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# Roundtable on RHIOs



**Industry Experts  
Build the Case  
and Define  
the Roles**



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# Roundtable on RHIOs

## Industry Experts Build the Case and

By some estimates, there are more than 200 regional health information organizations (RHIOs), often called health information exchanges (HIEs), in the United States, though most exist on paper only. Recent research, funded by Health & Human Services and conducted by the eHealth Initiative, identified 109 RHIOs, with only 25 of them fully functional. Still, that's a 177% increase over nine functional RHIOs identified in 2004's survey.

With their numbers spurred by federal initiatives and grants, RHIOs hold undisputed promise to improve the quality of patient care and reduce medical errors.

However, with the demise of community health information networks (CHINs) still fresh in the collective memory of many healthcare veterans, responses to federal calls to RHIO action should necessarily be more measured and thoughtful.

Provider, payer and ancillary healthcare organizations interested in forming RHIOs recognize instinctively that it's the clinically correct thing to do. But when they arrive at preliminary meetings, they need credible assurances that resources spent will yield sustainable results, tallied in black ink on P&L statements. And they need to assure those at the table

## Roundtable Moderator and Panelists



**Moderator:**  
**Don Mon, Ph.D.**  
**AHIMA**

Dr. Mon is vice president of Practice Leadership for AHIMA, an

association of more than 50,000 health information management (HIM) professionals. Prior to AHIMA, he served as a chief information officer at The Pritzker School of Medicine, University of Chicago, and helped initiate, develop, and maintain data and information systems for Catholic Healthcare West, Premier, Inc., the Oracle Corporation, and Rush-Presbyterian-St. Luke's Medical Center. He presents regularly at educational events and has published numerous articles on health information management and technology subjects.



**Richard Gibson, MD, PhD**  
**Chief Medical Information Officer**  
**Providence Health System**

Dr. Gibson is a practicing physician certified in

both family practice and emergency medicine. He holds a Ph.D. in Medical Informatics and an MBA from Wharton. In 1996, he joined Providence Health System, Oregon Region, a group of seven hospitals, a health plan, and 250 employed primary care physicians. As Chief Medical Information Officer, Dr. Gibson is responsible for planning and implementing clinical information systems in both the hospital and office arenas. His work at Providence earned him recognition as a winner of the prestigious 2005 AMDIS (Association of Medical Directors of Information Systems) Award.



**Karen Grant, RHIA, CHP**  
**Partners Healthcare System, Inc.**

Ms. Grant is Corporate Director, Health Information Services, at Boston-based

Partners Healthcare, which includes nine hospitals, a managed care plan, teaching affiliations with Harvard and Massachusetts General, and numerous physician organizations and facilities spanning the continuum of care. She leads Partners' HIPAA and master patient index efforts and is a frequent speaker on HIPAA, privacy, coding, re-engineering health information services and the electronic health record. She received the 1997 Outstanding Achievement Award from the American Health Information Management Association, and is Partners' health information management representative to the Massachusetts Health Data Consortium's MA-SHARE initiative.

# Define the Roles

that exchange participants are sufficiently committed to endure the “fits and starts” that seem to characterize progress in this emerging arena.

*Healthcare Informatics* is privileged to partner with the American Health Information Management Association (AHIMA) and the Association of Medical Directors of Information Systems (AMDIS), with underwriting support from McKesson and EMC, to assemble a panel of healthcare experts to discuss the emergence of RHIOs and their ramifications. The panel’s discussion took place on August 17, 2005.



“The question is, what business driver would cause a health system to divert money from building its own patient safety initiatives to building one across a community?”

Richard Gibson, MD

## Getting Started: Why a RHIO?

**Mon:** Can you address the business needs that brought your organizations together to form a RHIO?

**Grant:** At Partners, we’re participating in the Massachusetts Health Data Consortium RHIO, called MA-SHARE, and it’s still evolving. We had a patient safety initiative in Massachusetts that worked on sharing medication information; we called that MedsInfo. From our lessons learned with MedsInfo, we moved to share more clinical information among communities in Massachusetts. We learned that getting information was something that did improve patient care as well as patient safety. That was really our proof of concept, and we are moving forward with adding more data elements.

