Panel Discussion: Lessons Learned in Using the AHRQ QIs to Improve the Quality and Safety of Care
Wednesday, December 9, 2015

Transcript

>>DIANE: ...submitting questions in the chat panel at any time. So if you go to questions and write your question in there, we absolutely encourage you to do that. So if you have a comment or a question, we are monitoring that, and that will drive the Q&A sessions that we have later. So please do submit questions at any time. During the course of the webinar we're also going to be displaying a couple of poll questions. We're very interested in what you think about a couple of particular issues and so you will have the option of giving us your opinion based on those polls when the poll question comes up. And then if you have any technical difficulties, you can contact Lee Thompson at the email address that you see there, which is lthompson@air.org.

So I'm going to go ahead and review the objectives for the session today. Now first of all, my name is Diane Stollenwerk and I am with a small firm called StollenWerks, Inc. or SWI. And I'm joined here today by my colleagues from the American Institutes for Research and Pantheon Software. And all of us are pleased to be able to offer today's webinar on behalf of the Agency for Healthcare Research and Quality, or AHRQ. Today you'll hear from two health systems that are using AHRQ quality indicators, specifically the AHRQ Patient Safety indicators, in order to improve the quality of care. And, again, we really encourage you to engage with the speakers and your peers by asking questions and sharing how your organization is using the AHRQ QIs. And, again, you can add that information into the question feature -- any comments or questions that you might have. The objectives today are about sharing the case studies about creating an opportunity for you to learn from each other and learn from your peers who will be presenting on the webinar today. And then we'll also be sharing with you some resources that will support your use of the AHRQ Quality Indicators to help improve health care quality.

And one other thing I wanted to mention: We know that many of the AHRQ QI users are interested in information about the transition to the ICD 10 code set. The AHRQ QI website now has a page dedicated to information about ICD 10 planning. So you can check out the chat box for the URL or you can find a link to the page from the news and announcements section of the AHRQ QI homepage. On this webinar today, because we've got so much that we're covering, we're not going to be addressing ICD 10 related content or questions. So with that, let's go to the next slide.

So there you have pictures of our two moderators. There's me on one side and then Cheryl Fahlman on the other. So today the two of us will be moderating. Dr. Cheryl Fahlman is a Principal Research Scientist in the Health and Social Development Group at the American Institute for Research where she leads AIR's work in supporting the AHRQ Quality Indicators. Before coming to AIR, she gained significant experience with using the QIs, both as a clinician and a researcher. She worked at CMS to test and validate measures for the Medicare Shared Savings Program, including the AHRQ Prevention Quality Indicators. She also worked to education clinicians about the QIs during her time at Premier Healthcare Solutions and was part

of the team that focused on incorporating the inpatient and patient safety Quality Indicators into all of their learning collaboratives and software programs.

Our presenters also include Steve Allegretto from the Yale New Haven Health System in Connecticut and Verna Alverson from Essentia Health in Fargo, North Dakota. So Steve Alverson is the Vice President of Strategic Analytics and Financial Planning for the Yale New Haven Health System. He's been at the Yale New Haven Hospital and Health Systems for over 29 years serving in a variety of financial and operational roles. Mr. Allegretto also manages all financial relationships between the Yale School of Medicine and the Yale New Haven Hospital. He's a certified public accountant with an undergraduate degree in Economics from Fairfield University and a Master's in Public Health from Yale University. He's had various teaching appointments at the Yale School of Medicine's Epidemiology and Public Health Programs, the Quinnipiac University and Sacred Heart University.

Then the second speaker today is Verna Alverson. She's a Registered Nurse with more than 30 years of experience. She received her BSN from North Dakota State University and she has a wealth of experience in the world of nursing. She assisted with expanding Essential Health East Heart Failure Programs to facilities in their west region and she educated patients about their heart failure, symptom management, and ways to improve or maintain their quality of life to help reduce their risk of an acute heart failure event and readmission to the hospital. Verna has experience in the neural and cardiovascular ICU as a staff and resource nurse, in the cardiac cath lab and interventional radiology as a staff resource and research nurse, and in the operating room as a circulating nurse. She is currently working as an analyst in the Quality Department with a primary focus on patient safety outcomes.

