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## **Technology and Humanity: The Critical Balance in 21<sup>st</sup> Century Healthcare**

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**Your Life Your Health**

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In our recent two part series “Entrepreneurism and Professionalism” we have explored causes of the escalating cost of healthcare. It is this writer’s contention that the principle driving force of healthcare cost increases is technology and its cost coupled with decreasing trust between healthcare provider and healthcare recipient. Technology, beginning with the invention of the wheel, has increasingly improved our lives, while at the same time unwittingly being the catalyst which often makes us islands until ourselves. Technology, which has made it possible for us to have instant access to one another via cell phones, video phones and now iphones, has also increasingly caused us to be isolated from another. Technology has built barriers to intimacy replacing personal interaction and social intercourse with information and exposure. A kind of “social voyeurism” born of technological advances has made us spectators of life through television, cinema and computers rather than our being participants in life. This voyeurism has caused us to substitute watching others live for our own living.

### **The Front Porch – a Great Technological Advance**

One of the greatest inventions in western civilization was the front porch. The porch so defined the American culture that in the first decades of the “technological 20th Century,” the most popular magazine, *The Ladies Home Journal*, which was published monthly, had an annual “Porch Edition,” in which illustrations, diagrams and building plans for various kinds of “front porches” were described. The front porch was the community center, family gathering place, neighborhood visiting center and the communication hub for much of what was great about America. My mother’s parents, who were very poor and who lived in an old house were, in my judgment, the richest because they had a porch that went all the way around the house. My brother and I dreamed all our lives of having a house with such a porch. He succeeded. His home, secluded by a wooded area in the midst of development all around, has 4,800 square feet under roof. 2,400 square feet is a porch all the way around the house. But, alas, the function of his porch suffers technological advancement.

The porch was the coolest place in the house. It provided the opportunity for families to connect with their friends. It was the place where people who did not have the time to visit, greeted one another with a wave, or a loud “howdy.” I remember as a child sitting on the porch, or returning home to find my parents sitting on the porch. Whether singing “Swanee River” or reviewing the family album which is in my mind, the porch and my parents will always be cherished parts of my memory.

Sometimes the porch was the seat of justice. I remember returning home one day, having had the privilege of taking the family car to town for an errand. I dented my father’s new car, which though being used was new to us. Returning home, I crafted a tall tale about how this had happened. My parents were rocking on the porch when I returned. It looked like something out

of *Whistler's Mother*. As I began telling my story, I realized that it was full of holes and finally with a chuckle, I said, "I have just realized that there are three fatal flaws with this story, let me tell you what really happened." My father said, "No, let me tell you what happened; three people have already called and said, 'Billy, you will not believe what that boy did to your car.'"

### **The Encroachment of Technology**

The porch tied families and communities together. I remember sitting on the porch and wishing that there was not so much dust when someone passed on the dirt road in front of our house. Then one day, the road was paved. However, this technological advance of a "black top" road actually increased our isolation, as less and less time was spent on the porch and more and more time was spent on the smooth road. Then the ultimate advance came. I was a teenager when our family physician replaced the air conditioners in his home in town. He gave the old air conditioners to his dear friend, my father. I can feel the coolness today. It was a great day to have "conditioned air." You could be warm in the winter – we had heat – and cool in the summer, but what you could not have was the community connection of the front porch because it was not air conditioned. We didn't sit on the porch very often after that.

### **Healthcare Technology**

Like the loss of the community created by the loss of the front porch, technology has improved what we can expect of healthcare but it has not necessarily ultimately improved the quality of our lives. There was a time, because there wasn't much that we could do about it, that we did not spend all of our time thinking about extending the length of our life; we spent all of our time living.

*The New York Times Magazine* of May 2, 2010, carried an article entitled, "The Data-Driven Life," which asks the question, "Technology has made it feasible not only to measure our most basic habits but also to evaluate them. Does measuring what we eat or how much we sleep or how often we do the dishes change how we think about ourselves?" The article asks, "What happens when technology can calculate and analyze every quotidian thing that happened to you today?" I admit, I had to look up the word "quotidian." It means "daily; occurring or recurring every day; common, ordinary, trivial." Does this remind you of Einstein's admonition, "Not everything that can be counted counts, and not everything that counts can be counted?"

Technology must never blind us to the human. Bioethicist, Onora O'Neill, commented about our technological obsession with measuring things. In doing so she echoes the reality that not everything that is counted counts. She said, "In theory again the new culture of accountability and audit makes professionals and institutions more accountable for good performance. This is manifest in the rhetoric of improvement and rising standards, of efficiency gains and best practice, of respect for patients and pupils and employees. But beneath this admirable rhetoric the real focus is on performance indicators chosen for ease of measurement and control rather than because they measure accurately what the quality of performance is."