**Matthews:** In the Richmond, VA, area years ago, there was a lot of talk among the physicians about EMR adoption. One of their concerns was, “If we make an investment in an EMR, how do we get the clinical data we need into it?” Then we began conversations around how to interface—into a single electronic chart—clinical data from hospitals, labs, pharmacies and so forth, thereby enabling the physicians to move out on the HIT adoption curve. That was one catalyst for our RHIO on the physician side. They didn’t want some national solution imposed upon them. They wanted to have their own



Deborah Kohn, MPH, RHIA, CHE, CPHIMS, FHIMSS  
Principal  
Dak Systems Consulting

Ms. Kohn has more than 25 years of experience with health information systems and is founder of Dak Systems Consulting. She’s received AHIMA’s prestigious CPR Advancement Award for promoting and implementing technologies of Computer-based Patient Record systems, and serves on AHIMA’s EHR Practice Council. She publishes and speaks frequently on EHR systems, document management technology, Web initiatives and health information exchanges. She’s a “resource” to CalRHIO, an umbrella organization that brings together healthcare stakeholders to develop common elements—governance, operational processes, technology, and financing—required for forming and sustaining RHIOs within California.



Michael Matthews  
CEO  
MedVirginia

Michael Matthews is the founding CEO of MedVirginia, central

Virginia’s RHIO, based in Richmond. In 2005, MedVirginia launched a community health information exchange and will provide a variety of automation tools for affiliated practices. Matthews is also chief executive of the Central Virginia Health Network, a hospital services organization. He received his BS (Mathematics) and his MSPH (Biostatistics) degrees from the University of North Carolina. Matthews serves as project director and principal investigator for the Rural Virginia E-health Collaborative (RVEC), an AHRQ-funded initiative of Rappahannock General Hospital, supporting the adoption of health information technology to meet the needs of rural health care providers.



Todd Rowland, MD  
Director of Medical Informatics  
Bloomington Hospital

Dr. Rowland received his Doctorate of Medicine

from Indiana University in 1989 and completed clinical specialty training in physical medicine and rehabilitation and electrodiagnostic medicine at Ohio State University. He completed a post-graduate fellowship in medical informatics at the Harvard/MIT combined program in 1998. He is currently working with regional medical practices and Bloomington Hospital to develop the E-Health Collaborative, which supports development of a patient-focused integrated health care delivery system that can access and exchange secure, confidential data across geographic and organizational boundaries to improve quality of care, access to services and operational efficiencies.

## Industry Experts Build the Case and Define the Roles



platform across which they could securely communicate with each other.

On the hospital side, the compelling driver was clinical workflow process improvement. The hospital was looking for a way to integrate clinical process improvements with the physician's practice, for patient safety and care quality enhancement. Put those together and that's how we were able to get both the physicians and the hospitals on board with the initiative.

**Kohn:** The goals at the California Regional Health Information Organization, known as CalRHIO, are to improve the safety, quality and efficiency of healthcare for all Californians. As such, CalRHIO is a collaborative statewide effort that will facilitate the use of information technology to exchange care data. In addition, CalRHIO is an umbrella organization for the 15 current or developing RHIOs within the state, facilitating the governance, technology, financing and other aspects that are required for all RHIOs.

**Rowland:** Business needs resonate in our community. What's different about us is that we're a rural regional center and we want a grass-roots effort to determine our own destiny. The IS enterprise planning project we had under way gave us an opportunity to begin a community planning process and work with the physicians to create the opportunity to have more interoperability. Rather than waiting for a federal program to roll out, we felt there was a lot of work we could do. We're using the national data standards and are extremely aware of what's going on at the federal level, and leverage that activity.

### Is There a Business Case?

**Gibson:** What's been mostly expressed so far is that there was a clinical need for a RHIO. What I didn't hear specifically was a business need. In Portland, we believe the clinical needs are clearly there, that patients will benefit, but we're challenged to come up with a business need. Each of the seven competing healthcare organizations is trying to decide how to spend their dollars to build their own information system within their walls.

Now we have a suggestion from a community organization that says, "You need to spend money

connecting information across your walls, even though you compete in the same city. Don't be proprietary." But having complete information about patients is considered by some to be a competitive advantage. The question is, what business driver would cause a health system to divert money from building its own patient safety initiatives to building one across a community?

**Rowland:** If you look at the hospital/physician relationship, physicians have relationships with many hospitals. They don't want to deal with disparate systems for delivery of test results and messaging.