So we'd like to kick this off with a poll and while folks are still getting settled, we'd really appreciate if you would answer the poll questions that should be appearing on your screen. And we will use the responses to help with our future planning. So you should be able to just click on your screen to answer the poll question, which is: In what capacity do you currently use the AHRQ QIs, if at all? You can choose: This is my first time learning about QIs. I'm familiar with QIs, but don't currently use them. My organization is considering using the QIs. My organization currently uses the QIs. Or my organization previously or used to use the Quality Indicators. So if you would please go ahead and we'll take a minute. And if you would register your vote in that poll, what your response would be, that would be great. So we'll give it a minute or so. So, again, if you would go ahead and click to register your poll responses, that would be great. Okay, so with that, we'll go ahead and close the poll now.

And just very quickly wanted to -- I'll share a little bit about what the agenda is for today. So before we turn to the case studies, Cheryl's going to provide you with a brief overview of the AHRQ Quality Indicators, including what they are and also how they can be used to support a variety of initiatives to improve the quality of care. And then following each case study, presented by Steven and then by Verna, we will have a brief Q&A. And that's just going to be a couple of minutes. And then we'll also have time for additional Q&A after both case studies have been presented. And then by the end of the webinar, our expectation is that you will have a better understanding of how to implement the AHRQ QIs, what some of the issues are that come up in that process, and some ideas for how to overcome some common barriers. And then

some good examples of the impacts that the AHRQ Quality Indicators can have on the quality of care. Certainly provided by these health systems, but also, potentially, provided by your own organization when you're using the AHRQ QI. So with that, I'll pass it onto Cheryl.

CHERYL: Thank you very much, Diane. Now before we get started, I'd like to give you a little bit of a background and a deeper understanding of what the Quality Indicators are. As all of you know, now in today's healthcare environment, it is more critical than ever that hospitals and healthcare systems have reliable, valid, meaningful, and actionable quality measures to help guide quality improvement efforts, support transparency and meet the increasing expectations of the payers who are moving into value-based purchasing and other types of accountability programs. For example, by the end of 2016, CMS has said over 50% of all Medicare fee-for-service payments will be tied to quality or values. And that will rise to 90% by the end of the year 2018. So it is becoming increasingly important. To help streamline these measurement efforts, you need versatile but standardized measures that can address these needs across different settings, across different populations, and different service lines. So this is where the AHRQ Qis come into play. Next slide, please.

So the Agency for Healthcare Research and Quality or AHRQ Quality Indicators are a standardized, evidence-based, quality measure set that can be used with your readily available hospital administrative data. And it will help you track clinical performance and outcomes in a variety of areas, including inpatient mortalities, surgical complications, and selected hospital acquired infections. The QIs can help identify potential areas of strength, or opportunities for improvement and where there's variations in care. They can also help you identify the extent of the gap. And to do this, AHRQ has provided free software that's available in SAS format or in WinQI. There's free documentation and support available for both of these products from the AHRQ QI support team. And we will provide a link to this information at the end of the webinar. The software will automatically calculate the measures for you. So you don't have to do it. It will output the numerators, the denominators, the rates, all using your readily available hospital administrative data. So you can tie it directly to your hospital. You can also use aggregate datasets across many hospitals or across the state. So next slide, please. Next slide, please. Okay, thank you.

So just to give you a brief overview of the types of the QIs, there are four sets: Patient Safety Indicators, Inpatient Quality Indicators, Prevention Quality Indicators, and Pediatric Quality Indicators. So the Patient Safety Indicators are widely used in a lot of public reporting and pay-for performance programs. So these will tell you potentially avoidable safety events. These are at a hospital level and they are inpatient. Most of them are inpatient with some of them in the ambulatory care settings. There are a few of the measures that are area level indicators. So it will calculate based on your geographic area. The second group is the Inpatient Quality Indicators. These focus solely on inpatient issues, with a focus on mortality and utilization. So this will help identify potential overuse, underuse, or misuse of services. There's a volume indicator that is for complex, high-risk procedures, where volume is an important indicator of performance. As you all know, hospitals that have a higher volume in select procedures, will have a higher quality. The third area is the Prevention Quality Indicators. These are more related to the access to outpatient care and appropriate follow-up care after hospital discharge. So, for example, these might identify admissions that would have been avoided if there had

been appropriate care providers in the community, i.e. your ambulatory care sensitive conditions. These are area level indicators. So it tracks for the community or the region. The fourth area is Pediatric Quality Indicators. And, as you might expect, these focus on a pediatric population even including newborns. So these are a combination of hospital-level, pediatric, inpatient measures and area level indicators, which are related to ambulatory care for both acute and chronic conditions that are more likely to affect a pediatric population. Next slide, please. Okay, so as you know, there's a number of federal initiatives that use the AHRQ QIs, including things like the HAC Reduction Program, the Hospital Value-Based Program, Hospital Value-Based Purchasing. As you can see, we've looked at -- we've provided just a small sample of the variety of programs that use these QIs. If any of you are involved in Partnership for Patients, I know that many of those measures are related to the AHRQ QIs. So I'm sure you're familiar with some of them. So the next slide, please.

