

**Response to Questions for
the HIT Standards Committee – Implementation Workgroup
Implementation Experiences Panel
by
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Background

The Regional Extension Assistance Center for HIT (REACH) is a program of Key Health Alliance (KHA) working in collaboration with North Dakota Health Care Review (NDHCR) and the Center for Rural Health, University of North Dakota School of Medicine and Health Sciences to serve as ONC's Regional Extension Center (REC) for Minnesota and North Dakota. Key Health Alliance (KHA) is a partnership of Stratis Health, National Rural Health Resource Center (Center), and The College of St. Scholastica (CSS)—all committed to advancing health information technology (HIT), with emphasis on rural and underserved areas.

REACH is integrated with local HIT activities and stakeholders

REACH has developed a Minnesota Council and a North Dakota Council with representatives from state HIT/HIE organizations (section 3013), state Medicaid agencies, universities, medical associations, state departments of health, and state Medicare Quality Improvement Organizations (QIO). The REACH program plays an active role in many ARRA programs including: curriculum development with the University of Minnesota UP-HI program; Community College Consortia with Normandale Community College and Lake Region State College; Beacon; and HIT/HIE ARRA programs.

EHR adoption in Minnesota and North Dakota

EHR adoption is widespread across primary care in Minnesota, but rural areas lag behind. Stratis Health's 2007 statewide survey showed 62% of adult primary care practices had implemented or were engaged in implementing an EHR, an increase from 46% in 2005—yet only 48% of rural primary care providers had implemented an EHR or were in process of doing so. In 2009, 68% of primary care clinics reported having a fully-implemented EHR, and 19% were working toward implementation within six months. Clinics not part of an integrated delivery system were less likely to have an EHR than clinics belonging to a system, 16% versus 54% respectively. The fewer the number of physicians, the less likely the clinic was to have an EHR.

Of importance in Minnesota, progress toward effective and meaningful use has been slow, even in the large integrated health systems. Approximately 30% of clinics do not have registries to manage preventive care or chronic diseases. Only 48% of clinics coordinate resources to help patients and their families achieve health care goals; 36% of clinics do not have shared decision-making with patients and/or families; and only 21% of clinics report having a quality improvement team that includes patients and families. Based on KHA experience, EHR systems find it difficult to interface clinical data (e.g., diabetes, hypertension) with administrative data (e.g., race, ethnicity, language) to demonstrate value

and measurable improvement in disparities, which creates further challenges regarding EHR meaningful use. Since a larger proportion of Minnesota's primary care providers have already implemented an EHR than in many other parts of the country, an early and immediate focus of REACH has been assistance toward meaningful use and appropriate health information exchange.

North Dakota has a 40% EHR implementation rate at its primary care practice sites, and just under half of those that have an EHR are not using a CCHIT/certified product. No North Dakota clinics qualify as meaningful users under the current definitions, and significant deficiencies exist relative to HIE and data submission. As in Minnesota, the rural and small providers have a much lower EHR adoption rate.

REACH program impact

The REACH program intends to provide technical assistance to 3,600 priority primary care providers (PPCP) to achieve meaningful use. As of December 2010, the REACH program has signed up 1,069 PPCPs, 30% of its intended goal of 3,600 PPCPs. Additionally, with the Critical Access Hospital (CAH)/rural hospital supplement announced in September 2010, the REACH program plans to provide services to 124 hospitals across Minnesota and North Dakota. As of December 2011, REACH has signed up over 40 CAH/rural hospitals for services or 32% of eligible hospitals.

Q1: Identify your challenges, barriers, and successes when providing services (for RECs) or using the implementation support (for REC users) from a Regional Extension Center

Challenges

Overall complexity of the entire program

Both RECs and providers find the program complex. The payments, the requirements, the registration, the eligibility and the knowledge of changes over the next five years all add up to make the "overhead" portion of the entire effort very complex. Examples abound, but a few of the most troubling aspects include:

1. Various incentive payment schemes (clinic, prospective payment hospital, rural health center, critical access hospital, physician, nurse practitioner, Medicare/Medicaid)
2. Complex registration requirements for provider attestation and for REC clients
3. Many and complex requirements for meaningful use – need a 44 page document to explain the Core and Menu set of requirements
4. Complex and duplicative reporting requirements for the REC

The short timeline (mitigated)

One of the most significant challenges that faced us in working with our clients was the short timeline to get our extension center up and running. We needed to get clients signed

up within seven months and then get them to meaningful use in a year's time or less. The communication that we received on December 28 extending the subsidies for another two years will resolve several of these issues. An example of some of the challenges we faced were:

1. We did not having a definition of a underserved area until October 18
2. We did not have permission to work with a clinic that was part of a consortium until October 18
3. The timeline for the extension center to complete its work did not correspond with Medicare or Medicaid timelines for professionals and hospitals to achieve maximal meaningful use incentives or to avoid penalties.

