AHRQ Quality Indicator Software Version 4.1
Overview Webinar
January 14, 2010

Facilitators:

- **John Bott, MSSW, MBA,**

  Contractor, Agency for Healthcare Research and Quality

- **Jeffrey Geppert, EdM, JD,**

  Battelle Memorial Institute

John Bott [AHRQ]: This is the second webinar. It's a repeat of the first webinar on the 12th, a webinar where we focused on the AHRQ quality indicators, the newest release, Version 4.1.

Prior to getting into the agenda, a couple of notes of context. Our objective for holding a webinar on this current version, Version 4.1, is that we have a couple of goals. One is we want to be transparent about the current AHRQ quality indicators, and that's again, Version 4.1. We want to be clear with what it's doing when a user is running the measures. Secondly, is to transfer knowledge.

We want to take what we have learned and what we know about the quality indicators and provide that to those people who use the AHRQ quality indicators and may have a general interest in the quality indicators as well. And to appreciate the fact that different people have a different need to know about these quality indicators, we've organized what will be a forthcoming series of webinars in this particular webinar.

In regard to this particular webinar that we're in now, the aim of this webinar is to provide a very high level 50,000-foot overview of the changes from version 3.2 to this current version, Version 4.1, that will likely satisfy some people's need to know at that level just within this one webinar. And then we'll talk a little bit about the series of webinars that we're beginning to plan for the year that we're in, to talk in more detail about areas within Version 4.1.

So then with that agenda in this slide, Slide 2, is a preliminary schedule. We'll talk a little bit about the preliminary schedule for the Version 4.1 webinars. The bulk of this presentation portion today will provide that overview of changes from Version 3.2 to the current version, Version 4.1. We'll walk through the draft list of topics for future webinars and conclude to leave a lot of time for discussion to hear your questions — either over the phone or typed in.

So we'll go to the third slide; this is the preliminary schedule. You'll see that the first bullet is this high level overview webinar, two of them held this week on the same topics of the significant changes.

We have tentative plans to do webinars the week of January 25th, again repeating the same agenda where we'll go into a number of topics in more detail. And then the third bullet you'll see here is to then begin to conduct a series of webinars throughout 2010 — approximately one a month on a couple of topics in each of those webinars, and to go into more significant detail for people who want that level of detail about the specifications of what is Version 4.1 all about just so that we can be as transparent as possible.

I'd like to make a comment that if there are some people not able to get into the slides and they're on the phone right now — for whatever reason they aren't able to open the slides through the conventional link that they have — if people could go into the AHRQ quality indicators website, and in the upper right-hand corner you'll see a link there that should take you to the slides so that's another way to get into the slides.

At this time, I will turn it over to Jeffrey Geppert, who is the person at Battelle who is the project director on the AHRQ quality indicators work. Jeffrey?

Jeff Geppert [Battelle]: Thank you, John. Happy New Year to everyone, and thank you for joining us this afternoon or this morning, if you're on the west coast. We'll start before we discuss the broad changes that were incorporated into the most recent release, Version 4.1, discuss a little bit of the context of the changes that go into the consideration for new releases.

Each release responds to a lot of external input that the QI program receives that inform the specifications and use of the quality measures and inform how they might be modified and improved to changes in specification or changes in modeling.

First and foremost, each year the codes that AHRQ relies on — all of the AHRQ QI are based on administrative data, and so ICD-9 codes and DRG codes are updated each year by CMS and by CDC, and so we review those codes and we determine which codes potentially have an impact on the QIs. Either they're more expansive versions of existing codes, so we might have a code that gets expanded into more detail, or they might be entirely new codes that allow us to refine and evaluate the clinical rationale of the measure and improve the measure to target the type of event that the indicator is intended to capture.

More recently, we've worked through the team to try to provide some input into this process. Here again is where input from our users has been very valuable. There are often circumstances where the input we've received from users has indicated that a new code would be appropriate for inclusion in the ICD-9 code set.

Over the last couple of cycles we've made an effort to make proposals to CDC and CMS about potential codes that might be added, and the clinical rationale for doing so. So some of the coding changes that we are implementing in this release — and will be in future releases — are actually coding of things that the project team has initiated, based on the input that we've received from you.

