AHRQ National Web Conference on the
Use of Health IT to Improve Health Care Delivery for Children

Questions and Answers

June 30, 2016

QUESTION:

Regarding the children's electronic health record (EHR) format, and specifically the school-based linkage component, what are your thoughts about concerns with HIPAA from providers sharing EHR information with the schools? Was this a part of the conversation with the multi-stakeholder workgroup?

ANSWERS:

Jonathan Wald:

HIPAA-related policies and practices were beyond the workgroup's scope. The workgroup focused on areas where there is a clear need, policies that support sharing of information (such as around how EHRs can best support immunization records), and how to specify requirements or functional requirements in a consistent and reliable way to help designers and developers of systems implement them.

The group recognized that there are certain areas where functionality requirements are well understood, areas where they aren't, and still other areas where the requirements are complex and there is a lot of variation across different states or different kinds of practices. In trying to come up with a focused list, the group naturally worked in areas where the knowns outnumbered the unknowns.

The areas of policy were especially challenging because we were trying to do work that would appeal nationally. For federal policies, that's not a big challenge. But the group tended to stay away from things that vary from state to state, and states do vary in the way they treat sharing of information.

Edwin Lomotan:

I would also go to the USHIK website (ushik.ahrg.gov). There are several requirements on the 2013 version of the format related to school-based linkages.

There were many areas in which the group didn't feel they were able to make a lot of headway. The group was very interested in linking data to places where kids spend their time, including schools.

QUESTION:

Regarding the report card, did you provide the number (N) for sites or networks in addition to the N for individual providers (see slide 54)? Please talk about how the achievable benchmark score was established.

ANSWER:

Elizabeth Alpern:

The Ns on a provider report card are related to the number of eligible visits that the provider has for the particular performance measure (see slide 57). The N on the site report card is related to the number of eligible visits for that particular metric seen at the site.

The achievable benchmark of care is a mathematical calculation to represent the performance of the "best" providers without giving undue influence to those providers that are seeing fewer numbers of patients. These references may be helpful:

- Kiefe CI, Weissman NW, Allison JJ, Farmer R, Weaver M, Williams OD. Identifying achievable benchmarks of care: concepts and methodology. *Int J Qual Health Care*. Oct 1998;10(5):443-447.

- Weissman NW, Allison JJ, Kiefe CI, et al. Achievable benchmarks of care: the ABCs of benchmarking. *J Eval Clin Pract.* Aug 1999;5(3):269-281.

- Kiefe CI, Allison JJ, Williams OD, Person SD, Weaver MT, Weissman NW. Improving quality improvement using achievable benchmarks for physician feedback: a randomized controlled trial. *JAMA* Jun 13 2001;285(22):2871-2879.

First, we calculate the performance of a measure, such as systemic corticosteroids provided for asthma visit, for each provider. Next, we come up with the "adjusted performance fraction" by adding one to the numerator and two to the denominator. This helps us account for providers with very few visits. For example, if a provider has one visit for asthma and prescribes a steroid, the provider would have a 100% performance. But their adjusted performance fraction is actually two over three (add one to the numerator and two to the denominator) or 67%. On the other hand, if a provider has 198 visits for asthma and prescribes a steroid 198 times, their initial unadjusted performance is 100%. But if we add one to the numerator and two to the denominator, it's 199 over 200, and their performance is 99.5%.

We then rank the providers using the adjusted performance fraction. We start at the highest ranked provider and move down until we have reached a cutoff that accounts for 10% (or whatever cutoff you choose) of the visits in the performance. We take that as the "top" providers. Then, using that 10% of visits, we take the unadjusted performance (their actual performance) and come up with the achievable benchmark of care.

QUESTION:

On slide 63, looking at the antibiotic prescriptions in each demographic for the viral syndrome, and just assume that you're looking across all the children's hospitals. Did the hospitals themselves have different patient demographics?

ANSWER:

Elizabeth Alpern:

All of these are children's hospitals (see slide 63). Some of them are main emergency departments, and some are satellites. There is variability in the racial and ethnic populations seen at the different sites. We did a within-site model as well. We found a persistence of non-Hispanic black children getting lower rates of antibiotic provision compared to non-Hispanic white children within sites.

QUESTION:

Do you know of any national advocacy workgroup related to confidentiality and minor consent around things like adolescent sexual health? If so, please comment on how the workgroup talked about these issues.

ANSWERS:

Jonathan Wald:

The workgroup did talk about this issue, and one item (Requirement 2039) is titled "Problem-specific age of consent". Its description is as follows: *"The system shall provide the ability to access legal guidelines on consent requirements for reference, where available, and to record the age of consent for a specific treatment when these differ based on legal guidelines."*

Regarding confidentiality during the teenage years, there are issues that crop up around what information should be protected from parental visibility, and also around the problem of parents pressuring teens to share information with them.

The group recognized that this is one of those areas where there is not yet clear consensus or lots of experience about how to do this well. So this area needs to evolve before specific recommendations around functionality at a detailed level make sense. I know of a number of different organizations that are offering access to teens and teens' parents, and they vary in the way that their policies work. It is probably appropriate at this point not to be broadcasting a single set of requirements to EHR vendors and other industry stakeholders while it flushes out.