Cash flow for the REC

The way we receive payments from ONC has been a continuous challenge. Receiving payments following milestones makes it challenging for us to hire staff for the implementation phase since most of the initial release of cash was spent in recruiting and educating staff, reaching out to potential customers and then negotiating to get signed service-level agreements.

We have been unable to start in earnest with small hospitals since the funds for working with them has only recently released. The timeline extension and increased subsidy will help considerably in our work with these hospitals.

Barriers

General lack of knowledge about meaningful use

There is a general lack of knowledge about meaningful use and the certification criteria amongst the provider population. Despite multiple communications from CMS, ONC, our regional extension center, local organizations and medical societies, many providers remain unaware.

Many burning issues

Another barrier is the many other requirements that hospitals and clinics are facing at this point in time. Among them are MDS 3.0, ICD 10 and ANSI 5010. Thinking about adopting an EHR with a deadline further out is less of a priority.

EHR vendors can be barriers

Many EHR vendors, some who have longstanding relationships with their clients, have told them that their product will get them to meaningful use. As a result these clinics and hospitals don't believe they need additional help. Some facilities see us as yet another group of consultants they will have to coordinate. It has taken time and energy to have our potential clients understand that technology is but one component of achieving meaningful use. The more important components for truly effective use of an electronic health record involve people and processes.

Implementation timelines

EHR vendor implementation timelines are a barrier. One of our clinic clients reported that its vendor will not be able to start implementation of a new install until February or March 2011 and its implementation timeline is 18 months, dashing any hopes of achieving meaningful use within our original timeline. This is even more prevalent for small hospitals. One of our small hospital clients reported that "vendors are scheduling implementations years out." Finding another vendor is impracticable because small hospitals have few EHR vendors from which to choose. And those that exist are being stretched thin. Some of the staff at these EHR vendors are new and lack adequate experience for successful implementations.

Underdeveloped ambulatory products for small hospitals

Small hospitals with any outpatient services are interested in an EHR that has an integrated ambulatory product. The small hospital EHR vendors are only now developing certified ambulatory EHR products. This impedes our ability to implement the ambulatory EHR within a small or critical access hospital.

Large health systems have been resistant to have us work with some of their affiliates

If a small hospital is considering affiliating with a large system so that it may adopt its electronic health record, the large system sometimes has been concerned that it could cause the facility to choose another vendor and not its offering. Large systems often have a well-developed implementation plan and fear that the extension center may only make the implementation that the affiliate more complex. In addition, the affiliate would not know why it would need to pay for and employ an extension center when the large system is promising to provide all the services.

Access to capital

If the clinic or hospital does not have access to capital to even consider purchasing an EHR, it sees little need in employing the services of an extension center. We have had two examples where a small clinic was asked to secure their loan for the EHR with the physicians' personal property. There was not enough equity in the clinics to cover the cost.

Budgeting time is a challenge for the facility

Staff at these small, often rural, facilities must wear multiple hats and usually have both management and direct patient care responsibilities. Getting concentrated and focused time from a person who also needs to drive the ambulance, answer the phones or respond to other patient care needs is challenging. Also, implementing during planting or harvesting season is also challenging. At one of our sites the clinic administrator went home after work to run a combine for four hours.

The shortage of skilled IT and project management staff

Rural hospitals and clinics have a shortage of staff to spearhead their MU projects. Workforce training programs have had difficulty attracting students from the rural communities and those in the urban areas who complete these programs are reluctant to

move into the country. One of our clients noted, "Even if there were skilled staff we could hire, we don't have the money to pay them."

Reliable broadband

For many, access to reliable broadband has been an issue. This does not impede their ability to use extension center services, but it does make it more of a challenge in selecting products and achieving meaningful use. We have one clinic where the broadband connection frequently goes down and it has been unable to get a resolution of the problem despite several attempts with its broadband supplier. Staff says it seems to go down when a large truck drives down the main road in front of the clinic.

Gathering the data from a client to get them signed

Gathering all of the data required to be part of the REC program has been burdensome and time consuming for our clients and us. One potential client told us it wasn't worth spending his resources to gather all of the data in order to get free consulting services.

