



Beyond Babel:

MedAllies Direct brings a provider-driven, collaborative solution to the challenge of interoperability

Issue Brief

Electronic health records grow more sophisticated and robust each year. But there's a problem—one some have called the Tower of Babel syndrome: These various systems don't speak the same language. Interoperability—a requirement of Meaningful Use—remains more theory than practice.

“This has become a glaring issue. We understood it was an issue 10 years ago, but as providers progress along the continuum, making better and better use of health information technology, this has come out screaming as a need doctors have articulated,” said A. John Blair III, MD, CEO of MedAllies, a health information services provider in the Hudson Valley region of New York.

The solution? A simple, secure, scalable, standards-based way for participants to send authenticated, encrypted health information directly to known, trusted recipients via the Internet—an approach that will work across various EHR vendors.

Such a solution has emerged from the Direct Project, an effort spearheaded by the Office of the National Coordinator for Health Information Technology at the U.S. Department of Health and Human Services. Earlier this year—as one of only seven pilots nationwide—MedAllies launched a Direct Project pilot in the Hudson Valley to demonstrate a prototype for the delivery

of critical clinical information across care settings, and now it will implement the full Direct Project infrastructure, including the required technological backbone and support.

A how, not a what

Direct is a series of protocols on moving data from point to point. As Blair explained it, Direct is essentially a way for data to move. So the real question isn't what Direct does, but how it is deployed. (See sidebar on page 2.)

Some Direct pilots are moving data for lab transactions, some for public health reporting. In the Hudson Valley, it is being used for care coordination—specifically, for transitions between care settings.

Using Direct Project addresses, a provider can send and receive clinical information, connecting to other providers across town and, eventually,

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across the country. Direct represents a totally new way of doing business.

Here’s how it works. A practice has an EHR. The hospital uses a different EHR. Until now, there’s been no easy way to communicate when patients are referred between settings. Half the time, Blair said, such communication never happens, and decisions are made with inadequate information. When information is shared, it is usually by fax—or by the patient carrying slips of paper back and forth between providers.

Now, providers will have the ability to connect through their different EHR systems and easily send messages back and forth. And, significantly, they will be able to customize what they send.

Customizing the message

There are, Blair explained, certain pieces of information providers want to send for *every* transition of care—medication lists, allergy lists, etc. Others are context-specific. “The cardiologist may want the EKG, but the dermatologist could care less about that. Dermatologists want the skin biopsy.”

When Direct is applied to care transitions, the message carries a document with a core minimum data set (e.g., problem list, medications and allergies) and additional information. The sending provider chooses that additional information—patient-specific data that is appropriate for the receiving provider. “So instead of receiving a phone book of information, much of which is not relevant for the transition, the recipient of the message gets pertinent information, delivered succinctly, giving them exactly what they need.” It strikes the balance between automation

and customization; Blair sees great value in the provider being able to select what data will be sent.

The effort pushes critical clinical information across EHR systems to support care coordination and transitions of care, and in a manner that is completely consistent with each clinician’s established EHR workflows. The MedAllies connectivity model crosses all provider types and locations where care might be delivered, from small practices to integrated delivery networks.

In service of a larger mission

In MedAllies’ hands, Direct is a tool to advance primary care models that emphasize care coordination and improved care transitions; this gets to the heart of what MedAllies, in collaboration with Taconic IPA and THINC, has been working toward for a decade. These three organizations are part of a larger effort to transform the health care system, first in New York and eventually nationwide. Through the Hudson

About the Direct Project

Launched in March 2010 as a part of the federal government’s Nationwide Health Information Network, the Direct Project (directproject.org) is a public/private collaboration initiated by the federal Office of the National Coordinator for Health Information Technology. The goal: Make HIPAA-compliant, one-to-one, Internet-based communication easy for providers of any size.

Using Direct Project protocols, providers will be able to send clinical messages to one another, even if they have different (Direct-compliant) EHR vendors. The information transfer is secure, fast, inexpensive and interoperable, and it supports providers as they strive to meet Meaningful Use requirements.

Approximately 200 volunteer participants from more than 60 private-sector companies and organizations worked together to develop consensus standards that support secure exchange of basic clinical information and public health data. Pilot testing of information exchange based on Direct Project specifications is being carried out in 2011, with formal adoption and dissemination of those standards slated for 2012.

