The US is a land of opportunity that historically has had unlimited resources. The US mindset is that in the US, there are opportunities to do well, but doing well is an individual responsibility and the government won't help you do well. In contrast, Europe is an old,

established society with limited space, and there is a greater sense of solidarity. Nonetheless, Europe has healthcare problems, too. There may be a change here in the US as the baby boomers get older and there is more demand for healthcare for the elderly. In addition, there may be a realization that there is not enough money to do everything.

C: There is another cost to technology. Some technologies are worth almost nothing, but we don't test them for efficiency before we put billions of dollars into them. However, to put a new drug on the market, the only requirement is proof that it beats a placebo statistically.

C: There is a trend toward having one's x-rays interpreted in India, in using pharmaceuticals manufactured in Ireland, and even having surgery in India or Thailand for 25% of the cost in the US. Some things may be cheaper overseas, but then there is the issue of insurance coverage. The world is becoming global, with outsourcing and teleconferencing.

C: There is a global search for value. For example, suppose Wal-Mart buys its pharmaceuticals from India because they are cheaper, assuming that they are of the same quality. Wal-Mart has gained considerable control over its suppliers.

POINTS FOR THE CLASSROOM (send comments to forum@futuretakes.org):

- According to the *Pocket World in Figures, 2005 Edition*, published by *The Economist*, the US has the highest health spending as a percent of GDP (p. 84) and yet ranks only 37th in highest life expectancy (p. 78). What are possible reasons for this discrepancy?