

2012 and the Big Bang Theory

A White Paper By:

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2012 and the Big Bang Theory

Two opposing forces, gaining mass and momentum, traveling toward each other, will collide in the United States in 2012. There will be horrific disruption. Is this what the Mayans predicted? Probably not. However, we do have serious healthcare issues that are not being addressed, and actually exacerbated by the Patient Protection and Affordable Care Act (PPACA). All of us will feel the discomfort in 2012. The two opposing forces are:

1. Massive expansion of healthcare consumer demand for services.
2. Rapidly declining availability of healthcare service providers, especially physicians, and their required resources.

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Massive Expansion Of Demand

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Patient Populations

The population bubble that occurred in the eighteen-year period between 1946 and 1964 has been referred to as the “Baby Boomers” or just “Boomer” population. Due to their taste in music and other habits, I prefer “Boomer.” There are 78 million of them. The oldest will begin submitting their normal Medicare claims in 2012, but many are already using Medicaid and elements of Medicare/Medicaid for special conditions. Another 35 million consumers will receive new healthcare coverage through the recently enacted PPACA. There is a statistical overlap with the Boomer population, so let’s just say that this group amounts to an increase of 20 million consumers.

Another group is the increasing population of foreigners from other shores, in three categories:

- Normal immigrants
- Those who come to the United States for better care than they can receive in their native countries
- Illegal aliens

By far, category three above is the largest of the foreign-shore population, and because they are “illegal,” it is a difficult number to address, as well as a highly politicized number. For the purpose of argument, my guess is that we have 11 million illegal aliens in the United States today and growing at an annual rate of 20 percent.

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Finally, there are the old folks born before 1946. Most of them are supposed to be gone, but they are not. They are living longer than anyone expected, much longer. Could this be caused by good healthcare? By living longer, these folks will be consumers of healthcare services for many years more, and we didn't plan for them.

Utilization of Services

The Boomers, and their older counterparts, are pretty smart as a group. They have greater expectations of healthcare in general, and a better understanding of what is available in terms of new products and services, than their Great Depression/WWII parents did. According to the CNBC article "How Boomers Will Impact the Health Care Industry" (February 22, 2010): "They visit the doctor more, they consume more services and they aren't afraid to use their \$7 trillion in collective wealth to improve their quality of life. From physical therapy to cosmetic surgery, to the latest in life saving technology, Boomers just aren't built to grow old gracefully."

For the Boomers and older, we should expect more services per patient visit and more complex relationships between services offered, depending upon patient's age and condition, diagnosis, history, service conflicts and reimbursement rules. It will require a higher level of sophistication for caregivers, greater awareness of policies beyond basic caregiving and a higher level of cooperation between areas of specialization. Essentially, patient encounters will double, services will triple, and complexities in service relationships and conflicts could significantly increase error rates and litigation exposure.

Availability Of Caregiver Resources

The previous paragraphs discussed demand for healthcare services. Individual caregivers are the supply. Healthcare, due to the personal level of services required, is a business of intellectual resources. You can have the best equipment and the most up-to-date formulary, but if you don't have the caregivers, the other resources are virtually worthless. At the current time, it has been estimated that in the U.S., there is currently a shortage of 40,000 physicians. It is also estimated that the average age of a hospital surgery nurse specialist is 56. Of the current physicians available, many are older than the oldest Boomer, and nearing retirement. An interesting spin on this factor is that it may take two younger physicians to replace the retiring physician due to the differences in lifestyles between the two generations. The older generation is more accustomed to a 70 – 80-hour work week with an extreme level of dedication by today's standards. The younger

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generation expects to have a life beyond medicine; and therefore, 40-hour weeks are more the norm. Therefore, many are “selling” their practices to major providers, taking a salary and working a 40-hour week.

With regard to the physician shortage, the most critical shortage is the primary care physician (PCP). This is the result of higher rewards trending toward specialization over many years. The average income for a PCP is well below the specialist. The awkward problem is that the PCP, if there were enough of them, could have been a great alternative available to work through the next twenty years of healthcare.