## **Technology Can Deal with Disease but Cannot Produce Health**

In our quest for excellence, we must not be seduced by technology with its numbers and tables. This is particularly the case in healthcare. In the future of medicine, the tension – not a conflict but a dynamic balance – must be properly maintained between humanity and technology. Technology can contribute to the solving of many of our disease problems but ultimately cannot solve the “health problems” we face. It is my judgment that the major issue facing healthcare delivery today is that men and women, boys and girls have replaced the trust they once had in their physician with a trust in technology. It is as if the “front porches” of healthcare have disappeared and the air-conditioning has forced us inside the building so that we can’t say “howdy” to one another any longer.

The entire focus and energy of “health home” is to rediscover that trusting bond between patient and provider. In the “health home,” technology becomes a tool to be used and not an end to be pursued. The outcomes of pure technology alone are not as satisfying as those where trust and technology are properly balanced in healthcare delivery.

The challenge for our new generation of healthcare providers and for those of us who are finishing our careers is that we must be technologically competent while at the same time being personally compassionate and engaged with our patients. This is not easy because of the efficiency (excellence x time) of applied technology. A referral or a procedure is often faster and more quantifiable than is a conversation or counseling.

## **Preoccupied with not dying; often having forgotten to live**

In our quest to extend our lives, again quantified by the number of years lived rather than the content of the life itself, we want to have our trust restored in healthcare professionals. To do so, we turn to technological evidence of trustworthiness. We turn to quality metrics and the reporting of performance. This “trust” of numbers often blinds us to the inadequacy of technology to replace or even to display character, convictions and principles. We must never forget that often “the real focus is on performance indicators chosen for ease of measurement and control rather than because they measure accurately what the quality of performance is.”

In 2002, Onora O’Neill gave the Reith Lectures. She addressed trust in modern life:

“Trust, as I saw it, was mainly of interest to sociologists, journalists and pollsters: they ask regularly whom we trust. Some of our answers show that many of us now claim not to trust various professions. Yet I noticed that people often choose to rely on the very people whom they claimed not to trust. They said they didn’t trust the food industry or the police, but they bought supermarket food and called the police when trouble threatened. I began to see that there is a big gulf between saying we don’t trust others and refusing to place trust, between (claimed) attitudes and action. Bit by bit I concluded that the ‘crisis of trust’ that supposedly grips us is better described as an attitude, indeed a culture, of suspicion. I then began to question the common assumption that the crisis of trust arises because others are untrustworthy. I began to notice that there were lots of news stories about breach of trust, especially about supposedly scandalous cases, but that there was surprisingly little systematic evidence of growing untrustworthiness.

“Our revolution in accountability has not reduced attitudes of mistrust, but rather reinforced a culture of suspicion. Instead of working towards intelligent accountability based on good governance, independent inspection and careful reporting, we are galloping towards central planning by performance indicators, reinforced by obsessions with blame and compensation. This is pretty miserable both for those who feel suspicious and for those who are suspected of untrustworthy action - sometimes with little evidence.

“In the Reith Lectures I outline a much more practical view of trust. The lectures are not about attitudes of trust, but about actively placing and refusing trust and the sorts of evidence we need if we are to place trust well. Far from suggesting that we should trust blindly, I argue that we should place trust with care and discrimination, and that this means that we need to pay more attention to the accuracy of information provided to the public. Placing trust well can never guarantee immunity from breaches of trust: life does not provide guarantees. There is no total answer to the old question ‘Who shall guard the guardians?’, and there is no way of eliminating all risk of disappointment. Nevertheless, many of us would agree with Samuel Johnson ‘it is better to be sometimes cheated than never to have trusted’.

“If we are to reduce the culture of suspicion, many changes will be needed. We will need to give up childish fantasies that we can have total guarantees of others’ performance. We will need to free professionals and the public service to serve the public. We will need to work towards more intelligent forms of accountability. We will need to rethink a media culture in which spreading suspicion has become a routine activity, and to move towards a robust configuration of press freedom that is appropriate to twenty first century communications technology. This won’t be easy. We have placed formidable obstacles in our own path: it is time to start removing them.”

As we move deeper into the 21<sup>st</sup> Century, we do so knowing that the technological advances we face are astounding. Our grandchildren’s generation will experience healthcare methods and possibilities which seem like science fiction to us today. Yet, that technology risks decreasing the value of our lives, if we do not in the midst of technology retain our humanity. As we celebrate science, we must not fail to embrace the minister, the ethicist, the humanist, the theologian, indeed the ones who remind us that being the bionic man or women will not make us more human but it seriously risks causing us to being dehumanized. And in doing so, we may just find the right balance between technology and trust and thereby find the solution to the cost of healthcare.