# Open for Business: Private Networks Create a Marketplace for Health Information Exchange



By Chris Dimick

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*Large health systems and their IT vendors are creating private information exchange networks at a time when federally funded state operations are gearing up for launch. Is there room for private and public offerings in the new HIE marketplace?*

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Many state level health information exchanges (HIEs) are on the brink of launching, but some health IT vendors claim that they are already obsolete.

More than half a billion dollars has been spent by the federal government to set up state-level health information exchanges. These HIEs are tasked with facilitating the transfer of health data between disparate providers both within and across state lines.

But progress has been slow since the State Health Information Exchange Cooperative Agreement Program funneled $548 million to 56 states, territories, and state-designated entity HIE startups in 2010. Many of the HIEs are still developing their sustainability plans and preparing to launch, relying solely on the government grants that run out in just a few short years.

However, a mix of forces are driving providers to seek ways to exchange health information now. Instead of waiting for state HIEs to develop, some larger health systems have begun contracting with IT vendors to develop their own systems, focused on exchanging information among its own facilities and select outside partners.

So many "private HIEs" are popping up, industry analysts have begun to debate whether nonprofit regional and state HIEs have become obsolete before even taking root.

Others warn that private HIEs-which may narrow their services according to margin and competitive advantage-will drain customers and resources necessary for the success of state HIEs, which aim to provide broader services and are intended to serve the greater good.

Whether private and state HIEs compete or coexist will become clearer with time, but for now providers can be understandably confused about which type to join.

## Private Agility or Public Good?

HIE is having its moment with providers. Driven by HIE-infused initiatives like meaningful use, accountable care organizations, and the restructuring of provider payment models, healthcare systems and small providers are increasingly interested in linking to an HIE. A 2011 CapSite survey of 340 hospitals found that 74 percent plan to purchase new HIE solutions in the near future. That share is nearly double from when CapSite surveyed hospitals in 2009. When asked which HIE they were considering, respondents identified a mix of private and state HIEs.

The compatibility between state and private HIEs depends on the development model of the state HIE.

States are taking varied approaches in creating their HIEs. Some, like Delaware, created an HIE that provides both infrastructure and connectivity to its members, and it connects both healthcare facilities and physicians. A state that uses this model would be in direct competition with private HIEs, both vying for physicians and health systems to plug into their networks.

A federated model like Delaware's has been more difficult to achieve in larger states with multiple providers and interests.

Some larger states are investing in their nonprofit regional health information organizations, or RHIOs, as their connection point, funneling money to the RHIOs who in turn sign up providers and send information to the state HIE for connectivity. Indiana, a state with well-established RHIOs, is trying this model.

Other states are creating umbrella organizations that connect all of a state's HIE entities, including private HIE networks. They then offer their own value-added services. This state HIE would also directly connect to independent and rural providers not covered by other groups.

Kentucky and several other states are attempting this model. While some HIE vendors welcome the collaboration, others claim their clients are better served relying on their own HIE network to handle their needs.

## ONC: Avoid the Public Utility Model

The Office of the National Coordinator for Health IT, which manages the State Health Information Exchange Cooperative Agreement, has been diplomatic during the debate, saying only that different models work best for different states.

But since handing out the state grants, ONC has urged its grantees away from the top-down, single, state-wide public utility model, according to Claudia Williams, director of the State Health Information Exchange Program at ONC.

During a National eHealth Collaborative roundtable meeting of health IT experts in March, Williams said states have been told to try and leverage the private HIE development in their areas and look to provide services that have yet to be met by the private sector, such as linking private HIEs, supplying HIE to rural providers, developing standards and policies, and offering public reporting links.

"We still have concerns about creating a public entity that would then become a monopoly that folks are mandated to use," Williams said, "and we have guided folks through our program to really leverage gap filling-what is the space you need to fill so that everyone can participate."