**Matthews:** At MedVirginia, we don't believe information systems and clinical data are a sustainable competitive advantage. In the short run one system may get a head start over another, but in the end it needs to be a level playing field driven by patient safety and quality.

Once we got our initiative started we certainly wanted to integrate and play at both a state and national level, but that was secondary to the strong interest we had of making sure we were able to support our existing medical trading area needs.

**Kohn:** And the same thing for the CalRHIO. Initially CalRHIO looked at the goals of several RHIOs in other states and at the goals of the 15 developing RHIOs within California and realized that quality of care was being compromised when medical data was being exchanged between two or more competing organizations within one community. Those compromises were very costly and labor-intensive and reflected real business needs.

For example, placing a paper medical record into a taxicab to connect patient visits between two facilities, even within the same provider organization, was costly. Faxing information to competing organizations was error-prone and subject to patient privacy violations. Yes, there were clinical needs. But they were driven by business factors of labor, cost and efficiency.

**Mon:** How did RHIOs come about where there wasn't a clear business need, just a gut-level feeling that it was the best thing to do?

**Grant:** The MedsInfo project evolved from the Massachusetts Health Data Consortium, where we determined that, for the first time ever, medication history would be available for emergency departments across multiple payers. Once the players saw that MedsInfo was a good system to have to enhance patient safety, the next step was to

Fr: planning for the next glitch

To: planning for the next decade

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develop a means to support clinical data exchange and make lab results accessible. We're beginning that project, with support from the Markle Foundation.

**Gibson:** Perhaps I'm being too literal on the business case, but when I hear talk of a business case I expect someone to say, "Here is the money invested, and here is the return on that investment you can expect by participating in a RHIO." I haven't yet heard that. Everybody wants to do it because it's the right thing to do. But what we're struggling with as an organization and a community trying to come together with a plan is, "What are the numbers? This is the money I put in. Here's what I'll get out by investing in this expensive proposition."

**Kohn:** At North Carolina Healthcare Information and Communications Alliance, and at a primarily rural North Carolina health network, studies were performed—at the latter to determine the feasibility of exchanging health information between competing provider organizations. They added up the costs, the time, and the errors, and were able to show that the effort was feasible and that there was a return on the investment, both from a qualitative and quantitative view. CalRHIO is relying on those and other studies.

**Rowland:** We work with the same consulting group that works with the Indiana Health Information Exchange; and, it's our understanding that they found a 75% reduction in clinical messaging. Part of the problem with physicians receiving results is they get duplicate results. So, one of the efficiencies is becoming a more effective results delivery mechanism.

Another good example is HealthBridge in Cincinnati, which has been doing health information exchange for nearly 10 years. They've quietly connected all the hospital systems in Cincinnati without grant dollars. They also have return on investment information.

There is data out there. It's not as firm as I think a CFO would like to see, but for results delivery there is data.

Also, when you have a unified medication list, the reduction in adverse drug events can result in some very good savings for the community, not necessarily for the hospital systems, but for pay-

ers and employers. That's the argument for having a multi-stakeholder group involved. You need them at the table to help pay for the effort.

**Gibson:** Excellent point. So, if we could say, "Payers, you are the ones benefiting from a RHIO and here is the amount of money you can save. That's why we're asking you to make the lion's share of the commitment. The health systems will contribute in kind by providing the data." If we can clarify that case, then it's much easier to establish such an organization.

I believe it's the right thing to do, but I'm concerned that without a strong business case, ultimately a RHIO will fail.

## Who's on Board?

**Mon:** It was mentioned that payers would benefit from joining RHIOs. How did it evolve within your RHIO? Which organizations were the first to join?

**Grant:** We were very fortunate to have the Massachusetts Health Data Consortium as our convener. To pull the group together, we had core funding from Blue Cross Blue Shield of Massachusetts, the eHealth Initiative, the Markle Foundation, and grants from several regional providers and payers. When you have the money and the convener, you are able to develop a mission, project priorities and governance. Picking initial projects and pilot sites was a collaborative effort for the members of Massachusetts Health Data Consortium.

**Matthews:** Similarly, we leveraged an existing organization—a PHO or physician hospital organization, which had 10 hospitals and about 1,000 physicians—to create an IT company, which became MedVirginia.

Because we had gone through a lot of the governance issues and participant selection with the PHO formation, a lot of those battles had already been fought. We partnered with Virginia Urology, which was a very IT-savvy practice in the region and formed the initial RHIO.

