

# A True Tipping Point?

*From the signing of healthcare reform legislation to the release of final rules for “meaningful use,” events in 2010 are driving toward a true transformation in the delivery of healthcare in the United States. Optimism is high that we will finally see tangible benefits from healthcare information technology as measured by enhanced quality, improved access, and lower costs.*

*I recently reviewed some testimony given to a subcommittee of the U.S. Senate Finance Committee that highlighted the role of healthcare information technology in transforming healthcare delivery. Here are excerpts from that testimony.*

It is with great anticipation I approach this committee today to give testimony on health care issues and the effect new information technologies will have on the delivery of care. Clearly the swirling debate on how to restructure our health care system has raised the awareness of all Americans to this important issue.

It is through the management of information, in particular its dissemination, that we can address some of our health care challenges. We need to use new information technologies to provide physicians, patients, providers and payors with the appropriate, relevant information to produce good, acceptable outcomes from appropriate cost-effective care.

## Appropriateness

Experts have estimated that up to 30% of all medical care is inappropriate or unnecessary. A classic study by Wennberg identified variations in health care in two small towns in Vermont that could not be easily accounted for.

Dr. Wennberg concluded that practice patterns generated these differences in rates.

Guidelines and standards work well for tests and procedures where the proper plan of care is well known and usually followed. In instances where this is not the case, appropriateness protocols are useful. This includes procedures of high risk to the patient, high costs, and where evidence of inappropriateness exists. In the late 1980s, advances in computer technology and information systems research allowed this type of protocol development.

In addition to the information itself, the method of delivery of the information is key to its usefulness. Only systems that deliver relevant information at the time that it is needed are truly helpful. It is information physicians strive for, not data.

## Outcomes

Much attention has been directed to the benefits outcomes research can have on directing good quality care.

Outcome measures look at clinical results of treatment, functional health status, and patient satisfaction.

To be sure, outcomes measures are not a magic bullet for our health care quality and cost problems. Methodology challenges exist in outcomes research and there are the additional problems of study costs, study length and changes in medical treatment that make the studies less useful. These limitations aside, these new research areas take great advantage of the many new information technology tools.

## Profiling

The development of huge health payment claims data bases provide a vast source of mostly untapped physician performance data. Even with its inherent methodology and reliability problems, claims data can be used to profile care provided by health care institutions, managed care networks, physician groups, and even individual physicians. Using both software and hardware tools unavailable only a few years ago, developers can use this claims data to identify patterns of quality and utilization.

Our medical system does not lack data, it lacks information.

Profiling tools often look at episodes of care, the health care process a patient goes through from first becoming ill to finally returning to their baseline health status. In addition, key performance indicators, similar to the standards I mentioned earlier, are used to evaluate physician performance.

Standard treatment protocols help monitor resource use for categories of diagnostically equivalent illnesses. With all this, statistical adjustments, using case mix or severity of illness measures, are made to equitably compare physicians using normative data bases in an effort to identify areas where further evaluation is needed.

## Challenges

There is a very big difference between data and information. Whether using criteria, guidelines, protocols, profiles, outcomes or medical data bases, it is the way the data is presented, packaged, and delivered that turns it into information. Data becomes information only when it is relevant to the situation at hand and is available on a real time basis.

Our medical system does not lack data, it lacks information. These new information technologies convert data to information. With this there are challenges for all involved.

Physicians must step forward and take a leadership role in the development and use of these information systems to more efficiently manage high quality care. The medical profession can set the clinical direction through work on the development of standards, guidelines, protocols and outcome measures.

Payors have the responsibility to use the best information technologies avail-

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able to help ensure good quality patient care at a reasonable cost. This commitment must embrace the best tools, not just those tools that they currently use or they feel most comfortable.

There must be cooperation between payors and physicians so the information provided by these various tools can be used to improve the quality of care while limiting inappropriate care.

Payors must truly promote quality of care recognizing that high quality care manages costs. They must encourage innovation in information technology and help physicians to convert data to information to improve quality of care.

Patients too have a serious responsibility for their own care.

Several of the national on-line services, Internet and local computer bulletin boards have forums for patients with similar diseases to share information. As patients become more educated about their illnesses and potential treatment options, they must assist their physicians in developing treatment plans that are right for them. All the responsibility can not be just on the treating physician. Patients need to also embrace preventive services that can significantly impact their own morbidity and mortality. Finally, they must support the development of new technologies and techniques particularly through their participation in outcomes studies.

Industry has an important role to play whether their business is in the medical marketplace or not. Industry must underwrite innovation through grants and support of programs that take advantage of new information technologies. Industry can help by encouraging the further development and use of guidelines and protocols, the

proper use of profiling systems and the support of outcome studies by their employees. Industry must also recognize the link between quality and cost and not just focus on premiums.

### IT Revolution

The information technology revolution is changing the way medical care is delivered. These new tools provide physicians with the opportunity to access relevant clinical information on a real time basis to most likely impact on their patient care. Using standards, guidelines, protocols, and information available from profiling using normative data bases, physicians can obtain useful information on their patterns of care. Patients can obtain understandable information on their disease process, thereby becoming an informed consumer of health care. Organizations exist to educate physicians and other health care professionals in the use of these systems. For-profit firms are developing the tools and making the investment needed to convert data into information.

My final advice to this committee is hold on tight, the medical information superhighway has no speed limit.

*Would you be surprised if I told you I submitted this testimony to the U.S. Senate Finance Committee's Subcommittee for Health for Families and the Uninsured on April 29, 1994? Perhaps we have advanced in our use of healthcare information technology to transform care delivery during this period, but few would agree that we have advanced enough. This time the situation is different as healthcare reform, investment in EMRs, and advances in technology suggest we are at a tipping point in the effective use of healthcare information technology. With our healthcare system in crisis, we cannot wait another 16 years to fully embrace these tools. The time to act is now. IPSQH*

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