Okay, so before we get started, I would just like to remind you that you can find more information about the QIs on the www.qualityindicators.ahrq.gov. This link will be available at the end of the slide, when we present information about available resources. So today's case studies will actually focus on the implementation of the Patient Safety Indicators or PSIs for Quality Improvement. As we mentioned earlier, they are used in many federal initiatives, including pay-for-performance and public reporting. The case studies that we're presenting here were identified as part of a larger effort to develop and disseminate stories about the impact of the AHRQ QIs. We will be posting these stories on the AHRQ QI website shortly and we will provide a notice to everyone who has registered to this webinar when they're posted. If your organization is using the QIs and you are interested in sharing your story, we would love to hear from you. And you can contact us at QISupport@AHRQ.hhs.gov.

Now, the first story we're going to -- or the first case study we're going to hear is from Steve Allegretto at Yale New Haven Health System in New Haven, Connecticut. Following Steve's presentation, we're going to have a short Q&A session and please use the chat box to submit your questions. And then after that, we will then hear from Verna Alverson at Essentia Health in Fargo, North Dakota. Then we will have a brief Q&A session with Verna. And then after that, we will have a moderated discussion with all of the panelists and including ourselves. So, Steve, please go ahead.

STEVE: Thank you. This is Steve Allegretto from Yale New Haven Health System. And if you can go to the next slide, please. We are a provider of services primarily in Connecticut. We're about three and half billion dollars in revenue on an annual basis. And, you know, for those on the phone, we like to pride ourselves on uniqueness. We like to pride ourselves on complexity. So I always say, if you've seen one academic medical center, you've seen one academic medical center. And we sometimes make things more complex than they need to be, but it's based on the patients that we see. And we have the privilege of seeing close to 90,000 inpatients on an annual basis and close to $1.3 million of outpatient encounters. So we take the responsibility of enhancing the lives of those patients we have the opportunity to serve each day very seriously. And I am fortunate to have been a person working in this area, trying to link cost and quality data in ways so that finance folks can talk with clinicians. And the AHRQ PSI information allowed us the ability to link that data together. So why is that important that we link quality

and cost together? Can you go to the next slide, please? Can you do the transitions too as well? So this is -- yeah, and the next one too as well, please.

So this is a slide that Yale New Haven Hospital and Health System have consistently monitored over the last 25 years. It shows our revenue per unit of service. And this is a slide that only has information over the last 10 years. And I actually broke the 10-year period down into two boxes of three years each -- '08 to '11, Fiscal Year 2008 to 2011, and then Fiscal Year 2012 to '15. And you can see by those two periods the challenge we as providers of healthcare services are facing. Our revenue is up 21.1% over in that three-year period of '08 to '11. But if you look from 2012 to '15, it was actually down. And I can tell you that our inpatient services grew during that three-year time period, our outpatient services. But we are challenged, as many organizations are, in being paid less for the services that we provide. And the reasons for that are complicated. Some of them are logical and some of them are illogical. Some of the introductory material talked about value-based purchasing, which is a really important thing for each one of our organizations that are trying to take a look at quality and cost. And there's penalties associated with that, given our performance on those measures. And all of our state space and credible budget pressure is given the challenges on a state level. So there's a lot of things that are driving that revenue decline. And so our challenge is can we find an associate cost with quality? Can you go to the next slide, please?

LEE: This is Lee. We're having reports that folks cannot hear you for some reason. We as the organizers can hear you, but apparently, some of the participants are having trouble.

STEVE: No one can hear me?

LEE: So we can hear you. You know what? Folks, we're getting mixed reports. Okay, I think you're good. A lot of people are letting us know that they can hear you now. So thank you so much, everybody who is sending us questions. Steve, keep going, you're doing a great job. Sorry to –

DIANE: And if you can't hear, perhaps hang up and call back in, please.

STEVE: I can only tell you that that normally happens at home. My wife and two children often tune me out. So if they were on the phone, they would have done that intentionally. And then they would have said that I wasn't really talking about anything that made too much sense to them either.