Valley Initiative, their goal is to revolutionize health care delivery through a shared vision to improve the quality, safety and efficiency of health care in the community.

The power of collaboration

The Direct Project is a public/private collaboration championed by ONC, and that public/private approach proved powerful. “It was very significant. I don’t know if I appreciated the power of this when it was conceived,” Blair said. The ONC defined the vision and scope of the project and created the opportunity for everyone to come to the table. It communicated the need and created the environment for a collaborative solution.

Within a couple of months, 60 private-sector organizations were involved. EHR vendors, generally fierce competitors, were willing to cooperate. To a large degree, what ONC is doing with Meaningful Use created an environment which vendors knew was a *fait accompli*, Blair explained. The ONC made it clear that the Direct protocols would be one of the sanctioned approaches for connectivity. “You understood quickly that if you wanted to be up to date with regard to your production timeline, if this became a connectivity approach that ended up in the next stage of Meaningful Use, you probably needed to be in the game.”

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Significantly, ONC served as the convener. It provided guidance and logistics, but the financial commitment—as well as the sweat equity—came from the participants. This was no government-driven, publicly funded project. Although ONC had a strong hand in launching the effort, it gradually turned things over to the private-sector players. “They were able to initiate and guide and lead an effort.” And now, the public side is taking a progressively smaller role, allowing industry to move the effort forward, Blair said.

Collaboration was just as critical to MedAllies’ own Direct efforts. After all, success depended upon bringing competitors to the table. MedAllies was able to accomplish that because of expertise, credibility—and, frankly, because the Direct Project makes sense, Blair explained.

“We have relationships with thousands of providers. We already have a good working relationship with a large number of hospitals; we have cultivated a lot of good will, trust and credibility.”

Providers expressed an interest to vendors and that, coupled with vendor knowledge and respect for MedAllies, brought them on board as the effort coalesced. A large part was the logic. “We articulated a vision, a way for vendors to connect to each other,” Blair said. “It made sense.”

Everyone, it seemed, had grown weary of Babel. It was time to speak the same language. And MedAllies understood that the language needed to be one in which the provider was fluent.

Putting the provider first

MedAllies serves as a health information service provider, or HISP—the superhighway that carries secure electronic health information between providers and links their disparate systems. It has been working on health information projects for more than a decade, Blair explained. “As we solve some problems others bubble up.” For example, as MedAllies has resolved workflow and connectivity issues such as lab connectivity and e-prescribing, others have emerged, like referrals, consults and other care transition messaging/documentation concerns.

MedAllies also contributed to the development of the Direct standards with the expertise of its stellar technical team. It continues to work with ONC on standards around directories and security. MedAllies also brought provider insight into the process.

“MedAllies offered a unique perspective,” Blair recalled. “We went in early with providers and their vendors and asked, ‘How do we make this work for you?’”

Its “massive provider focus” sets MedAllies apart, he said. That’s not surprising, given that, in addition to serving as

CEO of MedAllies, Blair is a physician and president of Taconic IPA. MedAllies' chief medical officer, Holly Miller, MD, MBA, FHIMSS, is also a physician. (Leroy "Lee" Jones, chief information officer, completes the MedAllies leadership team.)

"From day one, we were focused on the end user and the provider. We said, 'Okay, they are using these systems now. We need to figure out a way, in their current systems, with minimal modifications to workflow, minimal changes in functionality, how doctors can leverage the current systems to transmit these messages.'"

Informed by its experiences with the Hudson Valley Initiative's successful medical home and care coordination efforts, MedAllies brought the provider perspective to the table. And that perspective defines MedAllies' approach to the Direct Project.

An easy lift

Direct Project specifications—due in large part to MedAllies' contributions—are in line with an approach the greater EHR vendor community has already embraced, Blair explained. MedAllies supports SMTP as well as the Direct XDR and XDM for specification. "That specification is in line with an approach that the whole EHR vendor community has been working toward for the last four years. Their infrastructure was built for this approach. Most vendors can adopt this very quickly."

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MedAllies' approach met vendors at their existing capability, resulting in a short timeline to robust use. All vendors involved in the pilot were able to exchange information via the MedAllies HISP within one to three months, he said. It's a remarkable accomplishment: MedAllies helped vendors connect the dots without reinventing the pencil.

