Address to the Beaumont Chamber of Commerce August 2000 Part I
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Your Life Your Health
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(**Author's note**: This address to the Beaumont Chamber of Commerce, August 24, 2000 will be published in two parts. Remarkably, the issues address with only a few exceptions are as valid today as they were almost eleven years ago. Southeast Texas healthcare providers will have an opportunity on January 19, 2011 to participate in a meeting to discuss a Health Information Exchange (HIE), which will move our area forward in the integration of healthcare delivery. Every citizen should encourage his/her healthcare provider to attend and to participate in the HIE. SETMA has fulfilled all of the expectations proposed in this address and, in fact, has moved far beyond what we envisioned in 2000. The HIE will move our entire medical community closer to this 2000 statement of the healthcare issues facing Southeast Texas.)

Healthcare Issues Facing Southeast Texas in the Twenty-first Century
By James L. Holly, MD, Managing Partner, SETMA, LLP
Beaumont Chamber of Commerce, Beaumont, Texas
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Many challenges face Southeast Texas' healthcare delivery system. Some of them are:

1. Healthcare for the uninsured or the underinsured – the present system is antiquated, inefficient, expensive and inadequate.
2. Access to timely emergency healthcare – the present system is expensive, time consuming and inadvertently promotes irresponsibility on the part of patients, who, failing to establish a relationship with a healthcare provider, overwhelm emergency services for non-emergency problems. With four to eight hour waits for care in emergency departments, patient risk increases.
3. Healthcare cost as a factor in the Southeast Texas business market. Major contracts have been lost to Southeast Texas because of the healthcare cost factor which made bids by Southeast Texas companies non competitive with other regions of the country.
4. Maintaining the quality of healthcare while controlling the cost of that care for our Senior citizens and for others on fixed incomes.
5. Integrating the delivery of healthcare where patient data is shared among all providers giving that care.
6. A current healthcare system, which is excellent in the quality of care it delivers, but is unprepared for managing the challenges of the future.
7. A growing understanding of the health hazards related to environmental and occupational considerations.

If we accept the validity of these issues, how do we solve them? I once thought that people studied business because they couldn't do any thing else. Then, I started reading business

literature and discovered a world of intellectual acumen and expertise equal to science, mathematics or any other academic pursuit.

Systems Thinking

A book, which has influenced everything we do at Southeast Texas Medical Associates, LLP, is Dr. Peter Senge's *The Fifth Discipline*, in which he declares, "The more complex a problem, the more systemic the solution must be." Senge has reference to "systems thinking," which is a way of organizing analysis of complex problems in business enterprise. **Systems thinking is:**

- A discipline of seeing wholes
- A framework for seeing interrelationships rather than things
- For seeing patterns of change rather than static 'snapshots.'
- A set of general principles spanning fields as divers as the physical and social sciences, engineering, and management.

System thinking is needed more than ever because for the first time in history, humankind has the:

- Capacity to create far more information than anyone can absorb,
- To foster far greater interdependency than anyone can manage
- To accelerate change far faster than anyone's ability to keep pace.

Complexity can easily undermine confidence and responsibility and systems thinking is the antidote to this sense of helplessness that many feel as we enter the 'age of interdependence.'

SETMA Has Adopted Senge's Ideas

SETMA has applied Dr. Senge's ideas to the private practice of medicine because the practice of medicine and healthcare delivery are so complicated today they require systems solutions. And, the only solution to the issues facing Southeast Texas in healthcare delivery is "systems thinking" and "systems solution."

Experts have recognized SETMA's success at applying business principles and particularly "systems thinking" to healthcare delivery. When Dr. Wilson and I spent the day with Dr. Larry Liebrock, Associate Dean of the School of Business at the University of Texas in Austin, he said, "You have applied business principles to the organization and delivery of healthcare; amazing!" In the July, 2000 issue of *Health Data Management*, Vinson Hudson, president of Jewson Enterprises, Redwood City, California, who tracks physician practices said: "(SETMA) is not your typical physician practice...Its business model is more sophisticated."