DIANE: Well, we're listening intently, Steve. So, please proceed.

STEVE: Okay. So, you know, again, that prior slide really talked about our revenue challenges. And then how are we able to use the AHRQ PSIs and broaden their definition for us to answer two questions internally as that large provider of services? Really how many cases do we have that have a potentially avoidable condition or a complication that was not present on admission? And what are the costs for those items and for those cases? And how do those compare to the cases that don't have a quality potentially avoidable condition? This report, we simply call it our red and blue report. It's not too fancy in terms of names. But it's a simple

monthly report. This happens to be for the Department of Medicine. During the introductory comments, we talked about service lines. It is important that we understand this information by service lines. And, given the way that we've developed our system, we're able to do that. So this report shows on the blue line those cases that did not have a Quality Variation Indicator and/or a PSI and those cases that did. And you can see that the cases that did not have a Patient Safety Indicator not present on admission or a Quality Variation Indicator, their average cost is about three to four times less than those cases that are on the red line. And our goal for those cases on the red line are identifying those cases and then really taking a look at those that are potentially avoidable. So what types of things that are included for those cases that are in the red lines? You know, a number of the folks that talked at the beginning between Cheryl and Diane and others, they include things like DVT, Deep Vein Thrombosis and ventilator associated pneumonias and surgical site infections. So using this data, if you go to the next slide, please.

Using this data, we were able to then -- this is the cost per case. Yeah, if you can bring that up. We were able to, using this data, from the period of 2012 to 2015 implement clinical redesign work, which we'll go through in a second, as well as this comprehensive quality definition that I just went through, anchored to the PSIs and through the Quality Variation Indicators, to actually level our expense increases off. So you can see in that '08 to '11 period, our expenses were up 20.3%. But look during the 2012 to 2015 period. We call that our sustained period of cost improvement anchored to quality.

It's important that we mention that we implemented a standardized EMR. It happens to be Epic. It doesn't mean that Epic is the system that can only help drive these improvements. But it was nice to be on a standardized system. And then we also have an Advanced Cost Accounting System, which is by a company called Strata. So when put those four issues together, those multi-year initiatives, that's what's allowed us to maintain that consistent cost curve. If you can go to the next slide, please.

So I wanted to give you a couple of examples. If we've been able to sustain the quality improvement, the question that we always get on the finance side is: How can you trace those dollars through to show that there was an actual impact for the patients where quality improved? One of the QVIs or in one of the PSIs are ventilator associated pneumonia. And we know, based on literature and all the work that we have done, both internally and externally, that a large majority of these cases, are given the correct clinical protocols and the vent leaning protocols are avoidable. So this was a problem for one of our hospitals, Bridgeport Hospital, which is one of our community hospitals. And we had a higher than expected incidence of ventilator associated pneumonia. So we developed a ventilator bundle. Can you go to the next slide, please? So this was our performance on ventilator associated pneumonia both before and after the implementation of the vent leaning protocol. You can see that up to through the period of April of 2012, our number of cases and the number of ventilator associated pneumonia days to total vent days was very, very high. We implemented our revised processes in the April 2012 time period. And you can see by this performance that it actually went to zero during that time period. So we actually reduced our rate to close to zero. If you go to the next slide, please?

So that was the clinical outcome. The question we got from our financial folks is what did that relate to in terms of cost? So how can we link cost and quality together? This particular slide

shows the cost related to those cases that we had back in 2012. And these cases actually based on the cost accounting system cost us about $75,000 apiece. So we spent about $1.4 million on those cases. You can see our experience over the last three years financially. The system that we now have pulled together allows us to be able to look at these. I'm not too sure there's many finance people on the call. But we are able to trace these improvements into the general ledger. So there's a lot of folks that are doing a lot of unique things, but as we talk about this nationally, we are one of a select few of organizations who have both a cost accounting system and a comprehensive definition of quality. And what I decided to include in here, the question we always receive, is how much money did we actually save? And you can see that I have a case publication reference that says that ventilator associated pneumonia cases account for about $3.1 billion of potentially avoidable cost across each one of our organizations. So again, going back to the discussion of the AHRQ PSIs and Quality Variation Indicators, each of us should know what our ventilator associated pneumonia rates are. And what are we doing as organizations to be able to prevent that? Because the impact on patient outcomes and patient experience is significant. Can you go to the next slide, please?

