

P E R S P E C T I V E

Another Lesson From Santa Barbara

Building a sustainable business model requires understanding who benefits from health information exchange.

by **Donald L. Holmquest**

ABSTRACT: In this commentary, Don Holmquest, speaking from the perspective of a state-wide regional health information organization (RHIO), responds to papers by Robert Miller and Bradley Miller and by David Brailer on lessons learned from the Santa Barbara County Care Data Exchange project and its subsequent demise. He posits that one of the critical lessons learned through the Santa Barbara experience is the need for a careful analysis of who benefits from health information exchange as part of creating a sustainable business model for health information exchange projects. [*Health Affairs* 26, no. 5 (2007): w592–w594 (published 1 August 2007; 10.1377/hlthaff.26.5.w592)]

ROBERT MILLER AND Bradley Miller and David Brailer have thoroughly and candidly dissected the rise and fall of the “experiment” in Santa Barbara, California, that was designed to enable physicians to access vital patient information electronically.¹ With the advantage of 20/20 hindsight, they have listed lessons learned and related policy implications. Their insights will be helpful for current and future exchange design efforts.

However, while both papers repeatedly mention the notion of a financial value proposition, they do not fully address the striking failure in Santa Barbara to confront the question not only of who should pay, but also of why anyone should pay.

As an early study or “field experiment,” Santa Barbara’s substantial grant funding permitted it to defer addressing the value or “why” question. The outcome of the Santa Barbara Project, however, suggests that other local efforts to create health information exchanges would do well to address the value question upfront, at the beginning of their

work. Today, creating a sustainable business model—and particularly a model that will support the initial costs of constructing information exchange platforms and linking local providers and other entities—is one of the biggest challenges for nascent health information exchange (HIE) efforts.²

Fortunately, the answer doesn’t rely on a consensus among policy wonks or information technology (IT) engineers. Instead, the answer resides with providers, payers, and patients themselves. If those with critical interests at stake can be convinced that HIE will improve the safety, quality, and efficiency of care over time and deliver a return on investment, then they all should, in theory, support the development of the exchange—and contribute financially. But how much each should contribute is open to debate.

For example, can we expect hospitals and medical groups to take on the substantial expense of building a state- or communitywide system from the ground up? And can we really expect HIE to advance at an acceptable pace if

Donald Holmquest (dholmquest@calrhio.org) is chief executive officer of the California Regional Health Information Organization (CalRHIO) in San Francisco.

regional communities must individually engage not only in the expensive and time-consuming effort of fund raising but also in selecting vendors and supervising a complex health IT project?

A viable business model hinges on two principles: (1) Those who benefit from health information exchange should contribute direct financial support proportional to the benefits received; and (2) unless alternative sources of financing are developed, front-loaded expenses associated with construction of the HIE will penalize early adopters and reward those that sit on the sidelines.

At the California Regional Health Information Organization (CalRHIO), we have taken all of these issues into account in designing a utility-service approach to HIE. It will provide a suite of health IT services from which individual organizations and communities can select to use some, all, or none. The financing model is designed so that participants do not underwrite the initial development and implementation of the exchange; instead, they will pay only when services that they want to use become available and as they use these services. The CalRHIO services will be compatible with and supplementary to services developed by communities that have already initiated local HIE efforts.

In discussing the value proposition for HIE, the authors could have referred to a recent and very important report on the current state of access to patient health information. In the 2 February 2005 edition of the *Journal of the American Medical Association*, Peter Smith and colleagues reported that in primary care visits, the clinical information missing from the patients' records was critically important enough to create a substantial risk of real harm approximately 6 percent of the time, not because of incompetent physicians or facilities or a lack of insurance coverage, but purely because critical (and existing) clinical information was missing or unavailable.³

“Health plans have a vital interest in assuring that the most complete and timely information is available to inform clinical judgments.”