## States Seeking Value-Adds, Breadth

States receiving ONC grants were free to develop their HIE model as they saw fit, given that they did not interfere with the marketplace and could be self-sustaining after grant money dried up, according to Gary Ozanich, PhD, senior research fellow at the Center for Applied Informatics at Northern Kentucky University and the chair of the business development and finance committee at the state-level Kentucky Health Information Exchange (KHIE). ONC intended the state HIE groups to use the cooperative agreement grants to foster HIE as a verb in their areas, not necessarily as a noun, Ozanich says.

Seeing how many different HIE systems were developing in Kentucky, KHIE decided take the umbrella approach and serve as the aggregator of all the disparate private HIEs, RHIOs, accountable care organizations, and vendor networks as well as offer direct HIE services to rural and independent providers not already linked to an HIE.

In addition to serving as the state's exchange hub, KHIE plans to offer providers value-added services that will make paying their soon-to-come state HIE participation fees worthwhile.

For example, KHIE can offer providers in private HIEs access to other HIEs as well as exchange capability with state immunization registries, a requirement in the meaningful use program. Other services include a patient record locator service and master patient index, as well as links to a new birth registry and state-required cancer registry.

Low-cost, value-added services and the ability to cover all providers regardless of size or affiliation will make KHIE and similar state HIEs sustainable, Ozanich says.

"Since we are covering the whole state, we can capture economies of scale and spread our costs so that the cost is palatable," he says.

KHIE's sustainability through this model is currently just a theory. While the HIE was exchanging data among 37 organizations as of March-and continues to grow-it has not yet instituted fees, which must be sorted out through the state legislature, according to Karen Chrisman, staff attorney for the Kentucky Governor's Office of Electronic Health Information, the agency operating KHIE. For now the HIE must rely on its grant money for operations.

## Less Profit in the Greater Good

State HIE sustainability is the biggest question mark when it comes to long-term viability, and some in the industry foresee private HIEs lessening their chances of survival.

If private HIEs corner the market on the most profitable services, state HIEs-charged with providing a wider scope of services with a lower return on investment, such as connecting rural providers-are being set up to fail.

This argument was made in a controversial paper published in January 2012 in the *Journal of the American Medical Informatics Association* by Leslie Lenert, professor of medicine and biomedical informatics at the University of Utah's School of Medicine. In the paper, Lenert and his coauthors say recent ONC initiatives such as the Direct Project, as well as private HIEs, undermine RHIOs and state HIEs.

"If exchange of data and meaningful use certification can be achieved without connecting to a RHIO, there may be little reason for providers to join one, particularly if RHIOs have higher costs," the authors state. State HIEs would require a monopoly on the more profitable aspects of HIE in order to offset unprofitable services.

"It is very difficult for public utility model enterprises that have to subsidize activities and provide universal service to compete against free enterprise organizations that don't have to provide these services," Lenert said during the March National eHealth Collaborative roundtable meeting, which in part discussed his paper.

## Alignment or Bureaucracy?

Another argument for state HIEs is they are uniquely positioned to bring together competitors and connect different private HIEs. The state HIE in the regulator role, establishing a single set of rules for privacy, data exchange, and services fills a need currently lacking in HIE. In Kentucky, all providers and HIEs must sign a participation agreement that enables the standard exchange of information between different systems, Chrisman says.

State HIEs are in a better position to develop both intra- and inter-state exchange, tackling the tough issues in an open public forum regarding patient content, differences in state law, and developing standards around HIE issues like exchange authentication, supporters say. Eventually, this work could be translated into a nationwide connection between states. Some vendors disagree, like Marc Willard, CEO of private HIE vendor Certify Data Systems.

Many health systems cross state lines, which would require those systems to join several state HIEs just to exchange health information within their own systems, Willard says. He believes it is better to leave HIE to the local health systems, which can then connect to a state HIE if they have a need to exchange information with systems outside their area.

"We have five or six health systems that will connect with each other without any state HIE, without any bureaucracy, and they will do that on an as-needed basis," he says.

State HIEs may be shoehorning themselves into the marketplace, adding an unnecessary layer and offering services that private HIEs could handle themselves, according to Willard.