So how are we looking ahead? You know, we also talked at the beginning of the program about bundled payments. At Yale New Haven Health System, we are in the lower joint of the BPCI Program. If any of you are familiar with the BPCI -- the Bundled Payments Care Improvement Program. We've been in that since April 1st of 2014. We have now linked the PSI number 12 DVT's -- for those on the phone that aren't clinical, that's a blood clot. For those that are clinical, it's a deep vein thrombosis. But we have actually linked our ability to be able to take a look at DVT's at a very detailed level, specific for each patient. And we have been able to identify the provider that provided that care, as well as the cost for that care. We have been trying to, in addition to this, trying to standardize our number of vendors that we have for spinal instrumentation. And, as of October 1st of this year, we were actually able to reduce our vendors from two vendors to four vendors. And we anchored this cost improvement to a gain sharing agreement with the physicians who perform these procedures. And if you go to the next slide, I'll explain that -- how that works. So we actually have -- every month we measure at a physician level the patients that complied with our DVT protocol, as well as those patients that actually had an outcome with a DVT. If the physician and the team followed the DVT protocol and they didn't get a blood clot, they would be subject to receiving the gain sharing payment. And so this has been very successful so far to date and being able to drive compliance to Epic protocols, as well as containing our costs. I'm going to close my presentation. Go to the next slide, please.

Sometimes we get lost in the numbers that we talk about and provide. And I always try to close with a patient story. Surgical site infection is also a PSI and a QVI. And this was an outcome for a patient that we would not want to have happen to either us or a family member. And, again, you can read the slide without me going through it. But this was a very healthy 68-year-old. Remember, I told you that my family doesn't like to listen to me. I'm not that old yet. I'm 56. But if I was a 68-year-old coming in for a total hip arthroplasty, I wouldn't want to have this be my outcome. We now know that our number of cases -- we do about 2,900 lower joints on an annual basis. And, depending on the time period that we pick, whether on the index admission, all the way through to 90 days given the bundle, our surgical site infection rate is anywhere from 1 to 3%. So we have room to improve and enhance the services that we provide

to those patients that we see. And we need to be able to do that to prevent outcomes such as the one that I presented here. So thank you and I hope I wasn't muted the whole time.

DIANE: So, Steve, before we get started, I want to go ahead and ask you a couple of questions. So Erica asks about the graph that you showed, comparing with and without QVI. And she was wondering was the analysis on all medical discharges? And if so, what did you us as a definition for medical discharge?

STEVE: Yeah, again, it's a really good question. We have multiple definitions of patient populations that we use depending on the question that's raised. I'll use HV – heart and vascular as an example, in addition to medicine. There are medical cardiology cases that are in the Department of Medicine. We also pulled those cases out to take a look at those when they're cared for by an interventional cardiologist or a general cardiologist versus a hospitalist. So we have multiple definitions. That particular slide includes only those cases that are in medicine. And, given our multiple definitions of populations, we're allowed to get down to the individual either DRG or ICD 9 basis. I know we talked about ICD 9 and ICD 10. We've actually cross-walked all of the QVIs from ICD 9 to 10 and we have some different classifications of patients. But that's how we define our service lines, in multiple different ways, depending on the question that's asked.

DIANE: Very helpful. And speaking of data, Jenna was asking about Epic and is Epic identifying your PSIs within Epic? Or are you running Epic output data through the AHRQ QI software?

STEVE: I'm hoping Jenna is not a plant. That's my daughter's name. So she would have teamed out already. So Jenna is probably -- So we have some concurrent identification for Iatrogenic Pneumothoraxes and I don't remember what PSI that is. But we have for those areas where we have specific project improvements, where we have position champions leading that, we have Epic defined fields that allow us to track that both concurrently and then retrospectively. And so, depending on the area that we're focusing on, we're able to do that in both places. And we're developing a couple of tools based on the data that we have to combine some Epic and our cost accounting system to look at predicting QVIs.

DIANE: Well, this has been extremely helpful. There were several other questions that came in. But, frankly, in the interest of time, since we will have a Q&A session a little bit later, we'll go ahead and move onto the next case study. Thank you, Steve.

STEVE: Thank you.

DIANE: Next slide. And welcome, Verna.