We have a very streamlined board and were able to do a lot of the development of the health information exchange infrastructure under the radar of the community, until we were ready to start engaging them. At that point, we expanded our outreach to bring in other stakeholders.

Having a tangible end point to the development process created excitement with the additional stakeholders that we tried to enlist. So, I wouldn't

underestimate the value of having a product, rather than spending three or four years in planning. I don't think most communities have the stamina to survive that kind of extended planning.

**Kohn:** CalRHIO has five working groups: business finance/legal, governance, technology, clinical and a regional efforts group. Each group is looking at all the stakeholders of the 15 developing RHIOs within California and other RHIOs in other states, to see what patterns emerge.

What they've found is that every RHIO started with different stakeholders. Some started completely with physicians, or patients or hospital organizations. Some added employers and health plans. But they're all coming together with a variety of stakeholders and trying to sort out the best mix.

## The Vendor Challenge

**Mon:** *We talked about the types of organizations that initially join a RHIO. What about information technology vendors?*

**Matthews:** In our case, providers want to own the infrastructure, to support care delivery in the medical trading area. Others are ancillary to that and ought to be partners, but not in the basic equity in the infrastructure itself.

**Rowland:** There are at least two major categories of vendors in this space: the integrators of disparate systems and the companies that come to the table with a full suite of products. In many efforts it's going to require both kinds of vendors. But the vendors are uncertain about whether or not they want to invest, that they might not be creating a sustainable system.

**Mon:** *If a vendor were to come in as an investor or a full partner, would that be acceptable to the providers?*

**Rowland:** In our community it's a possibility, depending on the details, as long as the providers don't feel a loss of control. It has to be very explicit where the data is going, what's happening with it and what the financial implications are.

**Gibson:** RHIOs challenge vendors of integrated systems. They ask vendors to put their systems together in a way that makes them interoperable with other vendors' systems. A system integrator can do that. But for full-suite-of-product vendors, building a RHIO is asking them to build their suite so it can interact with another vendor's.

## Cost Justifying Your RHIO (and your involvement in one)

Dr. Gibson's assertion that a browser-based portal strategy can overcome RHIO integration and connectivity issues is corroborated by [HealthBridge in Cincinnati](#). HealthBridge operates on a \$2.6 million annual budget, delivered test results to 5,138 physicians in the past 12 months, across five integrated delivery systems and 17 hospitals, and is cash-flow positive. Says Keith Hepp, HealthBridge's director of business development, 76% of that \$2.6 million is paid by hospitals and labs, with the remainder covered by physicians and their billing companies.

While HealthBridge itself is a going concern, how does one of its participants balance the fiscal scales? According to Jim Gravell, executive VP and COO, Mercy Health Partners of Southwest Ohio, a HealthBridge sponsor, "We believe in the concept of RHIOs to improve the quality of healthcare, but wanted to be sure we could justify our fees on a pure ROI basis. We... determine[d] what it would cost to digitally connect our physicians and [found] that, working as a community, there was over \$1 million in hard cost savings for Mercy Health Partners over five years—after HealthBridge fees."

Hepp says that HealthBridge delivers more than 1.1 million test results to physicians each month, and the paper, printing and personnel cost savings associated with results delivery alone are sufficient to cost-justify the hospitals' HealthBridge dues.

[How about smaller communities?](#) Camilla Hull Brown, principal, Strategies for Tomorrow, Inc., says the concept works there too. Her firm consults with many RHIOs, including Dr. Rowland's e-Health Collaborative in Bloomington, HealthBridge and Michiana Health Information Network (MHIN), South Bend, Ind.

"With only two hospital systems, one primary lab and less than 600 physicians," Brown says, "MHIN had to be creative in identifying short and long-term benefits for each organization, engage stakeholders with the ability to pay, and develop an equitable plan. The willingness of physicians to participate financially was largely due to their positive experience using the MHIN clinical data repository over the last seven years."

The business case presented in South Bend in August 2005, to expand the community data repository system to enable results delivery, included short-term ROI and medium-term cost avoidance opportunities for all the entities.

ROI and workflow studies show that a paper-based physician practice without an EMR can expect to save \$5,000 - \$7,000 per physician per year by moving to results delivery via a simple electronic inbox, Brown reports, the result of improved staff and physician time utilization. Practices with EMRs installed can also realize savings from the RHIO.