I don't know of a specific resource that addresses this. I suggest checking with the usual organizations, such as AAP.

QUESTION:

Are there educational presentations for the ED departments to help them educate on the overall trends? How do the ED departments use the information that you give them?

ANSWER:

Elizabeth Alpern:

The scope of our project, as written and funded, was to look at the impact of the report cards and did not embedded any other quality improvement interventions at the sites within the project. Our reasoning for this was that audit and feedback have been shown to lead to improvement in care. We all know that local boots on the ground are necessary for quality improvement, but that was not part of what we could achieve within the scope of this project.

We did do education at the site about the report cards, themselves, addressing derivation of the data, cohorts, and the performance measures. We also had recurring education on the format and interpretation of the information on the report cards.

We encourage feedback from the providers. Almost monthly we'll get questions like: Why is this done this way? Can you look into this for my performance measure? And we take that very seriously and do a lot of quality checks on our data to make sure that we are providing the performance measures appropriately and accurately. We also have weekly meetings with the principal investigators for each of the sites.

One of the sites was not pleased with their performance on documenting pain scores and their pain improvement in pediatric patients with long-bone fractures. So they did a root cause analysis of that problem. They found that the pain scores that we were getting in the registry were documented in their EHR in a place that was really difficult for the physicians and APNs who were caring for the patients to see. And they felt that the pain was not being acted on because it was hidden.

They subsequently moved their pain scores so that they could be seen every time a physician looked at the vital signs. And that has significantly improved their performance on those measures. We share that information as a group, but it is not done in a set fashion. It's more anecdotal.

QUESTION:

Are there similar resources for pediatric-specific patient portals, such as adolescents and families taking care of children?

ANSWER:

Jonathan Wald:

There's a need for resources. The California Healthcare Foundation has done some good work in patient portals (http://www.chcf.org/patient-portals). If you Google them and patient portals and resources, you'll come up with some resources, including a white paper (http://www.chcf.org/publications/2011/05/measuring-impact-patient-portals). I don't think they're specific for kids or pediatrics, but I suspect that they're generally useful.

Also, Boston Children's Hospital has been working to develop, design, and think about policies for patient portals for children for years. They have a very active portal, and they have active research going on. I'm not aware that they have created a toolkit or ready-made best practices list. But they have written a bunch of papers.

QUESTION:

Can you speak about implementing EHRs in a large adult hospital or a family practice with a small pediatric population?

ANSWER:

Jonathan Wald:

In Pennsylvania, we visited a number of hospitals with pediatric groups functioning within them. When the hospital system adopts a big EHR from a major vendor (such as Cerner, Epic, Allscripts, or NextGen), it makes a corporate decision. And then individual departments have to figure out how to configure appropriately. In one case, folks found themselves essentially using an adult EHR for pediatric care. They were supposed to configure their medication lists, order entry dictionaries, and so on for children. It was very, very challenging.

We found that designing and configuring the systems appropriately to support pediatric care in a high-quality and safe way had many different layers. Sometimes the vendor of the software placed some restrictions. At other times, the vendor designed decent functionality, but the parent organization limited it, the particular department introduced a limitation, or the specific implementation decisions or the workflow was at issue. That made it complicated for end users to figure out what to do when they noticed a gap.

QUESTION:

How do you make sure all pediatric needs are being thought of and addressed prior to implementation?

ANSWER:

Jonathan Wald:

The main purpose of the priority list is to spur dialogue during the RFP process or the implementation process. This lets you compare what you're being offered or what you've got to the workgroup's recommendations. I would encourage you to look at USHIK—both the priority list and the recommended uses.

QUESTION:

Are large payer organizations (such as Wellpoint) and the companies that code their systems participating? Do they have any plans to create apps that would provide feedback on portability and functional needs?

ANSWER:

Jonathan Wald:

In last year's project to develop the 2015 Priority List, the individuals from PCC and NextGen participated in the Working Group. I do not know at this time (July 2016) how payer organizations and their software vendors are participating in using the Children's EHR Format and the 2016 Priority List. We would encourage that and would direct anyone with interest to visit the USHIK website (ushik.ahrq.gov).

QUESTION:

Are you making your platform design user friendly for kids? Discussing the pain portion hidden from MDs reminds us of that. Graphics speak louder than words.

ANSWER:

Elizabeth Alpern:

We agree that graphics are very helpful. We do not have any plans within the current project to make any platform design changes to the sites' electronic health records.

QUESTION:

Is there a recommended pediatric order set or recommendations for adult EDs that see 20% pediatric patients?

ANSWER:

Elizabeth Alpern:

Our current project does not include any general EDs that see both children and adults. However, we used performance measures within our project that can be used by any ED that treats patients (regardless of the proportion of the population). The performance measures can be found at http://www.emscnrc.org/emsc-resources/toolboxes/emergency-department-pediatric-performance-measures-toolbox.

QUESTION:

For pediatric asthmatics who present to ED, is there any data on whether or not the patient is able to self-identify signs and symptoms of asthma?

ANSWER:

Elizabeth Alpern:

This is beyond the scope of our project. We utilized asthma scores documented by the treatment team within the electronic health record.