The external input remains a very critical component of what motivates changes. Those external sources of information include literature review. We systematically sort of review papers that have been published. Since the QIs have been out now for several years, more and more the literature that is out there is specific actually to the QIs and are studies that people have been done that have actually evaluated the QIs, and tested them. That has been a very valuable source of information.

Expert panels that the QI program has run is part of our own internal validation activities, but also expert panels that have been run by external organizations that have evaluated the QIs for adoption for their own reporting and quality improvement purposes, and the input from those

panels has been a very valuable source of information and input from a lot of the specialty societies that have reviewed measures for potential use by their members.

And finally, user input. The support line, support@qualityindicators.AHRQ.gov, remains a primary and vital source of information about how the measures are being used and the issues that people have found and suggestions for how indicators might be made more useful.

Recently, there has been a significant improvement in the types of data elements that are available to us on the administrative data files where revisions to the UB-04 that have added data elements and that we've worked to incorporate those data elements into the quality indicators, most notably present on admissions and point of origin in this most recent release. We'll talk a little bit more in detail about those data elements further on in the slides.

Expanded uses of the QIs, both as a result in consequence of NQF endorsement for a subset of the QIs and by adoption by CMS in their hospital compare initiative, has led us to critically evaluate the way that the measure is defined; the way the methodologies and the models are applied, and that has led to some improvements that we've implemented in this release.

And then, finally, I'll just add that new data becomes available each year and we try to keep our benchmark data and our model coefficients as current as we can.

So the first topic is the fiscal year '09 coding update, so the first thing to note is that in the most recent release the numerator and denominator specifications have been updated to incorporate the fiscal year 2009, so these are codes that went into effect on October 1, 2008 for both ICD-9 and DRG.

For CMS that means that the MS-DRG and for the PR-DRG, that means that the PR-DRG have all been updated to fiscal year 2009. We're in the process of preparing an update to this current release to incorporate the fiscal year 2010 coding update, and we anticipate that that release will be available sometime later in the spring.

The intention is to make it available for users when they have their first quarter, for us to have the fourth quarter 2009 available sometime later in the spring.

I want to highlight two coding changes in particular. All of the coding changes that were made to the measure specifications are listed in a PDF document that is on our website, the www.qualityindicators.AHRQ.gov website.

Each module, and as you know there are four modules, but each module has a page documents related to that module. One of those documents is the list of ICD-9 coding changes that were implemented for FY '09, and so you can download and review those documents for the details of the codes that were included and for which measure and where there was a numerator or denominator condition that was updated.

But the two coding changes that I want to highlight relate to pressure ulcers. In the most recent coding update there were U codes that indicated the stage of the pressure ulcer — stage one through four for unknown. Those staged codes were incorporated into the measure specification so that ulcers that are either stage one or stage two are excluded from the numerator, and from the denominator with the idea being that those pressure ulcers are more common and less serious than the higher stage pressure ulcer.

One consequence of this was that the indicator itself was renamed, since the codes used the terminology "pressure ulcer," we renamed PSI 3 and the equivalent pediatric indicator from decubitus ulcer to pressure ulcer.

The second important thing regarding how the measure is used, since the stage codes are new, we don't currently have data that implements those codes. There is always a couple of years' lag between the data that we have available to us for use in benchmarking and risk adjustment and the data that you use, which is technically more current data, and so for the time being you need to focus principally on the observed rate because that will implement the

specification. But the risk adjustment — the benchmarking and the covariates — are based on earlier data that doesn't incorporate stage. Those data obviously need to be updated once the data becomes available, and so you should focus primarily on the observe rate for the next couple of cycles.

[00:15:00]

The other coding change that I wanted to particularly highlight, was that there was a new code for central venous catheter-related bloodstream infections. This code was much more specific regarding the type of event that this indicator was intended to capture than the previous coding, and so we revised the measure to focus on this new code and we tried to use the terminology that was standard regarding this type of event. We renamed the indicator, which was formerly called "selected infections due to medical care," to this new name.