While ROI calculations for the two hospitals and lab were done internally and kept proprietary, Brown echoes Hepp's contention that reductions in paper and printing of results, some 38 percent of which were duplicates according to studies on the physician practices, and avoiding second and third requests for results delivery, were enough to encourage the three entities to expand MHIN capabilities.

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Putting data together in such a way that the emergency department system can send out data to be collected into a RHIO or into the clinical data repository of another vendor is going to be a challenging business case for full-suite vendors, without some inducement to do so.

**Kohn:** For example, when it comes to the master patient/person index, or MPI, which is really the first thing that has to be resolved technologically, not all vendors have robust MPI systems. Consequently, RHIOs are involving integrators or vendors that specialize in identity management. This is where I see HIM professionals having a big role within RHIOs. They are the ones who have managed MPIs for years.



**Grant:** Speaking of roles for HIM professionals, we're identifying key privacy issues and are finding that auditing, reporting and ownership fall under the privacy role. In addition, assuring data integrity falls under their data management role.

But, as we come up with policies and necessary application capabilities, and the question becomes "Can the vendors do this?" we see that HIM professionals and vendors definitely need to be at the table.



**Rowland:** The Health and Human Services contracts, particularly for interoperability in the national health information network, are going to be the playgrounds where vendors can learn to work together more effectively, where there is some financial incentive for them. As Dick Gibson points out, it would be very challenging otherwise.

**Gibson:** With more EMR adoption by physicians, we're beginning to see a workable model, where payers induce physicians to purchase EMRs for their office by giving them a premium on their compensation. That premium comes for using certified EMR products. And, part of what's certified is that they are interoperable. That's a cogent, coherent plan for inducing doctors to adopt EMRs.

It's more challenging on the hospital side, where hospitals are induced by, say, the Centers for Medicare and Medicaid Services, to purchase hospital information systems that are inherently interoperable. There's not yet a certification committee on hospital information systems, and currently there isn't that inducement. We're getting

there on the physician side, but the hospital information side is a little more complex.

**Rowland:** The certification process of groups like the Certification Commission on Health Information Technology, or CCHIT, will be very helpful for the physicians. I hope they branch out and do similar things for hospital systems.

## Down to Details: Data Exchange

**Mon:** Did business drivers help determine a priority for the health information to be exchanged?

**Grant:** In Massachusetts, administrative data was being shared among dozens of providers and payers through a collaborative called NEHEN, or New England Health Exchange Network. Then we went to emergency department sharing of medication histories. In terms of our RHIO, we started out thinking about an infrastructure to support eprescribing and then the sharing of labs, clinical results and notes. Of course, the more you share the more complicated it gets. So in terms of our RHIO, the jury is now out on what we will be sharing. It's another evolving story.

**Rowland:** It's a mistake to think these are linear processes that go in step-by-step sequences. They go in fits and starts.

**Mon:** If things go in fits and starts, how could you possibly build a business case?

**Rowland:** This is where the passion comes in for people who see the bigger picture and look at the clinical, financial and administrative sectors of healthcare. Those who have the endurance to keep pushing have to wait for other people in the community to evolve, and find ways to do outreach and educate them so that they eventually embrace the vision. That's the most challenging thing, to be the pioneer and feel you know where things need to go but you have to wait and be patient so you don't get too evangelical.

**Kohn:** At CalRHIO, that's exactly what's happening. Four projects developed based on the work of those five working groups I mentioned, as well as looking at RHIOs outside of California. The first project is emergency department sharing of information.

**Matthews:** You described the fits and starts, but one of the keys here is just being opportunistic and knowing where your leverage points and relationships are in a community. The more data

that are in the RHIO, the more subscribers we'll have. And the more subscribers we have, the more data will be put into it.

How do you get that initial critical mass of data in there? For us, Bon Secours Richmond Health System was an initial and primary sponsor and partner with MedVirginia. Gaining access to all of their clinicals was very important to us.

From there, adding things like reference lab data, connectivity to the PACS, being able to interface with the practice management systems that do business in this region, and being able to bring over physicians' schedules and patient lists—that certainly adds to the utility of the RHIO and enables applications like electronic prescribing.

Then the final piece is the way we're handling practice notes. We are creating the capability for the physicians to integrate their internal practice notes into the same electronic chart in which the community-based information resides. The community will not see those notes unless the physician has specifically tagged them for an e-referral or an e-consult. For the convenience of the physician, being able to see the community data and their internal practice notes in one view... we've found a lot of excitement around that combination.