Likewise, user training was minimal. Providers already were trained on their EHR systems, and the introduction of Direct messaging did not alter the current provider/end-user roles and responsibilities. Ongoing utilization will require little training, he predicted. With each release, the EHR vendor systems will continue to enhance their functionality around Direct messaging capabilities. The enhancements will be included in future vendor EHR product releases and providers can be trained at the time of upgrades.

Dramatic technological advances are meaningless unless they are effectively implemented. MedAllies' Direct effort was an "easy lift" for vendors and providers. From a business perspective, this is ideal: It keeps cost low and reduces the time spent having to come up to speed. "Cheap and fast are two good words in the business world," said Blair.

And there's the obvious benefit of improving a practice's operations. "Now, you've facilitated communication between providers. That helps providers; there's a value proposition there," he said.

And, from a business, clinical or technical standpoint, perhaps the most important thing MedAllies' Direct does is improve care coordination.

"The Direct protocols create interoperability from EHR to EHR for care transitions," Blair explained. "For us, it is about a direct network that connects certified EHRs for providers to push messages between each other in the process of patient care, focused on care transitions."

Supporting care coordination, driving transformation

The lack of coordinated care is one of the most pressing problems in health care. Of particular concern are the gaps in patient transitions across care environments. Part of the problem stems from the lack of an appropriately secure flow of critical clinical information; this has a negative impact on patient safety, care quality and costs.

MedAllies' pilot background

The Hudson Valley was selected as one of seven Direct Project (directproject.org) sites. MedAllies engaged clinicians throughout the Valley—and their EHR vendor partners—to create a Direct Project that will push critical clinical information across EHR systems. The aim: to support care coordination and transitions of care in a manner completely consistent with established EHR workflows.

The MedAllies Direct demonstration pilot included 16 providers at eight sites: Albany Medical Center, Asthma and Allergy Associates of Westchester, Community Care Physicians, Health Quest System (Vassar Brothers Hospital, Putnam Hospital Center, Northern Dutchess Hospital), the Institute for Family Health and Scarsdale Medical Group. Participating EHR vendors include Allscripts, eClinicalWorks, Epic, NextGen, Greenway and Siemens. The demonstration project is moving into full production over the next several months, and additional EHR vendors are coming on board.

It is that transitions-of-care component of care coordination that the MedAllies Direct effort addresses. “That infrastructure and the workflow design around it are critical to supporting transitions of care. If you make it very easy for one provider to get information to another provider, or very easy to get succinct, pertinent information to the primary care doctor from the hospital at time of discharge, you have built the infrastructure to facilitate what you need for care coordination.”

Appropriate, secure electronic information flow to care providers treating a patient is crucial; that’s the sort of connectivity MedAllies provides through the Direct protocols. It allows for vital clinical information to be received by each of the patient’s care providers nearly simultaneously with its creation in the EHR of the provider seeing the patient, thereby supporting these transformative health care models.

The ideal laboratory

MedAllies plays a crucial role: It operates the technical backbone for health information exchange in the Hudson Valley, making the region an ideal laboratory in which to test this approach. More than half of its providers have

EHRs with a high level of usage; that includes documentation at the point of care, high rates of e-prescribing, lab ordering/results delivery and registry usage.

Providers in the Hudson Valley are at the vanguard of the nationwide movement toward transforming the delivery of health care. More than 300 practices have become Level 3, NCQA-recognized, patient-centered medical homes. Connectivity and the patient-centered focus have set the stage for care coordination. Supported by technical expertise from Geisinger Health System, providers in the Hudson Valley will soon implement a customized version of Geisinger’s ProvenHealth Navigator.

Without doubt, the providers in the Hudson Valley have made significant advances, with an EHR adoption rate among primary care providers at 46 percent. But Blair noticed something: The more progress they made, the more pronounced the need for interoperability. “Over the last several years, with increased physician adoption and usage of EHRs, our providers have increasingly asked for interoperability between their respective systems for care transitions,” he said.

Direct meets that need.

The MedAllies Direct connectivity model supports not only the advanced primary care medical home and accountable care models, but also health care delivery for everyone.