Similarly, there is a little bit of a transition period with this measure since the data we have available — the most recent data that uses new code — was the fourth quarter of 2007. So the focus, again, primarily is on the observe rate, and then as more data becomes available to us to incorporate into the models over the next couple of cycles, then the risk-adjusted rate.

There are a host of specification changes that were made based on this external input. I want to talk about the details, but will refer you to the change log document, which is another PDF file that is on each one of the module pages on the QI website.

The change log is actually a cumulative listing of changes to specifications and to documentation and to the software that have been made since the indicators were originally released. So for the PQI that would be since November of 2001, for the IQI and 2002, for the PSI of 2003 and for the PDI of 2006.

So those are cumulative changes in each of the changes that are listed here and on the next slide is described in those documents in terms of what was changed and the codes that were changed.

Primarily, the changes were refinements to the exclusion logic, so we excluded particular types of cases from the measure. For example, for hip replacement we excluded the hip fracture cases; for hip fracture we excluded prosthetic cases; for incidental appendectomy we excluded *[unintelligible]* cases where we're finding exclusion logic to improve the performance of the measure in terms of specificity.

For esophageal resection, that's one exception where we actually added a procedure to the denominator for the volume and mortality measure, so it's a procedure code that's associated with some relevant diagnosis codes. That will expand that indicator slightly, but all of the rest of them are principally related to refinements to the exclusion.

The other thing that I want to point out here regarding these specification changes is the last one on the list, the birth trauma. This measure was submitted for consideration for endorsement by NQF through the perinatal project, and a similar measure was submitted by the National Perinatal Information Center, and so the changes that were implemented to birth trauma in this release are the result of a harmonization that took place between the AHRQ version of the measure and the NPIC version of the measure.

We are now co-intellectual property owners of that measure in the NQF structure, and will be collaborating with them on future refinements and revisions to that measure.

Next in terms of the list of changes has to do with the implementation of the new data elements that were made available on the Uniform Bill; these changes that went into effect October 1, 2007, in particular the use of two new data elements.

The present on admission data element, and the point of origin data on them. As many of you know, the present on admission data element is a flag that's associated with every secondary diagnosis code; that's also associated with the principal diagnosis code that we focus primarily in our indicator logic on the secondary diagnosis codes.

The way that the code was implemented in the UB-04, the values of the flag take on a number of different values. They can have a "Y" which indicates that yes, the secondary diagnosis was present at admission. No, the diagnosis was not; unknown, meaning the documentation is not sufficient to determine; "W" meaning that the provider cannot clinically determine whether the condition was present at admission, or exempt.

So the way that we've implemented this data element in the QIs, is that we've essentially mapped those values into a binary yes or no, for each of these secondary diagnosis codes. What's included in yes is why yes, or "w" clinically undetermined or exempt — those three values — or if the user still uses the previous 01 binary lot coding, "1" is also counted as a one, meaning present on admission.

The sort of rationale of the clinically undetermined is that it's clinically ambiguous, and so the benefit of the doubt essentially goes to the provider. The rationale for the coding of unknown is that the documentation is not sufficient, and so the motivation is to try to encourage more complete documentation and is the basis for the coding.

For point of origin, the rationale for this new data element, at from the perspective of the QIs, is that under the old admissions source you could not distinguish a patient that was transferred in, if they initially presented at the emergency department.

In other words, every patient that presented at the emergency department was coded as an "ED admit," whether they came from home or they came from another facility. And there were several of the QIs like pressure ulcers where we wanted to exclude patients that were transferred from other facilities. We weren't actually able to implement that exclusion

consistently because of the coding of admission source, so the benefit of point of origin is that it allows us to separately identify those patients — regardless of whether they presented at the ED or not, and so if they transferred from another facility, you know, we can identify them.

The challenge is that even though this data element has been added to the UB-04, not every state collects it and not every user has the data elements available to them for the application of the software.

In Version 4.1, both point of origin and admission source are accepted data elements. The logic applies to both data elements so the dataset could, in fact, have a mix of discharges that have point of origin and a mix of discharges that have admission source. The software doesn't necessarily implement any logic to ensure that those data elements are consistent with each other, so you would have to do that on your end, but it does apply to both data elements and you can use one or the other. Obviously, point of origin for the reasons I've mentioned is the preferred.