## Adopting Standards

**Mon:** Let's talk about the standards and interoperability, a key problem in exchanging health information. Which standards have you adopted in your RHIO?

**Rowland:** One of the things that we have done is to help create interoperability standards that mirror what's going on federally.

Physician groups often don't pay much attention to interoperability. We're trying to accelerate their understanding of what the tradeoffs are and help them with their selection process. The easiest way to do that is to give them questions they can insert in their RFPs.

We leveraged a lot of the work that CCHIT did—aggregating the data standards for public comment—because that was one good place to find all of them and, to some extent, to see them stratified by which are more realistic and which are really in formation.

**Gibson:** I'm not saying that it would be ideal, but it is possible to operate a RHIO without a great deal of interoperability. We considered this in Portland, where each of the major players had



"In our case, providers want to own the infrastructure, to support care delivery in the medical trading area. Others are ancillary to that...."

Michael  
Matthews

a significant chunk of data they were acquiring electronically within their institutions.

Deborah correctly stated that the MPI is the first thing that needs to be done in a RHIO to establish patient identity. So let's assume that an MPI has established where the data are in each of seven different healthcare organizations participating in a RHIO. If the organizations were contacted by the RHIO hardware or software they could simply present that patient's data in a Web-based format. You wouldn't really have to do interoperability; you would just have to be able to show the data in a Web browser.

**Rowland:** In the short term, this visual integration of information that Dick describes is obviously more doable. But the question is, who helps the physicians do that? They typically work with smaller vendors and would have less incentive to participate in those projects. Our intention is to take an application service provider approach and extend out those kinds of resources in an interoperable way within our community.

For example, the Bloomington E-Health Collaborative is setting up ASPs to host both practice management and electronic health record systems that coordinate patient matching with a community master patient index. This gives our physicians a good foundation for interoperability within our community.

**Mon:** Can you share what you've had to do to make sure that your MPI had accurate data for other people to access?

**Kohn:** Accuracy is really dependent on the human element. As sophisticated as these systems are—and there are some excellent systems out there for identity management—there still are going to be cases of two or more patients, same medical record number, or, one patient, two or more medical record numbers. The human element needed for data accuracy has been and will continue to be HIM or similar professionals who understand the MPI and are involved with the RHIO at each individual facility in a federated architecture model. Where the RHIO architecture doesn't depend on a central database, each stakeholder manages their own MPI, which then gets carried up to the governing RHIO.

These are issues that will not go away with sophisticated information systems. There are going to be patient identification and privacy issues that come up and they still have to be resolved by humans.

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**Rowland:** There's a combination of automation and human process that needs to be achieved. We're in the beginning phases of working with a management service organization outside of our hospital. So far, the enterprise master patient index approach is working well in that context. As we add more applications and more providers, I think we'll discover the challenges of this enterprise MPI.

## The Privacy Question



**Mon:** I've heard about how people are setting up their MPIs and about [data] thresholds at which they release the identity of a patient. Sometimes it results in inadvertent disclosure, sharing information on the wrong patient. That seems to be a thorny issue in RHIOs. How have you addressed that?

**Matthews:** In Virginia, we have both automated and manual processes as well. For us, in the case of the physician doing a query, the physician has to be in a relationship with that patient. That they have a relationship could come over through their patient list from their practice management system, or through the fact that they've ordered a test, or they've done an electronic prescription.

There is an opportunity to self-declare a relationship and document it from a HIPAA compliance standpoint. But, at MedVirginia a physician cannot just give a query for patients if they do not have a defined relationship.

**Kohn:** We're learning at CalRHIO that we can have multiple thresholds for user queries based on roles. In California we have federated architecture models, centralized database architecture models and combination models. Setting the threshold Don mentioned is the most important exercise in software deployment in all these models. From a non-technology standpoint, we're exploring the patient's role in this—the idea that the patient will have an opt-in/opt-out opportunity.

**Gibson:** Deborah, are you suggesting that part of that opt-in process would be for a patient to say, "I acknowledge that when a caregiver goes to look at another patient's medical data, even though the requester is asked to provide four or



five identifying elements, my data may be divulged to that caregiver inadvertently? By opting in, I accept that risk?"