VERNA: Thank you. Good afternoon. Before I go into Patient Safety Outcomes, let me give you a brief background on the healthcare facility where I work. Sometimes that helps as far as resources utilizations being aware of that. Like Diane stated, I am employed at Essentia Health in Fargo, North Dakota, which is a medium-sized hospital with 140 beds and part of a private non-profit integrated healthcare facility with facilities in Idaho, Minnesota, North Dakota, and

Wisconsin. We're a $1.7 billion enterprise with more than 14,000 employees, including 1,500 physicians and advanced practitioners. The Essentia Health System is comprised of 16 hospitals, 69 clinics, eight long-term care facilities, two assisted living facilities, four independent living facilities, and one research institute. So that kind of gives you an idea of the size of our healthcare system. To align with our vision of providing high-quality of care at Essentia Health, an emphasis was placed on the Patient Safety Indicators by AHRQ and value-based purchasing. Initially, Essentia reviewed a report that was put together by an analytics company we contract with for software programs we utilize to create and run our monthly PSI reports and other reports. The initial reports show that our occurrence rate for a select number of these PSI listed on the slide here were higher than the national average. With these opportunities for improvement in Patient Safety Indicators identified, it helped us to prioritize which ones to look at first. Our goal was to improve patient safety, which would in essence improve our pay for performance. Next slide please.

So the quality department determined additional resource would be needed, so I was hired and additional staff were also added to take a deeper look at what was happening and to assist in developing a plan of action. This past summer, after reviewing perioperative hemorrhage and hematoma cases for PSI, a subset of cases were identified where bleeding and/or hematomas occurred. From that, a workgroup convened. Members of the workgroup included nursing, education, a physician, and a member from quality. That group determined that patient care varied following the use of a hemostatic device for post angiogram patients attributing to bleeding and/or hemostatic occurrences. So the group took steps to reeducate staff on the application and the discontinuation of the device. They added an arm board to stabilize the risk post-procedure and then they updated the order set to reflect or clarify changes made in the process that they had established. For the first month following this new process there were no concerns improving our hematoma hemorrhage rate for this subset of patients.

Our next steps in quality is to review other hematoma and hemorrhage cases for trans and then move those findings forward. Next slide, please. We also review our accidental puncture and laceration rate PSI 15, and found areas of opportunities there as well. We noticed that we had cases flagged as patient safety events by the indicator that were incorrectly coded as accidental, when these lacerations were actually inherent to the particular surgical procedure. So we instituted a case-by-case peer review by a physician in the relevant specialty. And then we took those learnings from those cases were reviewed and shared with the appropriate person and/or department and with man quality. With the information received from the cases reviewed, it was decided we needed to institute a workgroup and that was because I didn't think we were getting to where we ought to be with current practice in defining what is accidental and also what our next steps should be. So a workgroup convened, which included members from coding, surgeons from different specialties, and quality. We reviewed additional cases and completed a literature search in order to define what accidental puncture and laceration is. The group created educational material for providers about the definition of accidental puncture or laceration. This information was also sent to coding for their review. A pre-billing query process was implemented in our West Region facilities. And in the meantime, a different process was being piloted in our East Region, which was later implemented system-wide. In addition to these steps, case occurrences are being brought to the procedural committee with the goal of getting to the frontline where we can make a difference. And as of a result with our

work on PSI 15, Essentia Health has reduced its rate from 1.2 events per thousand to a rate better than the national average. Next slide, please.

So what have we learned? We learned that provider education and prevention activities are critical to improve patient safety. The PSIs did show us where to focus. We used the technical specifications to examine each case individually, identifying opportunities to improve clinical care delivery and taking the information to the frontline to provide awareness and to make improvements. We have continued utilize the AHRQ website as a resource with its wealth of evidence-based information and toolkits that provide adaptable solutions, guide the provision of safe care, and the reduction of patient harm. Questions?

DIANE: It's wonderful to hear two systems with similar experiences, but markedly different experiences in terms of focus areas and where the similarities are is around the impact. And this is excellent. So a couple of questions have come in for you in the process. We'll ask a question or two, but then we'll move on to the more general Q&A. So did you notice the accidental punctures occurred in abdominal cases with adhesions and small enterotomies -- am I pronouncing this correctly -- were made. It seems that others are having challenges with getting the coders to understand this. And, related to that, there's also some interest in whether you have education materials that you would be willing to share with others. But the question that was asked: how did you get your coders to understand the nuances of how to code these accurately?

VERNA: Well, I think by helping or by having that workgroup that we did, bringing our Director of our coding, our Supervisor, and then one of the coders in along with the providers. And having that discussion when we did case reviews as far as if there's adhesions in the case, how do we differentiate that from something that's accidental versus not accidental? Because sometimes we have the discussion around they're in there working on these dense adhesions and there was just no way to avoid that. So that was some of the terminology that we looked at as far as when you're documenting in your report how you could define something that's accidental or , so to speak, non-accidental?

