James L. Holly, M.D.

Data Analytics

- [The Importance of Data Analytics in Physician Practice](#)

  March, 2012 Presentation to Massachusetts Medical Society on the "Important of Data Analytics in Physician Practice," Analytics transform knowledge into an agent for change. In reality, without analytics, we will neither know where we are, where we are going or how to sustain the effort to get there. For transformation to take place through knowledge, we must be prepared to ask the right questions, courageously accept the answers and to require ourselves to change.

- [Abraham Lincoln and Modern Healthcare](#)

  Contained within Abraham Lincoln's famous "House Divided Speech," delivered to the Republican Convention on April, 16, 1856, is the imperative for data analytics and performance auditing by healthcare providers today. Lincoln said, "If we could first know where we are, and whither we are tending, we could better judge what to do, and how to do it,". (Quoted by David Eisenhower in the Foreword to *Churchill: The Prophetic Statesman*, by James C. Humes, Regnery, New York, 2012) In any human enterprise, if the participants are unwilling to objectively and honestly face where they are, it is improbable that they will ever get to where they want to be, let alone to where they should be.

- [Patient-Centered Medical Home: The Power of Data in Designing the future of healthcare](#)

  Raw data can be misleading. It can cause you to think you are doing a good job when in fact many of your patients are not receiving optimal care. For instance the tracking of your average performance in the treatment of diabetes may obscure the fact that a large percentage of your patients are not getting the care they need. Provider Performance at the point of service is important for the individual patient. Provider Performance over an entire population of patients is important also. However, until you analyze your performance data statistically, a provider will not know how well he or she is doing or how to change to improve the care they are providing.

- [Patient-Centered Medical Home and Care Transitions: Part I](#)

  As the nation grapples with the theory of the future of healthcare, some of us are experimenting not only with ideals but with practical solutions. At SETMA, we believe that the future of healthcare has four domains, which must be addressed in any solution which will be sustainable. They are: The Substance -- Evidenced-based medicine and comprehensive health promotion; The Method -- Electronic Patient Management; The Organization -- Patient-centered Medical Home; The Funding -- Capitation with payment for quality outcomes.

- [Business Analytics and Your AQ](#)

  April, 2011 -- During the drive from Austin to College Station on Friday, Dr. Holly conducted a one-hour conference call with seven IBM executives to discuss a new initiative which IBM is working on called, "What is your AQ, or Analytics Quotient." Of this, IBM said, "We are promoting how our best customers use business analytics to extend the value of their information, gain new insights, increase collaboration and in some cases understand risks. These are companies where senior and executive management are engaged in utilizing this information to improve their operations, extend visibility and drive profitability. Following is a maturity model to give you a bit more information on the Analytics Quotient journey to improved performance."

- [Transforming Healthcare: Public Reporting of Provider Performance on Quality Measures](#)

  December, 2009 -- We have already stated that accountability and transparency are the principal reasons for public reporting of our performance, but there is more to accountability and transparency in healthcare than that. We b believe that public reporting of quality performance will change provider and patient behavior. Typically healthcare providers only receive delayed, retrospective reviews of their performance, which does not change behavior significantly, in our judgment. In the Old Testament, a verse declares that "because punishment against an evil deed is delayed, the hearts of men are set upon doing evil." The principle is that without immediacy between the consequences and/or evaluation of an action and the action itself, the potential for the consequence to effect positive change is diminished or eliminated. While auditing provider performance is never for punitive reasons, the principle is the same. If the reporting of the results is significantly removed in time from the events being audited, it will have little impact upon provider behavior.

- [2010 - SETMA and the Future](#)

  Since 1998, Southeast Texas Medical Associates, LLP (SETMA) has been involved in the transformation of healthcare delivery through the deployment of an electronic health record (EHR). In 1999, we realized that EHR was too expensive and too difficult if all we were to achieve in the process was an electronic methodology for documenting a patient encounter. As a result, we adopted the goal of "electronic patient management"

(EPM), which we define as the ability to leverage the power of EHR to improve healthcare processes and outcomes.