**Kohn:** Yes, that is the idea. We're saying that incidental disclosure is going to happen, HIPAA regulations notwithstanding. There will be an ugly case that will come through, because no system is perfect. But we have to look at the greater good of delivering excellent healthcare to patients.

**Rowland:** One of the things we ought to be doing is educating patients and consumers about the trade-offs and risks of opting out and not registering their information. We have to embrace the consumers as stakeholders and I think we're a bit afraid to do this because of the potential fallout. But we have to take this issue head on. HIPAA misperceptions are very powerful.

**Mon:** If patients don't feel comfortable with their privacy and confidentiality, they may opt out, in which case there's not going to be much health information to exchange within the RHIO. What role did your privacy policies play in determining those thresholds for releasing information when requested?

**Rowland:** Because of the nature of our community, having a single, dominate hospital, the privacy policy and the security approach that the hospital has taken has been very pivotal. The other groups see us as a leader in this. We try to strike the balance between getting information to providers when they need it to take care of patients, and protecting people's privacy.

One of the advantages we have is it's probably not as difficult for us to identify a provider because we happen to know many of them. Our bias has been toward access because of the safety risks associated with not having access to information. We haven't had a huge opt-out problem in our community.

**Gibson:** The question begged is, should RHIOs be established with opt-in/opt-out as one of the fundamental principles? Once you opt in—and you're educated when you make that decision to opt in—it means you're willing to take the risk and some of the standards that make things technologically impossible otherwise can be relaxed. But if a high number of people opt out, the system won't be nearly as effective and won't return the business case you originally expected.

**Mon:** How do you do that kind of mass education of consumers?

**Rowland:** One of the things we're doing is leveraging local resources. We are a university town, so half our customers are faculty and students of the university. We have a very robust cyber-security center on campus that we're working with on grant activity and outreach efforts. If you have those kinds of local entities, you should leverage them. That gives credibility to our effort with the university because they know and trust the cyber-security people.

**Matthews:** The moment of truth in all of this is when the patient goes to the physician and says, "Hey, Doc. I heard about this RHIO thing... What do you think?" At that point, the doctor says, "Oh yes, this is really going to be helpful to me. If we have all of your information, we can make better decisions." Versus, "Gee, I'm not sure I know enough about that to have an opinion." With that, we're forever lost on the consumer front.

**Mon:** So we also have to educate the physicians so they can properly inform the consumer or the patient when he or she is in front of them?

**Matthews:** That has to happen before any mass public education. Physicians have to be ready to support the communication.

**Gibson:** We disseminated the HIPAA notice of privacy practice over a period of 12 months. Nearly every patient that has been to our health system—in the physician office or in the hospitals' admissions department—has signed a notice of privacy practice. Perhaps it wouldn't be that much more to have a law like HIPAA mandate that patients also sign a notice of healthcare data exchange?

**Rowland:** There needs to be dialogue between providers and patients to create an understanding of what it is they're signing. When we see long forms, some people are very fastidious and read



"There will be an ugly case that will come through, because no system is perfect. But we have to look at the greater good...."

Deborah Kohn

them through while others just sign. I don't think patients really understand HIPAA, and the federal government didn't help educate them. There needs to be some kind of dialogue or story that gets concrete understanding of what it means to exchange health information.

**Mon:** Is there a role for an HIM professional to educate the consumer with the privacy of health information in the context of RHIOs?

**Rowland:** Yes, there can be a role for progressive HIM professionals to do this. We've had discussions about trying to create an audit trail that patients could review themselves. That would keep your neighbor from looking in your medical record, if they understood that you could do the audit. You have to have a pretty progressive group of health information managers to want to take on that task. It's a daunting task, but there's a role.

**Grant:** I agree. Audit trails can also be used for quality improvement initiatives. For example, perhaps a provider is documenting an order in a record. Upon review of the audit trail it is noticed that the reason behind the order is missing. This information can be brought to the provider's attention in order to improve documentation.

HIM professionals can add value in a number of areas, including the master patient index, patient privacy, enhanced documentation, data quality issues, and consumer education. We look forward to meeting these challenges of a RHIO.

**Kohn:** Yes. Clearly there are roles for HIM professionals in identity management and in the confidentiality of the information and privacy of the patient. Also, as Karen said, there are roles for HIM professionals in the accountability of the information being right, wrong or incomplete. Bringing these professionals into a developing RHIO or an already existing RHIO would greatly enhance the RHIO's development.

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