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Montana: Big Sky Country Beckons Health IT

By Chuck Appleby

Linking providers with varying levels of IT development, a Montana RHIO aims to ease the burden on emergency room physicians and eliminate paper-based processes.

Big Sky Country has drawn its share of outsiders, including celebrity ranchers, writers and one William Reiter, M.D., who chose to practice internal critical-care medicine in Anaconda, Mont., after 20 years as a practicing physician and faculty member at the University of Miami medical school. Like a missionary in the untamed West, he is helping to bring health information technology and a regional health information organization to an environment dramatically different from the one he left.

The focus of Reiter's IT mission has become the Western Montana Rural Health Information Technology (HIT) Partnership, a fledgling RHIO whose objective is to provide connectivity and information sharing to rural hospitals in Montana's five western-most counties. Reiter is principal investigator under a \$186,000 Agency for Healthcare Research and Quality grant that was awarded to the RHIO in 2004 and runs into 2006. Led by the Community Hospital of Anaconda, the RHIO's founders have gathered letters of intent from other community hospitals in western Montana and begun sketching out technical, governance and financial strategies. The RHIO has also applied for an eHealth Initiative grant to evaluate financial sustainability models.

Once the facilities in the five counties are connected, the plan is to expand into a statewide network called MontRHIO, an effort coordinated by the National Center for Health Care Informatics at Montana Tech in Butte, part of the University of Montana.

No Backups

There's a lot of ground to cover, literally and figuratively.

At nearly 150,000 square miles, Montana is the fourth largest state, yet its population of just over 900,000 ranks it 44th nationally—yielding a density of only 6.3 people per square mile, nearly last among all states. Forty-five of its 56 counties are categorized as “frontier,” meaning six or fewer people per square mile; another eight are “rural.” Not surprisingly, two-thirds of the population resides in nonmetropolitan areas. Serving this far-flung population are 56 mostly community hospitals, sprinkled like frontier forts across this vast area.

“It's zero degrees here this morning,” notes Reiter as he cites a litany of contrasts between his current and former home, which was an IT-savvy urban academic medical center in a tropical setting. “There's a very real need here for clinical information availability, especially for emergency room doctors. We depend heavily on ER docs on nights and weekends,” he says, adding that patients often present at their primary care physicians with no medical history. “There's a lack of information in urgent care and critical care.”

Perhaps even more of a driver for a RHIO here, says Reiter, is the fact that small, rural hospitals in western Montana have a dearth of high technology, whether CT scanners or information systems. And, unlike places like Miami, there are virtually no backup physicians or other resources to help cover those gaps.

“The more we know about diagnostics, the easier it is to treat a patient,” he says, adding that his experience with IT in Florida improved the way he delivered care and made him a crusader for clinical IT and a community health information exchange in Montana. Indeed, manual, paper-based processes create “an enormous additional burden compared” to using an automated system, Reiter says. At the end of a busy day here, for example, his office staff has to refile a mountain of paper medical records.

“They don’t get processed efficiently. Manual processes are intrusive in multiple ways. You don’t realize how smooth an electronic medical record makes your working day,” says Reiter.

Steve McNeece, CEO of the Community Hospital of Anaconda, says collaboration on a RHIO is viewed as a matter of survival for hospitals in rural Montana. “We have such limited capital resources. If we can just pool together,” he says, the hospitals can afford to implement information systems in individual facilities and a regional level.

McNeece says the RHIO’s goal is to allow for IT flexibility locally because each hospital is at a different stage of technology development. “We said, ‘Let’s not take a cookie-cutter approach.’ It depends on each hospital’s IT environment. Some need teleradiology; some need better Internet infrastructure.”

Another factor that sets the Western Montana Rural HIT Partnership apart from most urban and suburban RHIOs is the absence of market competition. “We’re not highly competitive because most of us are isolated in the communities in which we reside, but we share a similar philosophy of continually asking how we can take care of our patients to the best of our ability,” he says.

Plans for Sustainability

The RHIO plans to build an IT architecture based on an existing core at Community Hospital of Anaconda, a system from HMS that integrates administrative, financial, radiology, lab and nursing documentation in a network linking the hospital, nursing home, and family practice and internal medicine clinics. In a baby step toward regional interoperability, the hospital has extended the network to Powell County Memorial Hospital 30 miles away in Deer Lodge, which allows a radiologist in Anaconda to remotely read images from that facility. “Those images used to be sent by taxi because there’s only one radiologist in the area,” says Reiter.

Still, the project’s leaders are not married to using the existing system if it doesn’t prove robust enough for a clinical network. This is especially a factor in rural Montana, where the hospitals will have to share software, most likely in an application service provider, or remotely hosted, model. In that case, he says, “We become our own ASP entity and our own customer. Our five-county volume may generate less volume than a single building in an urban center,” Reiter acknowledges.

Ultimately everything will be linked via a virtual private network because access to broadband services—even cable or DSL—can be difficult to come by. “It’s hard to realize how primitive the rest of us can be,” he says, when you live in a metropolitan area that accepts technological sophistication as a matter of course.

Still, Reiter has some big-city plans for the RHIO’s financial sustainability, including the well-documented IT-enabled administrative cost reductions possible from transcription savings, fewer chart pulls and improved documentation. In addition, he expects hospitals to build on the clinical information sharing facilitated by the RHIO to succeed in pay-for-performance programs the federal government is expected to implement on a widespread basis in the next four to five years. Also—and here’s where his experience leading 20 clinical trials comes in—Reiter wants to use the RHIO to facilitate a practice-based clinical trials network to take advantage of the Food and Drug Administration’s plan to expand Phase Four trials and to sell de-identified data to nonclinical markets.

“William is a pioneer,” says Ray Rogers, chief development officer of the National Center for Health Care Informatics, which hopes to leverage the Western Montana RHIO into the MontRHIO statewide network. “He has amazing concepts of sharing data, but he sees it from a practical perspective. It has to be cost-effective and involve an architecture that allows a low-cost connection,” he says.

Rogers sees Big Sky Country as a great testing ground for a RHIO. “There are great distances when you drive across Montana, lots of miles between cities. If we can accomplish this in Montana, we can accomplish this anywhere.”

Chuck Appleby is a Benicia, Calif.-based freelance writer specializing in health care and technology.

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