Let me start by thanking Health Affairs for organizing this event and for recognizing the value in sharing the learnings from the Santa Barbara County Care Data Exchange. I am surprised to see so many in attendance; I guess post-mortems on failed IT projects are a popular topic.

We commissioned Bob Miller’s independent evaluation long before we knew the outcome of this project. In fact, we originally asked Bob to study and measure any quality and service improvements that resulted from the project. Our objective then, as today, was to broadly share what was learned.

In an endeavor as complex as this one, the learnings will undoubtedly be open to interpretation and debate—as we’ve already heard this morning, as you will read in the companion perspective articles to Bob and Brad’s lead article, and hopefully, in the dialogue these articles stimulate.

That said, we too at the Foundation have evaluated this project. It has helped to inform other CHCF investments, as well as our own continued efforts to promote the effective use and adoption of health IT to improve the quality and delivery of care. I want to briefly comment on four of those lessons learned, which have both policy and operational implications.

**Lesson 1: Risk-taking, Foundation Financing, and Its Impact**

When the Foundation’s board of directors approved the implementation stage of this project, in September 1999, it was fully aware of the risks involved, as this was, and still is, the largest single investment the California HealthCare Foundation has made in its 10-year history.

The Foundation’s board makes decisions within a failure-tolerant framework. The board believes a culture of intelligent risk-taking can lead to sustained innovation, and that failure is sometimes a prerequisite to invention.

In evaluating this project we have had to look beyond traditional definitions of success and failure. We’ve learned that if you view failure as the opposite of success, rather than its complement, you’ll never be able to take the risks necessary for innovation.

Ten years ago most health care organizations were not willing to invest in an experiment like Santa Barbara. Without significant foundation financing, this project and these resulting learnings would not have occurred.
Did foundation funds create the “moral hazard” that Bob and Brad describe, such that it distorted the community’s risk-taking behavior? Maybe so, as we’re certainly aware of the peril foundation dollars can have. However, there is also another way to view it—though not in economic terms. We believe there was a “morale hazard” created by the project’s flawed design and poor execution, which after eight years, led to what might be described as “communitywide fatigue” with the project. As much as anything, we believe the project ultimately collapsed under the weight of its recurring development and implementation delays, its overly ambitious scope and the vendor instability that resulted.

Unfortunately the community was never able to test, or realize, the administrative, clinical, and service value the Exchange was designed to produce. Nor was the community able to determine whether that value was sufficient to justify contributing to the annual cost of governance, operation, and maintenance of the system. We learned that stakeholder buy-in is achieved through demonstrated value, not a theoretical construct.

We also re-affirmed there is a clear investment role in projects like this for foundations to play—a role few others in health care are able to fill. And we learned we should be even more cognizant of the impact foundation dollars have on risk-taking and commitment.

**Lesson 2: Importance of Data Standards**

The Santa Barbara Project involved building 28 interfaces to 10 different types of data in eight health care organizations. Much of the time, expense, and complexity of the project had to do with getting these interfaces to function properly. The absence of uniform data standards adds to the complexity and cost of health information exchange—both in initial implementation and ongoing maintenance. A better mechanism is needed to encourage the faster development, adoption, and use of uniform standards.

In 2005, in California we facilitated an eight-month process among a diverse set of stakeholders to develop uniform standards and business rules for the exchange of pharmacy and lab data, which is now widely in use, including eight commercial health plans, the two largest reference labs, several large hospital systems, and more than 100 of the largest physician organizations.

Our experience with the current national standards setting process is that it is too slow, too cumbersome, too political, and too heavily influenced by large vendors. That needs to change.

**Lesson 3: Need for Privacy Policy Clarity and Additional Liability Protections**

I want to reinforce what has recently been said by the National Committee on Vital and Health Statistics (NCVHS), that a uniform privacy standard needs to be established for any health information exchange activity and for those entities that engage at any point in such a process. The lack of clear rules was a constant issue in Santa Barbara. As David suggests in his article, as a result, the lawyers were the winners.

Accountability and enforcement standards need to be clear for all players. There still is widespread confusion about who is liable for what. A number of Santa Barbara providers were not comfortable with the potential of being held liable for breaches that might occur, which were out of their direct control. There is a need for further safe-harbor provisions to foster health information exchange, while protecting providers from increased liability exposure—if they meet uniform privacy and security safeguards. Until these issues are resolved, it is reasonable to expect that other information exchanges may become mired in a similar legal morass.
Lesson 4: A New Concept: “Radical Incrementalism”

It is important to remember the context in which the Santa Barbara Project was being developed to understand the decision to build and deploy the Exchange functionality “all at once.”

This project was undertaken in the midst of the dot.com era. Shortly after the initial grant was made, CareScience went public and opened a “start-up” like office in San Francisco. As was typical during that era, the philosophy was to build big, build fast, and push the envelope of existing technological capabilities. David and I used to laugh about people we met during that period who were in a heightened state of technological arousal, including ourselves.

The decision to build a comprehensive health information exchange “all at once” was intended to address most participants’ needs for access to a broad range of clinical and administrative data and to demonstrate a workable comprehensive solution—one that could potentially be shared with other communities.

Our principle learning from Santa Barbara is what some call “radical incrementalism.” It’s a development approach usually typified by rapid “waves” of near-term (6 to 12 month) initiatives, and initiatives organized around a clearly articulated longer-term (5 to 10 year) strategic direction. The basic concept is that the best way to drive major change is through a series of smaller, successful waves. While each success represents a small step in the right direction, the overall cumulative effect can create radical change. The California HealthCare Foundation used this approach successfully in California to build and deploy a state-of-the-art system for modernizing enrollment in public health care programs. Had the Santa Barbara Care Data Exchange deployed this methodology—starting, for example, with the exchange of lab results data—it would have met an immediate need most providers expressed.

Lessons regarding technology challenges, user requirements, and liability concerns could have been learned earlier and applied to the exchange of other information, such as pharmacy or radiology data. Input from users could have been gathered and assessed to allow for refinement of the system’s user interface, and so on. Immediate value would have been created and reliably quantified to establish momentum for the project.

Conclusion

I want to conclude by saying that I share this lesson about radical incrementalism for a reason. Last week the Commonwealth Fund released a report that looked at all of the leading Congressional health care bills. The report found that none of the bills provide the funds and central leadership required to realize the potential benefits of a fully interoperable health care system. Instead, the report concludes the bills contain modest building blocks and further experimentation.

Short of a massive infusion of federal funds, which seems highly unlikely, the myriad of lessons learned from Santa Barbara and elsewhere, suggest that through a series of well-designed and well-executed steps, like many of those David initiated while at the Office of the National Coordinator for Health Information Technology (ONCHIT), the larger goals of health information exchange—to improve quality and care delivery—can still be advanced.