Successes

Giving them a vision

One of our greatest successes is to help the hospitals or clinic see the value of an electronic health record. We have people on our staff and subject matter experts within the community who have used an electronic health record in the care of patients and have seen the value of using them for patient care. These individuals help stimulate the desire and the vision in the hospitals and professionals and help them see a way forward when times are difficult.

Finding them the money

We have had several successes addressing the cash flow issues for some of the clinics in North Dakota and Minnesota. Minnesota has a \$3 million revolving loan program starting to which we are directing CAHs. There are some independent nonprofit loans for the small, rural clinics. There is a bridge loan from one EHR vendor that can be used as a last resort. North Dakota has been able to provide loans to its providers and they are also providing matching dollars for using the extension center as the provider achieves milestones on the way to meaningful use.

Educating them on the rules

We have begun to offer day long, in-depth educational programs on meaningful use: the incentives, criteria, and quality measures. These boot camps are not merely a data dump of facts, but rather, they are workshops designed for small group discussion in which each section is taught in the didactic form followed by small group problem solving and large group discussion. This gives participants an opportunity to learn the final rules and their implications in depth.

Helping them see it's not just the technology

One of the greatest benefits of the boot camp format has been the opportunity for different people within organizations to have a greater understanding of the implications that meaningful use has in other parts of their facility. For hospitals, the financial, IT and clinical staff had the opportunity to talk with each other and understand how each of them has specific responsibilities to make this a success and how they needed to work together in order to achieve it. The same is true for clinics, but in addition, there was interest in sharing information among different clinics. The boot camps have had a positive impact in a number of ways:

- Allowed participants to see that meaningful use is about workflow and not just a technical fix
- Allowed participants to see how they could begin to take action now
- Helped potential clients see us as a knowledgeable resource
- Helped us build trust with potential clients

Supporting EHR vendors

We have been working with EHR vendors to educate them on how we can assist them in implementation of their products. We can do the readiness assessment; map current workflows; and assist with visioning, and establishing project governance and project planning. Vendors are beginning to show interest in this.

Educating large health systems

We have found it valuable to educate large health systems on how we can assist them with implementation with their affiliates. We make it clear that we integrate with their current implementation plans and that we would not "get underfoot" in the process they had already developed. Several of the health systems we have approached are interested in using us for the readiness assessment, process mapping, and possibly even implementation support for potential affiliates.

Q2: Outline the implementation support and methodologies you used that worked and didn't work. Include any real-world user stories, illustrations, or examples.

Methodologies That Worked

Focus on the patient and quality

The most important methodology was to help clients keep their focus on the patient and on quality care. We have found it important to remind them that that is ultimately why they are in practice and why they have undertaken this project. Having a vision and goals firmly established was important but even more fundamental to that was the desire of providing quality care to their patients.

Meaningful use boot camps

As mentioned above, meaningful use boot camps have been a viable method for educating both clients and potential clients on meaningful use, understanding the complexity of a successful EHR implementation, and understanding that in addition to the technology, people and processes need to be adapted. These boot camps were popular with people who had already implemented an electronic health record as well as those who had yet to begin the process.

Spending the bulk of the time in the early stages

Approximately 50% of the time planned to be spent with a clinic over the time we work with them is devoted to tasks that must be accomplished before it signs a contract with an EHR vendor. We have found that creating a firm foundation helps a clinic through the "valley of despair" that occurs shortly after the excitement of going live wears off and they realize how much work still lies ahead. With a firm foundation and a clear vision the valley is shallower and a clinic is able to climb out of it faster.

Goal setting

One of the essential tasks in the early stages of our working with a client is to focus on visioning and goal setting in excruciating detail. We have found that when clinics have no vision of where they want to go, they have no focus on what they want and consequently it becomes difficult for them to make decisions. A vision also helps them in times of difficulty to remind them why they're doing it. Having clear goals allows them to measure progress in a task that requires many steps.

Breaking down the process into small pieces

Much of our implementation experience has come from our previous work in the DOQ-IT program. We have found that breaking down the process into small pieces and bringing a client along step-by-step was particularly effective. It was also effective to schedule weekly and/or monthly status meetings to help keep projects on track.

Identifying a project manager

We ask that each clinic to identify one person who can devote 20 to 40% of their time as a project manager. This is a tough sell at most sites. However, once project managers get started most agree that they probably spend close to 40% of their time on the project.