These data indicate that in California alone, upward of 50,000 patients every day run the risk of likely harm because we have failed to provide a mechanism whereby patients have an effective and available medical record that physicians can access in a timely manner. Every day, because of this gap in information, patients are receiving drugs that are inappropriate, ineffective, or injurious. They are missing important referrals that could result in direct or indirect injury. They are tagged with incorrect diagnoses, or important treatment opportunities are overlooked. These data augment the findings detailed in the Institute of Medicine's 2000 report *To Err Is Human*, and they underscore the extent to which we are failing our patients and our loved ones.⁴ We are also overlooking the obvious business mes-

sage: There is value here that can be monetized and that could pay for other critically important benefits.

So, again, who receives the benefit of better, more efficient care and fewer unnecessary services? Patients, providers, laboratories, pharmacies, hospitals, health plans, and employers are among the many stakeholders who will benefit from HIE. It appears that most of the Santa Barbara Project negotiations occurred among the hospitals and providers. In retrospect, the project might have been more successful if the health plans had been actively recruited. They are key players in any major transformation of health care, and as such they have a vital interest in assuring that the most complete and timely information is available to inform clinical judgments.

In addition to lack of a strong value proposition, the authors highlighted legal uncertainties and disagreements as important causes of the project's failure. In my former life as an attorney, it was clear that legal hurdles always can be cleared when people with good intentions seek progress instead of advantage, and when they see benefit. Brailer makes a sound case for good sense and good will, pointing out

the critical need for local communities to assume responsibility for creating the trust and the moral imperative to overcome technical and legal concerns.

Today, electronic HIE is achievable in a safe and secure way. Privacy policies are necessary, of course, as is a balanced solution for ensuring confidentiality and effective informed consent. With the proper technology and policies in place, consumers will need to weigh the threat of harm from a breach of security or confidentiality against that from missing vital medical data in an emergency. According to the Federal Trade Commission, in 2005 some 45,000 Californians were victims of identity theft.⁵ Compare that number to the more than 50,000 potential victims of missing medical record information every day in California.

As the authors note, HIE is seen by some as compromising valuable assets. Some organizations may think that they want to protect a perceived competitive and financial advantage accrued through possession of exclusive clinical patient information. Over time, however, consumers, legislators, and regulators alike will make clear the ethical and legal issues these organizations will face if they impede immediate and life-saving access to medical records.

Neither paper provides an opportunity to express gratitude for the enormous effort and risk taken by the visionaries and supporters of the Santa Barbara experiment. All of us working to make HIE a reality are better off for the pioneering work of the Santa Barbara community leaders, the California HealthCare Foundation, and Brailer and colleagues. They have inspired the work of HIE efforts all over the country to resolve the lack of timely medical information. As a society and industry, we must find the will to follow their lead and the resources to plug this enormous hole in our medical safety net.

NOTES

1. R.H. Miller and B.S. Miller, "The Santa Barbara County Care Data Exchange: What Happened?" *Health Affairs* 26, no. 5 (2007): w568–w580 (published online 1 August 2007; 10.1377/hlthaff.26.5.w568); and D.J. Brailer, "From Santa Barbara to Washington: A Person's and a Nation's Journey toward Portable Health Information," *Health Affairs* 26, no. 5 (2007): w581–w588 (published online 1 August 2007; 10.1377/hlthaff.26.5.w581).
2. Foundation of Research and Education, American Health Information Management Association, *Final Report on Development of State Level Health Information Exchange Initiatives* (Chicago: AHIMA, 1 September 2006).
3. P.C. Smith et al., "Missing Clinical Information during Primary Care Visits," *Journal of the American Medical Association* 293, no. 5 (2005): 565–571.
4. L.T. Kohn, J.M. Corrigan, and M.S. Donaldson, eds., *To Err Is Human: Building a Safer Health System* (Washington: National Academies Press, 2000).
5. Office of the Attorney General, State of California, "Identity Theft," 2007, <http://ag.ca.gov/idtheft> (accessed 27 June 2007).