Next is the revisions that have been made to fully implement the MS-DRG. So as you know, up until Version 24, we had the CMS-DRGs, and we referred to them in the QIs as the CMS-DRGs. And then with Version 25, CMS implemented the MS-DRGs, and so we were sort of faced with the circumstance of having to make sure that the software was compatible with both versions of the DRGs, since users do use earlier data for the purpose of trending.

This version of the software, Version 4.1, made a couple of changes to ensure that the software would be compatible regardless of which version of the DRG you were using. The first change was to modify some of the indicator specifications that relied on DRGs, so we tried to replace those specifications replacing the DRG spec with a version that was based on ICD-9 codes.

There are new code lists for those indicators for things like cardiac surgery, cardiac arrhythmia and abdominal surgery, that previously were based on DRGs — that are now based on ICD-9 codes — both before and after the adoption of MS-DRGs.

Where we couldn't do that easily, using the ICD-9 code-based version specification, we simply created parallel lists of CMS-DRGs and MS-DRGs. For example, for the craniotomy mortality and the medical and surgical inclusion lists that are part of the PDI and the PSI, you'll see in the documentation and in the software that there are two lists — one for the CMS-DRGs and one for the MS-DRGs.

One question you might have is regarding the implementation of the low mortality DRG measure, the PSI 2. The way that we have implemented this measure during this kind of transition period between CMS and MS-DRGs, is to create a logically consistent grouping of both the CMS and the MS-DRGs, the mapping between them and created broader categories that we refer to as "modified DRGs."

In most cases, these broad categories for the CMS-DRGs would include DRGs that had with or without comorbidities and complications, and so they would be grouped together into a single DRG. Similarly, for the MS-DRGs the three different comorbidity breakdowns would be grouped into a single category.

In this pooled modified DRG that we use as the basis for the denominator for the low mortality DRG measure, so we do an empirical analysis of this pooled category to determine whatever the mortality rate is less than half a percent. That's the threshold that's used for that measure.

We also used this modified DRG, this massing between the CMS-DRGs and the MS-DRGs, to refine the DRG categories that are used in the risk adjustment for the PSI and the PDF. So we could use one set of coefficients and one denominator regardless of which DRG system

was used; that was the rationale. This is something that we can refine as we go forward and the CMS-DRGs become what's relevant and the focus remains on the MS-DRGs.

[00:30:00]

The next change topic is the implementation of the NQF-endorsed composites. While the previous releases were under preparation, the NQF, they had a process for developing a set of evaluation criteria for composite measures that were submitted for endorsement, and the RQIs were submitted to that process for evaluation under those criteria as kind of the first test case of those criteria.

Three of the composite measures that were submitted to NQF were endorsed by NQF, and so Version 4.1 implements the composites as they were endorsed. The three composites are the IQI, mortality for selected condition composite, and then the patient safety for selected indicators composite and then the pediatric version of that.

So when we talk about the NQF version, there are two components of that. One is which indicators are included in the composite. One of the criteria that NQF applied was that the component measures of a composite either have to be individually NQF endorsed, or they have to be determined through an evaluation process to have met the criteria for NQF endorsement of an individual measure so that was done. The composites were limited to either those that were endorsed or were evaluated to have met the criteria, and so the composites were implemented in that way with the subset of measures that met that criteria.

Then the weighting that's used in the composites is based then on these NQF weights, and for the IQIs, the NQF weights are based on the relative frequency of the denominator of each of the conditions. And then for the patient safety versions, the NQF weights are based on the relative frequency of the numerator. You'll see in the software reference to NQF weights, and that's what that means.

Just a brief comment on the fourth composite measure that was not endorsed, which was the "mortality for selected procedures" composite. The reason that was not endorsed was primarily for conceptual reasons. The measures that are included, these volume outcome measures really apply to a relatively small subset of hospitals. Relatively few hospitals perform these procedures in sufficient volume to be included in the composite. There is a lot of heterogeneity amongst the procedures in terms of the hospitals that perform them. Some of the procedures like triple A repair are done by an even smaller subset of hospitals on a consistent basis.