Identifying a physician to be involved in the process

Some sites felt that their physicians were too busy to be involved and tried to do the work without them. We found this to be a mistake. Physician involvement was crucial and ideally it would be a physician who is perceived as a clinical leader and not one who is perceived to be enamored by technology for technology's sake.

Empowering clients

A methodology we have found helpful is to teach clients how to do the work and not do the work for them. We don't do the project management—we train one of their staff persons to be a project manager and provide them with mentoring support. We don't do the process

mapping in the workflow redesign—we give them the skills to do it. We learned the importance of this as a CMS DOQ-IT program provider. Often, at the celebration ending our work with a clinic, they realized they had done all the work and were very proud of what they had accomplished. They were ready to take on the next challenge. Leaving clients able to operate their EHR and ready to face future changes we see as a great success.

Having groups work collaboratively

One of our clients that works with a needy subpopulation has offices spread around the Twin Cities area. They wanted to look in detail at 10 vendors so rather than having all sites look at each one individually, they pooled their efforts and are able to look in great detail at 10 vendors in less than two months. Each clinic only needed to do a report on one vendor. They were able to rapidly narrow the field and requested demos from only four of them. Collaboratives also have been effective to allow consultants to serve more clients. Their members share workarounds and provide each other support when they have a common EHR vendor.

Shared learnings across groups

A small clinic 70 miles outside of the Twin Cities metro area providing help to the similar population as the collaborative mentioned above paragraph were able to use the work to facilitate their selection of an EHR. Rather than having to start from scratch and evaluate each EHR against their own needs, they were able to utilize the work done by the Twin Cities collaborative since their population of patients was so similar.

Coordinating with other grantees

The Minnesota e-Health Advisory Committee has helped us to coordinate our work across the other grantees within Minnesota. That work has recently started in North Dakota. By meeting in a large group on a quarterly basis and workgroups on a monthly basis, we have been able to focus on helping our health care community adopt, implement, and effectively use health information technology. It also allows us, as an extension center, to enlist the help of other grantees within our state as well as other members of the public and private collaborative that is the Minnesota e-Health Advisory Committee to advance EHR adoption and meaningful use.

Sharing with other regional extension centers

We have found it valuable to participate in the ONC's Health Information Technology Resource Center (HITRC). This is a resource for sharing amongst the different regional extension centers and communicating with the ONC. We share lessons learned as well as tools among the regional extension centers. It is subdivided into Communities of Practice which focus on such topics as meaningful use, workflow redesign, education, privacy and security, rural healthcare, among others. We have gained many valuable tools as a result of participating in this forum.

Distance working and sharing a collaborative workspace

From DOQ-IT we found that most status meetings could be done effectively over the phone and we are applying that process as an extension center given the vast distance between

some of our sites. With our field staff working within and outside of the organization, we needed a mechanism to share documents in a secure and timely fashion. We could not give them access to our internal document sharing system since many of them are not employees. As a result, we adopted a commonly used collaborative space for communicating among our staff. We have also created workspaces for our clients that they have found very useful for sharing documents among themselves and with us. It also allows us to track a clinic's progress between contacts.

Methodologies That Didn't Work

Using a sense of urgency to convince them to sign up for services

The main methodology that didn't work was trying to get providers to feel a sense of urgency to achieve the technical aspects of meaningful use. Focusing on meaningful use deadlines was not effective. When we started, we expected that hospitals and clinics would immediately sign up for services. When that didn't happen we attempted to create a sense of urgency. Attempts at *scaring* them into signing up for services failed. There were too many other issues that required attention and since there is a deadline of 2015 for meaningful use, they did not see this is an urgent matter.

Letting the customer run the show

Some of our staff members in our extension center are new to our adoption and implementation process. We have developed a very effective process which we try to follow closely. In the past, a clinic might have had a clear idea about how it wanted to proceed and could cause us to compromise our approach. We have found that this is a mistake. For example, some customers have wanted to go immediately to EHR demonstrations without doing any goal setting, visioning, or requirements definitions. When this happens, the selection process inevitably gets bogged down and we have to go back into the work we should've done in the beginning.

Q3: Discuss your outcomes/results. Include any surprises or unexpected outcomes and how you addressed them?

Most of our results and outcomes at this stage focus on progress towards EHR implementation and our progress towards completing a signed contract with our clients. Given that few clinics without EHR's signed on early we will not have any clinics ready to begin to demonstrating meaningful use come January 1. Also, given that small and critical access hospitals are waiting for their software to be upgraded, none feel like they will be ready to attest to meaningful use in fiscal year 2011.