Southeast Texas Medical Associates' Strategy

Three years ago, Dr. Mark Wilson and I determined to transition our practice from a paper/document medical record to an electronic/data medical record. We didn't know it then, but what we were doing was embarking on a journey of "systems thinking" and "systems solutions" in healthcare delivery.

In the past five years, Southeast Texas Medical Associates has committed its future to two beliefs, both of which reorganized our thinking about healthcare delivery:

1. Managed Care strategies can provide excellent care to our patients while helping control the cost of that care.
2. Electronic Medical Records is the only methodology and/or technology, which can make this happen at the provider level.

Once you get by the methods of managed care:

- Pre-certifications,
- Limited provider panels,
- Formularies,
- Authorizations,
- Referrals, etc,

you are left with its **dynamics** which are:

1. A continuum of Care model of delivery, which addresses the quality component of the value equation, and which is a data issue.
2. An integrated delivery network organization of that delivery, which addresses the cost component of the value equation, and which is also a data issue.

This dynamic requires a different kind of medical record than that which has traditionally been available. In the history of medicine, the nature of medical records has been:

1. In the 18th Century, for practical purposes, medical records -- as a documentation of individual patient treatment -- did not exist.
2. In the 19th Century, medical records were not much better, but those that existed were based on pencil and paper.
3. In the 20th Century, the standard of excellence for medical records was transcription. This was a vast improvement, but fundamentally employed the same methodology as the 19th Century -- paper. Fundamentally, 18th, 19th and 20th Century medical records were documents.
4. In the 21st Century, medical records will be based on some form of electronic medical records.

Transactional and Static Medical Records

19th and 20th Century medical records, except for research programs, were essentially **transactionally** driven. **When a patient "showed up" a record of the transaction between the provider and the patient was made**. And, that recorded remain in the providers office unless it was physically transported somewhere else. FAX machines allow us to provide "real time" access to records from remote sites, but that access remained static. There was no dynamic interaction with the patient's record anywhere.

This is going to change in the 21st Century, as providers are going to:

1. Think about his/her patients when they don't show up.
2. Interact with their patients in a real-time continuum of care model of healthcare delivery, where the provider is responsible for both quality and cost.
3. Not only going to have to think about their patients when they are not "there," they are going to have to think about them as: a person, a population, a problem (disease state), and a preventive healthcare opportunity. This kind of strategic thinking about our patients when they are not in our office or on our phone will require: **Systems** which provide **Data** over time and which is **Accessible**,.

These systems, this data and this accessibility will guarantee that we will function with both a continuum of care and in an integrated delivery network.

Limitations of Old Document-based System of Medical Records

The limitations of the old document-based system and/or of any new system which principally depends upon a document, even if that document is electronically generated, are illustrated by:

1. If a drug were recalled, there was no effective way of determining which patients were on the drug therefore being able to notify each one to stop it, and to call the office for a substitute.
2. There was no systematic way of seeing how many patients with diabetes and hypertension were on an ace inhibitor, which is protective of renal disease. The same applied to many other disease states.
3. There was no effective way of continually bringing the family, social and past medical history forward in the chart to make it an interactive part of every patient encounter.
4. There was no way of determining how many patients had not had a pap smear, mammogram or occult blood screen, short of asking those questions when the patient came for a different illness. Therefore, preventive healthcare was driven by acute healthcare, which essentially didn’t work. And, even when the provider kept excellent records, there was no way to access that information short of picking up and examining each patient record.
5. If the healthcare provider were at a different location than where his/her charts were stored, the paper chart, no matter how extensive and well organized, was little improvement over the 3x5 card. The patient and provider were dependent upon the memory of the provider for continuity of care.
6. Patient allergies, drug interactions and the use of drugs in certain disease states were dependent upon the physician’s knowledge and/or memory, not on the interactivity of various capacities of the medical record.
7. Everyone wanted quality in healthcare, but it was difficult to define and almost impossible to prove.