Moving forward

MedAllies’ Direct experience offers lessons for everyone. For federal policymakers, Direct’s success demonstrates that a public/private effort can be successful, and that this could be a model for future efforts. State policymakers recognize the need to have a Direct strategy for their health information exchange efforts. And EHR vendors are quickly recognizing that this is what providers want and need. “Their customers want to be able to communicate with all providers they routinely do business with; MedAllies Direct will allow that to happen,” Blair said.

MedAllies plans to expand the initiative; it is talking to EHR vendors about potential business relationships. Eventually, the effort will spread beyond New York, he promised. “MedAllies has every intention of becoming a national Direct network.” ■



A. John Blair III, MD

Blair is president of Taconic IPA (TIPA), a nearly 4,000-member physician group at the forefront of transforming health care delivery in the Hudson Valley through meaningful use of health IT and pay-for-performance incentives. TIPA’s mission is to optimize the value of medical services through patient-centered care while maximizing physician satisfaction. Blair also serves as CEO of MedAllies, which facilitates physician adoption of health IT for care coordination, patient-provider communication, public health and quality reporting. MedAllies built and operates the Hudson Valley Community Health Integration Platform (CHIP), which operates under the direction of Taconic Health Information Network and Community (THINC). On the national scene, Blair is a key thought leader for health IT and care transformation. He serves on the Privacy and Security Workgroup and the NHIN Workgroup of the Policy Committee of the Office of the National Coordinator. He is a member of the National Committee on Quality Assurance (NCQA) Committee on Performance Measurement, and serves on the Health Information Technology Advisory Committee (HITAC) for the National Quality Forum.



Holly Miller, MD, MBA, FHIMMS

As chief medical officer for MedAllies, Miller optimizes MedAllies’ strategic implementations of certified EHR systems to improve patient quality and outcomes and enhance care coordination. The implementations are designed not only to meet the efficiency needs of time-pressed physicians, but also to fulfill government requirements for meaningful use of EHR systems. She is the MedAllies physician liaison for all implementation projects and works closely with the team to design a change management program ensuring optimal utilization of the EHR tools within different practice environments. Miller develops organizational structure and strategic vision, approves and oversees staffing to implement all aspects of MedAllies’ consumer initiatives. Miller is a frequent presenter at national meetings on health IT and personal health records, and serves as vice chair on the HIMSS board of directors. She is the lead author on a book about PHRs, *Personal Health Records, The Essential Missing Element in 21st Century Health Care*, published in 2009.



Leroy "Lee" Jones

Jones is chief information officer for MedAllies. He also provides thought leadership to the New York eHealth Collaborative, the statewide initiative to enable widespread secure health information exchange. Jones is involved on the national level in a number of broader health information exchange industry initiatives. He serves as the program manager on behalf of the American National Standards Institute (ANSI) to manage the Health Information Technology Standards Panel (HITSP), a national initiative to harmonize health care technical standards to enable interoperability among disparate health IT systems across the entire health care industry. As a member of the RHIO Federation Taskforce formed by the Health Information and Management Systems Society (HIMSS), Jones is the co-editor of a guidebook for RHIOs to use as a source of practical advice and direction as they form and mature, the *Guide to Establishing a Regional Health Information Organization*. Jones has authored several other publications regarding effective deployment of technology for the betterment of health care.



About the Hudson Valley Initiative

Each of the organizations behind the Hudson Valley Initiative plays a fundamental role in transforming health care delivery and promoting advanced primary care.



TIPA’s medical home transformation work has been an essential building block for care coordination. TIPA, a

nearly 4,000-physician IPA, was part of the effort to help more than 300 Hudson Valley primary care providers become recognized by NCQA as Level 3 patient-centered medical homes—one of the highest concentrations in the nation.



MedAllies is the health information services provider that facilitates physician practice redesign to improve

efficiency and effectiveness of health care through health information technology, and operates the technical backbone for health information exchange. Its expertise has been essential to creating the virtual integration necessary in a community that lacks a large integrated delivery network. Since 2007, more than 700 Hudson Valley physicians have implemented EHRs.



THINC fosters collaboration and encourages transparency. It brings together providers

and payers in a neutral forum that leaves individual concerns at the door. Building on an accountable finance model, it has partnered with six health plans and a major employer (IBM) in a value-based purchasing program to reward physician practices for reaching quality and care coordination benchmarks.