Economics, Supply And Demand

I am not an economist, but I did stay at a Holiday Inn Express last night. It seems to me when demand exceeds supply, innovation and efficiency, higher levels of productivity are essential to meet demand. Defining productivity in healthcare has always been a difficulty. For example, how many lives have been saved, or how many coronary bypasses have been avoided by stenting? Stenting is usually an outpatient, two-hour procedure. A coronary bypass is at least five days of inpatient stay and as much as a 60-day recovery period. Stenting seems productive to me, especially in an age of fatty diets and consumer awareness of cholesterol issues. Eat badly and get a stent, rather than the triple bypass for clogged arteries. However, according to the CNBC article referenced earlier, David Cutler, professor of economics at Harvard University, suggested that the aging population is not the only issue in the healthcare crisis but also the emergence of costly new drugs, diagnostics and medical technologies that created it. Dr. Cutler refers specifically to stenting and stated, “The procedure was originally developed for a small number of people who needed it, but now it is given prophylactically.”

What is productivity in healthcare? Is productivity the improving of life, avoiding critical operations and very expensive procedures? Is a patient missing work for 60 days versus missing 1 day productive? How many stents are provided to avoid one bypass surgery to have a good ROI? If providing a stent prophylactically allows a father to raise his children, is it a good use of our healthcare dollars? Remember, a living father pays taxes.

Perhaps it's easier to identify what is not productive in healthcare. For example, innovation and creativity normally includes technology, which extends the output value of a labor hour. If currently a physician serves 22 patients each day, and with implementation of new innovative technology, he/she could see 30 patients per day, this would be a 36.4 percent improvement in productivity and very helpful in addressing the physician shortage. Conversely, if new technology is introduced which

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... the newly insured consumer will probably wait a very long time to see a doctor and may conclude the ER wasn't such a bad alternative. The bottom line, so the story goes, is that the insurance card doesn't guarantee a doctor's appointment or a reduction in ER visits...

reduces the number of patients seen to 14, that would be a 36.4 percent reduction of productivity and most would say that this is a bad idea. Unfortunately, the government disagrees and has funded physician order entry systems where the doctor must also be a data entry clerk. To exacerbate the issue, physicians are notoriously bad data entry clerks because they just haven't spent enough time in secretarial school. They make a lot of data entry errors while they are seeing fewer patients. By the way, this is very irritating to the Boomers as they waste 10 – 15 minutes of their time watching their caregiver typing. The government recognized that the "new" approach to physician order entry would irritate both the physician and the patient; and therefore, it did what the government always does: leverage fines and other financial penalties as encouragement. Conversely, there isn't a shortage of data entry clerks – many are unemployed, looking for work and currently adding to the unemployment rate. However, the government might tell us that by hiring fewer data entry clerks in healthcare, we are productive in keeping our costs down. Also, if doctors see fewer patients, we will keep our costs down.

There are many Catch-22 situations in healthcare, and the number of examples is growing. A popular discussion at this time relates to the overloading of emergency rooms (ER) by consumers who do not have healthcare insurance. The assumption is that if they are given, or encouraged, to buy health insurance they will seek service the normal way by making an appointment to see their PCP. Meanwhile, there is a shortage of physicians. Actually, physicians are being encouraged to leave the profession through significant reductions in their Medicare reimbursement rates leading to reduced income. Therefore, the newly insured consumer will probably wait a very long time to see a doctor and may conclude the ER wasn't such a bad alternative. The bottom line, so the story goes, is that the insurance card doesn't guarantee a doctor's appointment or a reduction in ER visits.

Solutions

Based upon healthcare consumer population trends, in 2012 we will begin to experience an increase of 110,000,000 of a combination of new patients and more demanding patients. This will be exacerbated by a dramatic decline of caregivers through retirements, de-incentivized payment mechanisms for all providers, and a reduction of coverage options for some patient classes such as Medicare. Needed technological innovation will be discouraged as government agencies narrowly focus on specific areas.

There will be more patient visits. The ratio of services per visit will increase dramatically. The ratio of professional staff available per patient visit demand will decrease significantly. It will take longer to see a physician, and the physician will have less time for you. Consumers will

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be more aware, especially as their cost for coverage increases as well as their personal portion of the cost of service.

In a broad sense, we must embrace our caregivers, especially physicians, and offer a variety of service options, such as times and locations, to consumers. Key healthcare executives should be incentivized accordingly. Work processes must be more productive.