Systems Thinking, Results in Integrated Healthcare Delivery Networks (IDN)

Integration of healthcare in to delivery networks:

1. Produces collaboration between every person participating in the care of a patient and the sharing of information on that patient at every point of the patient's entry into the healthcare system.
2. Demonstrates that the primary care physician and the specialist have common goals and incentives, and that they share the same information about the patient.
3. Provides that the home health agency, hospice, DME, physical therapy, reference laboratory and long-term care facility have a common vision and a seamless interface when dealing with the patient.

The IDN model is realized when each member of the healthcare delivery team has access to the patient's record and when the patient's record is updated and available to other members of the team at and from every encounter with another IDN team member. **Without this sharing of information, at best the patient's care will be segmented and inconsistent**.

Continuum of Care Model

What truly differentiates a continuum of care is that care management drives patient care. **And, care management is a database function**. If the patient's record is available at every point of contact with the healthcare system, there will not be:

- **Redundancy** – repeating the same test or procedure simply because one healthcare provider does not know that another provider has the information.
- **Inefficiency** – collecting the same information about the patient — past medical history, family history, etc. — multiple times simply because there is no effective means for sharing that information from provider to provider.
- **Excessive cost** – A plan of care has always been a part of healthcare. Sometimes that plan of care will be treatment and instruction to return if the patient doesn't improve; sometimes it will be referral to a specialist, and sometimes it will be observation and testing if the patient doesn't recover. Whatever the plan of care, it should be:

    - Documented – CPR allows this to be done every time.
    - Discussed with the patient – CPR allows for this to be documented every time.
    - Followed – CPR allows the provider to follow-up the patient, even if the patient doesn't keep his/her follow-up visit.

- **Defensiveness** – the best defense against an accusation of inadequate or substandard care is a complete history and physical and an agreement between the provider and the patient as to a plan of care. CPR allows the provider to document a plan of care with which the patient agrees. When that plan is based on sound medical judgment and an excellent record, the need for excessive and often expensive tests to prevent lawsuits will be eliminated.
- **Lack of follow through** – Patients often discontinue treatment and/or fail to seek follow-up when they begin to feel better. CPR allows the provider to track patient follow-up and to make certain the patient's treatment or evaluation is completed. **With CPR, SETMA has designed an electronic tickler system, which allows consistent follow-up on patients who require further, essential testing or repeat testing.** For instance, if a person needs a follow-

up chest x-ray in six months, SETMA has an electronic solution for reminding the patient and the provider to make sure the test is done.

The IDN will have elements of the insurance, care-delivery and continuum-of-care models, but preventive care, health promotion and community health will drive the care delivered by an IDS.

SETMA Moves Toward an IDN

The reality is that whether a family physician, a cardiologist or an endocrinologist, the initial information needed on a patient is the same: chief complaint, history of present illness, review of systems, allergies, past medical history, family history, social history, and habits. If this information can be shared, it will make the IDN more efficient and more effective, and that will increase the excellence of the care.

Information systems also enable the healthcare provider to drive the delivery process because of the data, which is available. Traditionally, healthcare providers only responded to the care request of their patients. Now, providers can structure and deliver preventive care and routine care, which is more cost sensitive and higher quality.

Healthcare driven by the provider is: higher quality, more cost-effective, preventive and more effective. The only way the healthcare provider can drive health care is with records, which give him/her the capacity to:

- Measure outcomes,
- Monitor preventive care and
- Make patients' healthcare database available at every point of the patient's access to healthcare.

Healthcare driven by the patient **is** typically more expensive, poorly managed and thereby less effective. Also, healthcare driven by the patient is typically based on static medical records, which are driven by acute medicine, rather than health maintenance and preventive care issues.

Constable or Counselor?

Healthcare providers must never lose sight of the fact that they are providing care for people, who are unique individuals. These individuals deserve our respect and our best. Healthcare providers must also know that the model of healthcare delivery, where the provider was the *constable* attempting to impose health upon an unwilling subject, has changed. Healthcare providers progressively are becoming *counselors* to their patients, empowering the patient to achieve the health the patient has determined to have. This is the healthcare model for the 21st Century and the computerized patient record is the tool, which makes that model possible.

Providers and patients being collaborative in the patient's health initiatives is a data driven dynamic and it requires the sharing of that data between patient and provider.