DIANE: So very helpful. And then one other question that I'll ask and then we'll move to the more general Q&A. Someone was asking about whether you've used the QI's in assisted living settings or are these primarily focused on hospital settings?

VERNA: I just work in the hospital right now. So I'm not sure if Essentia's other facilities, what work they're doing around the PSIs in those settings.

DIANE: Okay. All right, well, thank you. So, again, several questions have come in. So we'll open it up. And again, if anybody has additional questions, please feel free to include them in the questions. Type them in. We're obviously tracking them and sharing. So there was a question that came in earlier that we didn't get to. And that is several questions around, Steve, for you, around the specifics on gain-sharing. And then also the financial impact, in other words, were the savings to the hospital or were they passed along to purchasers? And you could certainly get into detail if you want, but, I guess, a broader question is: is this cost savings and

gain-sharing model published in a peer review journal or elsewhere for people to be able to access?

STEVE: Again, a good question. I don't mind sharing some of the specifics because I think it's important as we're trying to understand how cost and quality are linked together. You take a look at how Verna was able to use the data to be able to impact and change laceration rates. I look at the gain-sharing program that we put together as our ability to lower cost and improve quality. So we tried for five years. We know that going from 4 vendors of instrumentation for our 2,900 hips and knees that we could have going down to two, saved about $3 million a year. We attempted to do that for the last five years. Over the last five years, we probably spent as an institution $15 million more than we needed to give our patients in the selection. We happen to have recruited an individual from the Mayo Clinic, Mary O'Connor, who was passionate about quality in the care that we provided, as well as integrating that with cost. And so she was able to use the data around our clinical variation and identify that wouldn't it be great that if we were able to reduce our number of DVT rates and our compliance with protocols? We then were able to look at how can we gain-share that with physicians? And there is a portion of the VPCI program for anyone that's on the phone that's in the CCJR. I hate using these terms, but that's the Comprehensive Care Joint Replacement Program that CMS has mandated for 67 geographical areas across the United States. There's something called the Internal Cost Savings Gain-Sharing Program that allows us to -- if we have a cost accounting system and that we can demonstrate there's a quality improvement as well as a cost savings at a physician level, we are then able to share some of those dollars. So out of that $3 million, we're projecting to save -- we are going to share with the physicians about $700,000 of that is the goal. And that alignment of cost and quality is important to us. Is that issued in any peer review journal? It's not in a peer reviewed journal. We were featured in an article around variation and quality within the HFMA, the Health Finance & Management Academies, cover story back in December of 2014.

DIANE: Excellent. Well, we'll see if we can get a copy of that and perhaps if people are interested, we could pass it along. I have a general question both for Verna and Steve. And this has to do with sharing the information. So, for example, Karen was asking: Do any of you use the data to report at a quality council meeting? Or generally, how do you share the PSI results across your organization? Who receives them and does sharing that information spur action in your organization? So, Verna, maybe you can answer that. And then we'll have Steve comment on the same question.

VERNA: Yes, we share information across the organization, not just within the facility, but across the system as a whole. So one mechanism that we use for sharing it is we have an ACO dashboard at Essentia. And, actually, any employee has access to that so they can go in and they can look to see, for instance, under the PSIs, they can log onto that dashboard, look how we're doing as a system. They can look how we're doing as a region, a facility, even down to the department at each department. We also take -- quarterly we take a report to our West Region quality here. And then that report goes up to system quality. And then to Med Exec as well.

DIANE: Excellent. And, Steve?

STEVE: Yeah. You know, I always look at where we are is we're on a journey. And we're on a journey of sharing the data. And we do have a monthly report that's included in the financial statements. And then there's a quarterly quality report where the two are integrated. We have some areas where there's physician champions, where that data is again shared down to the provider level. And there are board reports around quality improvement. We have a corporate objective this year to reduce our QV -- I'm sorry, our DVT, our blood clot rate by 10%, above and beyond what's included in the Medicare value-based purchasing. So we select a number of measures because you can't work on all of them simultaneously, because there are too many of them, if you will. So you really need a physician champion. And the data that we end up using with both the physician and the nursing champions are at that detailed level.

