

ANALYTICS: THE PIVOT POINT TO TRANSFORMING HEALTH INSIGHTS

By: Mr. Raj Shah, Chairman and CEO, CTIS, Inc.



THE PREMISE

Quality decisions are based on quality data; and data is only of true value if it can be shared, integrated, reported, analyzed, and acted upon to deliver insight and wisdom to advance our mission and results.

We have the good fortune to have oceans of data that have been gathered over time. Now our challenge is to liberate the knowledge in the data and harness its powerful insights to guide our path forward. The enhanced data must be accurate, timely, and delivered in the end users' preferred method (digital, virtual, mobile).

"To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science."

– Albert Einstein

Leaders in healthcare consistently express their observation that we are swimming in data. This is a testament to our diligence to collect data. By the same token, it is also a critique of our inability to capitalize on the knowledge that data can deliver. Front-running organizations and leaders will maximize their data investment by adding the power of analytics. This will provide trends and directions towards predictive rather than reactive

models. This shift will enable a preemptive ability when examining future patterns, and the ability to intercept them to deliver optimal outcomes.

The **Insight** to Drive Change is in the Evidence
The **Evidence** is in the Data
The **Challenge** is to convert the data to Intelligence and Wisdom

The leading government and private healthcare teams have come to respect and rely on the power of leveraging data to its maximum use. Often, when we ask for the status of a specific healthcare subject, it is a “rear view mirror” exercise, when what is really needed is a view through the “windshield” of the path forward, so we can select our best options and navigate based on evidence and fact. If we do this, then we are positioned to apply our talent and other resources to deliver the best outcomes for our patients and care givers and align all of the vital support systems for scientific exploration and innovation.



Another advantage of analytics is the distance that we are able to see into the path ahead. This added capability enhances insights and expedites research toward delivering cures and better health and condition management.

At this stage of our “data journey” we are poised to usher in the new era of enhanced decision making through the power of enhanced data insights. For instance, although it is important to know how diabetes is affecting our society, it is more important to know how we can change the future by abating the ravaging effects on individuals, families and communities. There is great science in place to address diabetes. Overlaying this with leadership and motivation to change will enable a winning combination. This holds true for major correlated illnesses such as pulmonary and cardiac disease and depression.

We are entering the “Era of Insight.” We are at a new frontier of instituting methods to avoid illness and promote health. With the convergence of new treatments, greater awareness of patients seeking and demanding better care and outcomes, new genetic and “-omics” research, new legislation, new generations of high-tech information-technology-centric doctors and researchers, new funding for innovation, new incentives to drive the highest quality at the lowest cost, we have a primary, excellent option to invest in the power of data and analytics to gain wisdom to solve current issues and pave the path to significantly better methods and outcomes.

Taking current data investments and applying analytics can tell us the likelihood of certain people to encounter disease, the best prevention and cures, who may convey the disease to future generations via genetic or behavioral leading indicators, who is most likely to show up in our emergency rooms, those who are most likely to not be consistent in taking their medication, and on and on. **So what is stopping us from stepping into the brighter future of analytics?** What’s the hold up when such bright prospects attract us?

Here are the insights I have gathered that address some of the key barriers to rapid progress. First of all, there is an old saying that goes like this: “I’ll believe it when I see it.” Perhaps a slight twist on this statement might help us all change our perspective to: “I will

see it when I believe it.” What does this mean? It means if you believe that data can be ultimately enhanced by analytics then you will start to see the high-end value in the data because you intuitively and factually believe it is there. **Changing our perspective of the value of the data will lead us to the future of better analysis and outcomes.**



Increased use of data will also point to new data that should be gathered to continuously improve and drive best outcomes. One of the common challenges to expediting our ability to capitalize on the intelligence within data is that the data is “owned” by different entities.

In today’s environment, no single team is (rightfully so) ready to contribute its immense data to a higher cause without the guarantee of the following:

- Overall governance to have consensus, agreement and equitable use of the data
- A seat at the table to determine the use and value of the data
- Clear control over security and confidentiality
- Prioritizing the value of the data in solving challenges. This entails some form of compensation for data that is contributed. What currency should be used to reflect this value?
- An evolving appreciation for the power of analytics to drive and guide high quality decisions
- A concurrence on the priority order of what problems should be solved first
- A solid commitment to provide the resources and time to deliver success
- A team approach on how to collaborate and share data for the overall good

These are just a few of the hurdles that need to be addressed. These require the guidance and mobilization of strong leadership – hence my personal focus on the role of leadership to guarantee success. The hurdles are mostly cultural, political, organizational, and social. Notice that I did not highlight technical hurdles. In my opinion and research, these technical hurdles are largely addressed in a caring, insightful way by the innovations of government, academic and commercial entities. For instance, the Healthcare Information Technology Standards Panel (HITSP), led by Dr. John Halamka, is collaboratively defining a comprehensive set of technological solutions and standards to facilitate the use and sharing of data.

The technological advancements are in place to achieve success. The challenge is the “leadership factor” to mobilize teams towards advancing the ultimate value of data. Crossing the cultural chasm of sharing and acting on data requires vision, strategy, teamwork, and commitment. It is an exercise of willingness and openness to address and conquer new frontiers. There are many examples of data supporting counterintuitive premises. For instance, Mayo Clinic has evidence-based proof that quality healthcare actually costs less.

Here’s a proven plan:

(By the way, it’s not the innovation of this plan that is the key – it’s the consistent, dedicated execution and evaluation of the results.)

1. Select the challenge we will address and define the best outcomes.
2. Find a team who is passionate about solving this issue and that has made the prerequisite investment in their data.
3. Identify and attract a cohort population that is motivated and dedicated to full participation and winning.
4. Identify the best-of-breed analytics expertise and technology to deliver our solution.
5. Set the team and plan in place to WIN!

The journey toward analytics is driven by vision and leadership. The critical success factor is teamwork. The ability to clearly envision the comprehensive talent required for success must be matched by the willingness to team with others to assimilate their abilities in the success formula.

"Ingenuity, plus courage, plus work, equals miracles."
- Bob Richards, Olympic Gold Medalist