

THE EVOLUTION OF INTEGRATED HEALTH CARE DELIVERY SYSTEMS AND THE SINGULARITY.

If one had to design a health care system that would seem doomed to failure one might start with one in which the providers of care were fragmented, independent and driven through the reimbursement system to provide ever more services that generate higher income on a fee for service basis. The system would provide care to patients who were isolated from the economic costs of the services by third party payments, through employer funded insurance coverage. Third party payers would make their money through reducing premium payouts, by simply delaying or not paying out what they contracted to provide or extorting deep provider discounts in exchange for directed volume. The approach to care of individual patients would be ad hoc, without significant oversight. Severely ill patients would be passed back and forth by all providers like the black queen of spades in a deck of cards. Bad debts would be written off as "charity care." Insurance premiums would rise faster than the world's oceans in global warming. Sound familiar?

Unfortunately, in an contentious and polarized political democracy little can be done to re-design an antiquated, inefficient, ineffective, and bankrupting cowboy system of health care delivery in a focused, comprehensive way that will likely make a real difference. There are just too many moving parts and special interests involved. There is, however, an incremental change underway as a result of the recent health care reform efforts that have the potential to morph the system into a paradigm that makes more practical sense. Medicare will be providing contracts with Accountable Care Organizations that will have to become clinically integrated systems of efficient hospitals and care providers in order to obtain adequate reimbursement. Expect to see these new systems expanding in the private sector as well.

The government's push toward implementation of global electronic medical records systems will be key to the development of data driven systems competing not only for financial gain, but also for quality in performance and outcomes. Data capability inaugurates performance accountability in managing patient care. With the advent of reliable data there will be more and more focus on evidence based medicine, what works and what does not and we will be moving from a largely intuitive approach to an empirical design in health care delivery. Outliers will be reviewed, evaluated and addressed. The focus will be on system based accountability in providing the most effective method of care and the most reasonable price. This can only occur if hospitals and care providers are focused on and are compensated for the delivery of health not the delivery of care. Look to the rise and advance of fully integrated health care systems compensated in global fixed fees, and view the decay and death of fee for service medicine.

The pace of technology development in the form of electronic medical records, smart electronic medical devices and in communication, storage and cloud computer functioning, augers the potential for what Ray Kurzweil describes as the "Singularity."

What then is the singularity? It's a future period during which the pace of technological change will be so rapid, its

impact so deep, that human life will be irreversibly transformed. Although neither utopian nor dystopian, this epoch will transform concepts that we rely on to give meaning to our lives from our business models to the cycle of human life, including death itself.

Kurzweil, Raymond *The Singularity Is Near: When Humans Transcend Biology*. Viking (2005), at 7. The best hope for solving of the health care delivery and financing dilemma may well reside in the the disruptive power of advancing technology and a paradigm shift to systemic rather than individualized views of quality and success.