Innovation, creativity and technology will be necessary to maintain current levels of care. Suggested common sense do's and don'ts for us are:

1. Reduce clerical and administrative work effort allocation to physicians and other skilled caregivers.
2. Create smart systems and infrastructure so that clerks, assisted by the artificial intelligence of the computer, can perform complex tasks.
3. Remove the waste from healthcare process workflow and monitor key milestones of activity associated with service regimens, and set up alerts for when the process isn't followed.
4. Increase involvement and personal responsibilities for the consumer.
5. Link the consumer to automatic reminders.
6. Align and coordinate resource availabilities for more expeditious patient encounters.
7. Ensure patients are totally prepared for the encounter; including tests, fasting and appropriate screening.
8. Eliminate "no-shows" and cancellations using all modern means available.
9. Post current ER wait times on the web.
10. Make sure the consumer is perfectly identified prior to service.
11. As computer systems evolve as an important element in the caregiver's process, make sure the system is 7/24, fail-safe, and has a quick recovery backup.
12. Don't waste caregiver time, money and other resources on expensive CPOE and EHR systems that are not ready, not reliable, just for a few dollars reimbursement from the government.

If you follow these 12 rules, you won't have to worry about the end of the Mayan calendar. Instead, you will improve your productivity, relationships with physicians, patient satisfaction, competitive position and bottom line.

About the Author - Skip Covington

Skip Covington is the chief architect and designer of Unibased Systems Architecture's products such as ForSite2020[®] Resource Management System (RMS) and periOperative Resource Management System (ORMS).

Prior to joining Unibased Systems Architecture, Mr. Covington was President and Chief Executive Officer (CEO) of Graycross Professional Services, Inc., a creator of software development productivity tools, which merged with Unibased Systems Architecture, Inc. in 1989. From 1985 through 1989, Mr. Covington was a Corporate Vice President with McDonnell Douglas Corporation (now The Boeing Company).

Mr. Covington also served in various executive positions with Electronic Data Systems (EDS) from 1980 through 1985 and as President and CEO of Informational Resources Electronics Corporation (IREC) from 1973 through 1980, a firm that he founded and subsequently merged with EDS. Mr. Covington was with KPMG Peat Marwick (now Bearing Point) from 1967 through 1973 where he was responsible for MIS consulting for the St. Louis region. Following five years of service with the U.S. Navy, where he served as a logistics and communications specialist, he served in various software engineering capacities with McDonnell Douglas.

He is a graduate of the United States Naval Academy and holds a Bachelor of Science degree in Electrical Engineering. Mr. Covington has lectured at the university level in topics including Artificial Intelligence (AI), Growth in Technology and Science, trends in Modern Computer Systems, and Workflow and Business Process Management Utilizing Expert Systems.



Unibased Systems Architecture's ORMS ranked #1 for Surgery Management and RMS ranked #1 for Enterprise Scheduling in "2009 Top 20 Best in KLAS Awards: Software & Professional Services report". Both solutions have been the top ranked system in their respective market segments for seven consecutive years (2003-2009).¹

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Celebrating its 24th year in the HIT industry, and having achieved "Best In KLAS"¹ in the market segments for surgery management and enterprise scheduling for seven consecutive years, Unibased Systems Architecture, Inc. (Unibased) markets various products that are open, scalable, integrated client/server and web-based solutions, designed to meet the unique needs of sophisticated enterprise organizations and improve the coordination of healthcare services.

In the HIT industry, Unibased offers ForSite2020[®] as an integrated solution that provides alternative access management techniques, including scheduling, EMPI and registration, and tracks patient resource needs from pre-access through follow-up. ForSite2020 also monitors the effectiveness of clinical programs, financial productivity, and capacity management striving to improve quality, safety and efficiency of healthcare services. ForSite2020 has an integrated module which addresses surgery procedures and surgeon scheduling, pre-admission activity monitoring, surgeon preferences, suite utilization, materials management, clinical worker training and certification, perioperative charting, and surgery-based EHR. ForSite2020 results in significant improvements in physician relations by including a physician portal, automated order creation not requiring data-keying by physicians, a business intelligence offering labeled ForSite Analytics, and revenue cycle functions such as validation of patient demographics, patient's current insurance eligibility checking, assurance of medical necessity compliance, and estimation of the patient's out-of-pocket expense based upon scheduled and ordered services.

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