But while private HIEs may have the technical capability to connect to other private HIEs, they may lack business incentive to do so on a large scale. When private HIEs do link up, it is usually to serve a narrow business case and not for the type of extensive record exchange that supporters of state HIEs envision.

"The public good is actually about creating a level playing field for grouping information across all organizations, and if we take away the structure to do that we are going to be in more trouble than we think," Lenert warns.

## Private HIE: Focusing on the Business Need

The track record for regional and state HIEs is not a good one. Many have folded, unable to find sustainable business models that support their missions.

Just ask Chris Voigt, senior director at HIE vendor MobileMD, which is owned by Siemens Healthcare. Voigt helped develop and launch the once-promising RHIO CareSpark in the Tennessee area. The RHIO ceased operations in June 2011 after it was unable to develop a solid business model despite a string of government contracts and local provider support.

Voigt also helped ONC develop several national HIE projects like the NwHIN, which has been slow to find users, Voigt says, because it lacks a strong business case.

"I worked with ONC on all the NwHIN projects, and it was a wonderful thing and we were going to save the world, but nobody used it, nobody picked it up, not because the technology wasn't there but the economics never matched," Voigt says. "So why should providers share data and how should they coordinate care with this technology? In the enterprise private space with our HIEs, there are a lot of financial reasons to do it."

State HIEs must seek alignment from stakeholders spanning entire regions when developing their networks. This can be difficult when developing policies on contentious issues like privacy and security practices, patient consent processes, and even fee structures. In Kentucky, KHIE has been working for a year and a half to conduct a cost analysis and get necessary approval from legislature before it can charge HIE fees.

Private HIEs don't have the same restrictions. They can determine their own data exchange standards and fee structures.

Private HIEs typically form between trading partners that have established relationships and are happy to trade data. State HIEs don't have that luxury, Voigt says, and they usually must reach hard fought consensus between parties, Voigt says.

"When it comes to state HIE, everybody involved is extremely risk adverse, so those HIEs are threatened by such tight control and such low risk exchange that you may even be hurting the patient," Voigt says. "Because of the decisions people made in the public HIE about taking 'no risk' views to exchange, you are actually not exchanging anything, which would be even worse."

For the same reasons, private HIEs can be faster to offer new services and adapt to new business situations, Voigt says.

"We can react extremely quickly here,'" he says.

Lenert asserts that this difference creates a disservice to the patient and the taxpayer; that state HIEs should receive backing to serve as the HIE for a state and not face direct competition with the sometimes self-serving private HIEs. That revenue should drive the health services provided is counter to the goal of healthcare-treating patients, Lenert says.

"(This) argument that every transaction in healthcare is one that's economic, and that (unprofitable services) can be subsidized, but only if the institution gets value from it, I don't think that is true," Lenert said during the NeHC discussion. "I think things like record locator service that looks up every place that a person has been and integrates that record for emergency purposes isn't necessarily economic, but it is really valuable to patients."

## "Competition First, Then Cooperation"

A healthy bottom line for those health systems that invest in private HIEs is good for patients, too, Voigt contends. The private HIE approach of business case supporting information exchange could be the long sought key to HIE success, he says.

"We say at MobileMD, with good economics comes good care," Voigt says. "Even though our providers often start using a MobileMD network for competitive reasons, literally driving more patients through the door by connecting with more docs in the community, that's competitive and maybe makes you not feel quite the right way, that healthcare should be better than that.

"But we live in a capitalist economy and that is the way it is. But even with that physician affinity, we know there is better data flowing and care can be improved. It is still a good thing."

While providers might create a private HIE for competitive reasons at first, Voigt says that as they become more comfortable with the HIE's capabilities, benefits, and risks, many providers begin to reach out and share data with other HIEs with care

and quality improvement in mind.

Several MobileMD customers have worked with competitors to trade information through their HIE, but they had to come to that relationship on their own, Voigt says. He thinks many providers would be reluctant to join a state HIE that forced collaboration.

"We have a phrase: 'competition first, then cooperation,'" he says.