Longer time to sign up providers than expected

We have over 1,000 providers and 40 small and critical access hospitals signed up for services. At first, providers were slow to express an interest in REACH. And once they did, it took 60 to 90 days to get a signed service level agreement. That was much longer than expected. However, within the last two months our momentum has picked up significantly,

aided by receiving the final definition of an eligible priority primary care provider in mid-October.

More success in signing clients who already have an EHR

We have more success signing clients who already have an EHR and are having difficulty reaching those who do not have an EHR. We suspect that there is a subset of providers who are putting off EHR adoption and meaningful use for a few years in order to let others work out any bugs in the process. Others are willing to pass up the incentives and will only adopt in order to avoid penalties. We have attempted to reach these providers through trusted sources of information such as the Minnesota Academy of Family Physicians, Minnesota Pediatric Association, Minnesota e-Health Advisory Committee, North Dakota Medical Association, Minnesota Hospital Association, through presentations, boot camps, articles in local journals, webinars, and cold calling. These approaches are gradually paying off.

Competition with medical home

The concept of medical home in Minnesota (Health Care Home) was designed in such a way so as to not require an EHR. Consequently many providers are choosing to go for subsidies earned by a medical home and see installing EHR as complicating and competing with becoming a medical home. We are doing what we can to crosswalk the medical home criteria with meaningful use criteria to help these providers see how having an EHR will assist in the management of their patient populations as a medical home.

Surprised by the power of a few

We have been surprised by the power of a small group to accomplish great things and get past huge barriers. Two examples of that are Glacial Ridge, a small critical access hospital in western Minnesota who struggled with their EHR has motivated focused team were able to figure out workarounds to successfully implement their software. Another critical access hospital Kanabec, was able to successfully implement its electronic health record and was the first critical access hospital to achieve stage VI of the HIMSS EMR adoption module.

Q4: Describe experience using ONC and CMS communications regarding the criteria, standards specifications and measurement

We have found the staff at the ONC and the staff we met at CMS to be friendly and helpful. They have all tried hard to answer questions. Their challenge, as well as ours, is to get an answer within a reasonable time period. We understand that official documents need to be approved by a number of different offices in order to be released. This process has been very slow. One example of this is a question I asked an ONC staff back in November. The staff person spent some time thoroughly researching the answer and on November 19 gave me an unofficial answer and told me that an FAQ would be released shortly. Just over a month later, the FAQ was released and I receive notification by email; however, I am unable to find the FAQ on either the ONC or CMS website.

Q: What future issues do you anticipate?

Though this question was omitted in the final set that was submitted to us, we think it valuable to address. Here are some issues which concern us:

Deteriorating quality of EHRs

Prior to the initiation of the ONC-ATCB certification process, vendors were able to demonstrate the quality of their product by stating that they were CCHIT certified. CCHIT developed a growing number of requirements for electronic health records that were based upon requests from the provider and vendor community. As one who participated in this process I could see how this drove the improvement of EHR products. However going forward I foresee a problem. EHR products can now achieve ATCB certification criteria and yet not contain the criteria that users have come to expect from a product that was CCHIT certified. ATCB certification is designed to demonstrate that an electronic health record is able to submit the quality data required by CMS and enable certain functions necessary for the collection of this information. Most of the CCHIT requirements are not included. As an example there are no requirements for clinical documentation other than vital signs and growth charts. The requirements for whether a note can be signed or cosigned, part of the 2008 CCHIT ambulatory requirements. Though we believe that mainstream EHR products will continue to release products of high standards and quality, we fear some vendors with poor quality products will earn ATCB certification and unsuspecting providers may purchase them assuming that they have the basic functionality we have all come to expect as a result of the old CCHIT certification process.

CCHIT was not perfect. Omitted from the certification process was a measure of usability. This continues to be a problem and impedes providers from being effective users of EHR technology.

Vendor certification only requires the vendor certify three clinical measures from the menu criteria

This creates uncertainty for our clients. What if one of the measures they wish to select is not one of the measures that the client is certified upon? What if they have certain quality measures that they are very interested in and the EHR product is not certified to report on it? What if the vendor claims that it is able to produce a report on a noncertified quality measure yet, since it has not been tested, the client has no guarantee that the measure was built correctly? If the measure is not one that the vendor says they have built, where will the clinic find the skills to produce that report? Small hospitals and clinics typically don't have the skilled resources to do this work.

In closing

Thank you very much for allowing us the opportunity to share our thoughts with you. We wish you luck in formulating your recommendations.