Published in final edited form as:

Arch Intern Med. 2010 April 12; 170(7): 629–630. doi:10.1001/archinternmed.2010.59.

The Litmus Test for HIE Success: Will Small Providers Participate?

Robert S. Rudin

The movement to establish widespread health information exchange (HIE) in the U.S. has thus far shown mixed results.[1] Although the number of sustainable HIEs is increasing, it appears that few of them so far encompass a large enough portion of healthcare providers and patients to significantly impact care delivery. Even long-standing and eminently successful HIEs have been slow to gather clinical data from independent office-based practices, [2] which account for the majority of healthcare utilization in the U.S.[3] Nor is much known about the extent to which existing HIEs organize clinical data as patient-centric, longitudinal records, accessible to all providers caring for a patient. Many HIEs achieve sustainability by automating the delivery of test results,[1] rather than by offering more robust data exchange functionality in which providers can actually view a wide array of clinical data generated by other providers, formatted as a unified record for each patient. Understanding why providers, especially those who are office-based, do or do not participate in HIE has become even more urgent now, to inform how ARRA's payments for meaningful use of HIE can be effectively targeted.

In this issue of the Archives, Fontaine et al explore HIE from the perspectives of small primary care practices in Minnesota.[4] Because small primary care practices provide a large portion of care in many regions, they represent critical stakeholders to HIEs, both as sources of clinical information for use by other providers and as consumers of other providers' clinical data to inform and coordinate their patients' care. These stakeholders, however, may be the hardest group to engage in HIEs because of their difficult financial situations and large patient loads.[5] And with the shortage of primary care physicians in the US, few will think to use HIE as a competitive weapon to attract new patients, as many already have full panels.[6][7] That small primary care practices are both essential for HIE success and difficult to engage makes their perspective an important one to examine.

The authors' findings reveal a diversity of information sharing activities among nine small primary care practices, selected for their close geographic proximity to HIE initiatives and varying degrees of clinical data sharing activities. The practices seem well integrated electronically with laboratories, an encouraging finding. Less encouraging is that only one in 9 are sharing data electronically with hospitals, and very troubling, not a single practice was found to be electronically sharing clinical data with another non-affiliated physician practice and "no practice was fully involved in a regional HIE and HIE was not part of most practices' short-term strategic plans." [4] If small primary care providers are not engaged in robust clinical information sharing in Minnesota, a state with a relatively high degree of health IT penetration, it can reasonably be assumed that few primary care providers, other than those in large integrated delivery systems, are exchanging clinical data with other providers electronically, and HIE has a long way to go to realize its potential value. [8]

What is preventing small primary care providers from joining HIEs? What could motivate them to participate? Through extensive interviews, Fontaine et al begin to answer these questions and provide a window into the incentive structures in which these critical stakeholders operate. They describe a complex array of forces at work but perhaps the most

potentially powerful one is absent: patients demanding that their records be shared electronically among their caregivers. Patients appear to not yet be aware that HIEs exist or of their potential to improve care and reduce costs.[8] It may be that patient demand for HIE will not grow until patients come to expect access to their own health data in a organized electronic form: when HIEs offer patient portals, allowing them to view and manipulate data from their providers and clearly see which providers are participating and which are not. If the intent of ARRA's meaningful use payments is to stimulate HIE to the point of sustainability, the payments may need to advance HIE to the point where patients can access their own clinical data so that market forces – in the form of patients' expectations – become strong enough to bring providers toward HIEs.

However, in today's healthcare provider market, patient demand for HIE may only motivate a small portion of primary care providers to take part in HIE. The shortage of primary care doctors suggests that few will need to compete for patients, and they will be especially reluctant to join an HIE if the membership fee further strains their finances.

Patients' expectations notwithstanding, the barriers described by Fontaine et al seem daunting. Among the most challenging is the lack of interoperability among vendors. One measure of success of the meaningful use payments will be how effectively they stimulate EHR vendors to compete based on interoperability and to leave behind business strategies aimed at locking doctors and patients in to proprietary systems. Fostering such competition should be one of the meaningful use payments' central and explicit goals.

Probably the most significant barrier to providers joining HIEs today is the lack of a business case. The meaningful use payments may ease this burden in the next few years, but the payments may not be large enough to be worthwhile for many practices, especially small primary care offices, and there is no mechanism established to pay for HIEs after the meaningful use payments run out.

One possibly way to make the business case was identified as a motivating factor by Fontaine et al and is consistent with findings of my own research: quality measuring and reporting capabilities provided by HIEs.[9] Quality reporting appeared to be a “frequently mentioned motivation for establishing HIEs” in Minnesota.[4] If HIEs are adequately designed to support quality measurements, and those measurements are expanded to become more comprehensive, quality-based performance payments may have the potential pick up where the meaningful use payments leave off.

For this to happen, however, the quality metrics must measure performance at a fitting level of analysis in an organization or network of providers, which may require grouping provider practices together. Fortunately recent momentum to establish accountable care organizations (ACOs) may supply the framework for such grouping. [10] ACOs and HIE will need to work together: ACOs will be interested in the services that HIEs offer for improved clinical decision-making and cost avoidance, and HIEs will look to ACOs to help them achieve sustainability.

Another way to make the business case to small primary care physicians is through their participation in a patient-centered medical home program.[11] This approach may cover providers' HIE membership by providing payments that “support coordination of care” between providers and “use of health information technology for quality improvement.”

What will it take for small primary care practices to participate in HIEs? In the short-term, the meaningful use payments may motivate many, but some providers may still need more direct subsidies or be allowed to contribute clinical data to HIEs for free and only pay for access to collected clinical data. In the long-term, HIE must be embedded in the larger

healthcare system's incentive structures. When the meaningful use payments expire, if patient demand for HIE, quality-based performance payments, ACOs, and patient-based medical home projects have not gained in influence, HIEs may still suffer from the difficulties of sustainability and attracting small providers that they grapple with today, and much of the potential benefit of HIE will not be realized.

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