DIANE: Yeah. Excellent. So I have one final question, just being aware of the time. And we know that there are a number of other questions that have come in. And the engagement here is incredible. But you both have very powerful stories to tell. But what it all comes down to, and, I have to admit, I'm a bit of a data geek, and that I got a little teary-eyed as you guys were talking. And it comes down to this question, and that is how has using the PSIs improved care at the bedside? In other words, it would be wonderful if you would share an example of how your work with the PSIs has contributed to better outcomes for the people in your care, for the patients.

STEVE: I don't know, Verna. I'll take one. One of the ones that has been of interest to us is respiratory failure. I believe that's a Quality Variation Indicator internally. I'm not sure where it stands with PSIs. So for our CABG cases, we identified that that was one of our, in addition to lacerations, the one that Verna talked about, that happened to be one of our most frequent occurrences of cases. I've been at this for a while, a number of years, and we had a presentation that we were making to the providers. And as we presented that data, I don't know if you're all familiar with clinical registry data. You know, the ACC Registries, the American College of Cardiologists. But respiratory failure or pleural effusion rates were very high for us over the last 3 or 4 years. So there was clinical concordance between what the PSIs and QVIs said, and what was in the clinical registry. And that discussion then led to the variation in when chest tubes are pulled for those patients and how it varied by physician. And that has now led to an improvement process to standardize that for each of our patients. So I know if I come in as a CABG two months from now, there'll be a standardized procedure, which will, hopefully, reduce our pleural effusion rates.

DIANE: Do you have an example to share regarding the impact on patient care?

VERNA: Ours, I think we just got started with -- I mean, from the PSI standpoint since I've been involved, the example that I gave with the hemorrhage and hematoma, where we took that subgroup of patients, identified a problem with -- there was staff doing different things post-procedure and it wasn't all alike. So we went back to look at the process and standardized how were we utilizing this hemostatic device that we're putting on the patient's wrist? And saw that there were variances there. And, therefore, going back, reeducating the staff on how to apply that. And then when we take it off, what are those steps? And then patient care moving forward there. And now our next steps are okay, what other areas in that PSI 9 for hemorrhage and hematoma do we need to look at next?

DIANE: It's a good reminder that every data point is a person, is a patient. So thank you both Steve and Verna for sharing your stories and the impact that your organization has been able to make by using AHRQ Quality Indicators. So I'm going to turn this over to Cheryl to talk a little bit about Resources and Support.

CHERYL: Okay. So thank you Steve, Verna, Diane. We really appreciate this. Now before we talk more about the resources available to help you, we'd like to get your response to one more poll. This will help us inform future webinars and events. So the poll is: I have a better understanding of how the QIs can help my organization meet its quality goals. Strongly Agree, Agree, No opinion, Disagree, or Strongly Disagree. Now we will take about a moment -- we will take about a minute. If you would care to answer that, we would greatly appreciate it. [PAUSE] And just in case you need me to repeat the question: I have a better understanding of how the QIs can help my organization meet its quality goals. Strongly Agree, Agree, No Opinion, Disagree, or Strongly Disagree. [PAUSE] Okay, we'd like to move on now to the next slide. And AHRQ has developed -- Oh, sorry, we have a small technological glitch here. The QIs do have a toolkit that's been developed to help you understand your readiness to change, how to apply the QIs to your data. How to identify Quality Improvement priorities and opportunities. And also how to implement some of these improvements. You'll see the website listed at the bottom of the page. We will again provide this resource at the end of this slide deck. Next slide, please. So you see, there are additional -- there are other resources available, including technical assistance. Please remember this if free technical assistance. And there's also free QI software and documentation for both SAS and WinQI. And the website contains a broad range of technical assistance. Products and services, including the technical specifications, methods, FAQs, user guides. So please, spend some time exploring the website and learning more about the QIs. We also have regular updates to the AHRQ QIs to insure that the software remains current with changes in healthcare and coding. And it's updated annually every year. The new release is expected sometime in the spring of 2016. Now, as I mentioned earlier, additional information on Yale and Essentia using the AHRQ QIs can be found or will be found at the website. If you are interested in sharing your story, we would love to hear from you, please. So please contact the AHRQ QI support team at QIsupport@ahrq.hhs.gov. And, finally, the AHRQ QI program hosts a series of webinars on a wide variety of topics. All of the webinars are recorded and available on the AHRQ QI website. In the spring of 2016, I'd like to invite you to join us for webinars that discuss the enhancements to Version 6.0 of the QI software, including the addition of the ICD-10 codes. So I would like to thank our speakers and our participants again. Thank you so much for joining. And I hope you found this interesting. If you have any comments or questions, please reach out to the support team. Thank you.