- [Patient-centered Medical Home SETMA's COGNOS Project](#)

  October, 2009 -- Perhaps the most important aspect of being recognized as a Patient-Centered Medical Home is the ability to examine patient-care data in order: to change provider and patient behavior; to change procedures and processes in the practice; and, to provide patients with information about, and strategies for improving or preserving their health. The organization and analysis of raw data obtained in the care of patients can produce information on the basis of which decisions, treatment plans, and plans of care can be provided to patients. These materials can help patients take charge of their own care and become actively involved in the management of their own health.

- [COGNOS and SETMA - Why and What is our goal?](#)

  What is the purpose of the COGNOS project? Why are we doing this? The cost of COGNOS, the licenses and the customization of the data mart and audits is not inconsequential. Why would SETMA's partners do such a thing? First, we want to know what we are doing. Without auditing our performance, we will never know how we are performing. The COGNOS Project will allow us to objectify our performance. We will no longer "think" we are doing well; we will know if we are doing well. Second, we want to improve what we are doing. Evidenced-based medicine with the treatment targets established by science can tells us where we want to be. If we know where we are and if we know where we want to go, we can design and way to get there. Third, when we know that a patient is not treated to target or to goal, we want to know why. COGNOS will allow us to know if evidenced-based standards of care are being employed. If they are, and if the patient is still not to goal, it will allow us to address hindrances and/or obstacles to the patient getting to goal...

- [AHRQ - Ethnic Disparities in Care](#)

  June, 2010 -- One of our major quality initiatives this year is to totally remove ethnic disparities in the care of diabetes, hypertension and dyslipidemia. Our experience is that several issues contribute to the disparities. These include: Access to care which is a healthcare structure problem. This includes the lack of insurance and/or inadequate insurance. Also, it includes the lack of healthcare providers who are willing to take on complex patients. And, as is illustrated below, it sometimes is the result of Health and Human Services rules through CMS which creates gaps in care. Co-morbidities particularly obesity, tobacco, inactivity and sometimes alcohol. Personal resources which limit access to gymnasiums, healthy nutrition, education, medications, etc. Cultural predilection for foods and habits which contribute to many of the above. Limited access to dental care. Fragile social, economic and health infrastructures.

- [SETMA -- HIMSS Stories of Success: Part I -- Improving Population Healthcare and Safety Through Real-time Data access, Auditing and Reporting](#)

  (Editor's Note: The Health Information and Medical Management Society (HIMSS) is the largest medical-information-technology organization in the world. Their annual meeting which ended today attracts over 15,000 people. Dr. Holly serves on several key committees with HIMSS. In 2006, SETMA was award the HIMSS Davies Award (see www.jameslhollymd.com -- *In-the-News*) which is the most prestigious award for innovation and development in electronic medical records. HIMSS Stories of Success is in its second year. It is a highly prized program with Tier 1 (the highest) and Tier II designations. For 2011, SETMA has been awarded Tier I HIMSS Stories of Success, and is only one of two organizations so designated. This two-part series is a summary of the content which resulted in this award.)

- [SETMA HIMSS Stories of Success: Part II -- Improving Population Healthcare and Safety Through Real-time Data access, Auditing and Reporting](#)

  Through its EHR and BI data management tools, SETMA has eliminated any uncertainty about whether it is meeting national quality standards - and its providers no longer need to wait months to receive quality reports from payers. COGNOS software allows every provider to examine performance at the point-of- service on over 200 quality metrics, including age-appropriate screening and preventive care needs. The discrete data capture capabilities of SETMA's EHR are used to measure, on a daily basis, each individual physician's performance of -best practice- standards against every applicable healthcare quality measure available. Before a patient is seen, for example, his or her chart is searched to determine if all HEDIS, NQF, PQRS, PCPI, AQA or NCQA standards have been met. Nurses independently initiate the completion of preventive and screening services according to age requirements.