## Going Private

This phrase has rung true for private HIE operator Pinnacle Health System. Located in Harrisburg, PA, Pinnacle uses the profits from its most successful HIE functions to invest and support the other services that do not make money but improve healthcare and support the HIE's greater good, says Steven Roth, vice president and chief information officer with Pinnacle.

In 2009, unwilling to wait for Pennsylvania's then-fledgling regional HIE to develop, Pinnacle established a private HIE through MobileMD in an effort to better connect its physician offices with the healthcare system. Today about 780 physicians use the Pinnacle HIE, Roth says.

Pinnacle's earlier attempts at joining a public HIE were not promising. In 2007, it joined central Pennsylvania's biggest health systems and payers to discuss a regional, public HIE. But after six months of grinding discussions, "it became really clear to me that the neutral HIE wasn't really growing arms and legs and the health systems in the market really weren't interested, probably because of competitive reasons," Roth says. "It became clear if we wanted to do this, we had to do it ourselves."

Though grants were being handed out to establish HIEs, Pinnacle wanted its HIE to be sustainable from the beginning. The plan was to build an HIE that made a profit by boosting use of Pinnacle's ancillary services such as lab and radiology through referrals from the physicians they would connect to. Electronic ordering capability and electronic results distribution would also spur more business.

But Pinnacle does not choose its HIE services solely by profitability. The network's profits are in part used to support more community-focused activities that are unprofitable. For example, one initiative helps religious organizations that use the HIE to proactively manage and monitor the care of their members.

"We started shopping in the market for a product that could support all of the not-for-profit, community minded and focused set of capabilities as well as a set of functionality that gave us a reasonable ROI story to tell when we went to ask our board for funding," Roth says.

The HIE achieved ROI in nine months, half the time it expected. For the last three years, the HIE has been operating with a profit.

"We had to build the funding mechanism in, but the real focus-and where most of the time is really spent-is around the community outreach piece of the HIE, patient and community engagement, physician engagement, the not-for-profit, mission piece," Roth says.

### HIE concept: Participants


Source: IL HIE Authority Data Security & Privacy Committee

## The Case for Compatibility

While state HIEs might need wider stakeholder input to develop standards, privacy agreements, and other consensus for the HIE to develop, some argue that they are in the best position to ensure data exchange remains the most useful and secure. Private HIEs must follow HIPAA too, and supporters like Willard contend that they create exchange that is just as valuable and private as any state entity.

But including a vast array of stakeholders in the discussion could position the state HIE in a better place to truly solve complex issues like consent, exchange authorization, and even technical issues like patient record locator services, says Harry Rhodes, MBA, RHIA, CHPS, CPHIMS, FAHIMA, director of practice leadership at AHIMA.

Because most private HIEs are just that-private and not linked to competitors-the argument can be made that the industry needs entities like state HIEs to pull competitors together and help integrate for the purpose of information sharing.

For example, Pinnacle Health has invited other health systems, including direct competitors, to link to and use their private HIE. Most have declined, with only one health system setting up a limited one-way exchange of information from just one Pinnacle physician office.

Vendors argue that health systems should develop connections naturally and through specific business ventures.

"We have clients where if you are standing in one client's hospital and you are looking out the front door, across the street is a competitive hospital facility," Voigt says. "How on earth are they going to come around the same table and figure out how to share data? They are not going to, because every other minute of their business day they are trying to figure out how to compete with each other."

Some private HIEs are happy to engage in the development of the state HIE, hoping the connections improve their already sustainable offerings.

Pinnacle Health has already committed to connecting its HIE to the new state-level Pennsylvania eHealth Collaborative HIE currently in development. Pinnacle sends representatives to the meetings and supports the HIE's mission of connecting the state's private HIEs while offering "safety net" HIE service to independent and rural providers.

State HIEs operate best when they work with but not against private efforts, filling the gaps left by private HIEs, Roth says.

"In my mind that is a pretty good model," Roth says. "It makes sense to me that some public entity brings all of those [private] entities together, where there really isn't a motivation otherwise."

## References

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