And then, finally, the thought was that the reason one uses the composite — the rationale for using a composite — is really to make decisions about the hospital selection prior to one knowing what one needs the hospital for, and so before you know what condition you might have. Most of the procedure-based indicators are really elective procedures where one knows in advance why one needs to go to a hospital. There is less of a rationale conceptually for a composite for those types of procedures, so all of those factored into the decision by NQF.

Another change with Version 4.1 was the inclusion of a module, which we refer to as the "neonatal quality indicators." This module is really a submodule of the pediatric quality indicators, but specific to the neonatal population.

There are two new indicators that are included in this module. There is an indicator for a neonatal mortality, in-hospital mortality, and then an indicator for bloodstream infections in neonates which is also a new measure.

Then we grouped another existing measure into this neonatal set, which was the iatrogenic pneumothorax in neonates measure. We numbered that measure so that it's now part of this NQI set, and so we refer to this by the acronym "NQI."

And then we have sort of refined the definition of neonatal, and I'll just refer you to Appendix I in the PDI technical specifications where all of these sort of concepts related to neonate and

newborn and normal newborn and inborn/outborn — all of these concepts are defined, and particularly they incorporate some of the coding that's used in the present point of origin data element to help refine the inborn/outborn definition. So if you see a reference to the NQI, that's what this refers to.

Another major change with Version 4.1 was in the updating of the benchmark data using the state inpatient databases for 2007, which was the most recent data that was available for computing for both the national benchmarks and for computing the risk adjustment models.

This is a change from the earlier releases in that in the past what we had done was we pooled three years of the state inpatient databases for computing our population rates and our risk adjustment models. The rationale for doing that was we were trying to balance the currency of the data with the stability of the trends and the estimates in the data. For many of the PSI, in particular, many of the covariates are relatively infrequent and rare, and so we had more robust estimates by pooling data.

But the changes to the data elements — the availability of POA, point of origin, and similar types of changes — the pace of change is continuing to accelerate in the coding that's used and in the data elements that are available. We just anticipate that this is going to continue, so I put more of an emphasis and a need for relying on more current data. That's why the benchmarking is based on the 2007 set. This is a trend that we just anticipate will continue through the adoption of the ICD-10 in 2013, which will again put a premium on having access to current data for the estimation of those models.

Apart from sort of the conceptual basis for the models remains the same where the performance of any particular hospital in any particular year is measured in reference to this reference population dataset, and so one just needs to keep that in mind in terms of interpreting the rates.

So for the first time we actually in this release removed two indicators from the patient safety module, and obviously this is not something that we do lightly without a lot of deliberation and consultation, but I'll just briefly discuss sort of the rationale for why these two indicators were removed from the patient safety indicator module.

We've retained them in something that we refer to as the "experimental module," which is intended to be sort of a repository of measures that have some value and some might want to use them for their own internal purposes, but they're not considered to be suitable for any kind of comparative reporting and they need some further refinement and development.

For the complications of anesthesia measure, the main issues with this measure were that number one, it's heavily dependent on e-codes; almost all of the numerator is based on e-codes. As we know, the collection of e-codes varies substantially from state to state. In some states it's not available at all, and the number of codes that are reported varies by state. It's also a measure that through empirical analysis is very sensitive to the number of secondary diagnosis codes that were reported, more so than any of the other measures.

But those reasons by themselves or concerns by themselves were really not sufficient to warrant removal, but what was really the contributing factor was the fact that e-codes rely on a different set of coding guidelines than other ICD-9 codes do.

For most ICD-9 codes, they're supposed to be coded only if the condition was not expected or somehow influenced the diagnosis or treatment. That's sort of the criteria that's the threshold for coding. E-codes don't have that requirement, and so the things that can be coded could be expected or not particularly relevant for diagnosis or treatment.

What we've found through a lot of subsequent studies looking at charts and some of our analyses that were conveyed to us, this indicator was picking up a lot of really minor complications — and not the kind of complications that the clinical panels that had reviewed this measure were really anticipating. This measure has been reviewed not only by AHRQ

clinical panels, but by clinical panels from other national and international organizations —
and all of them have agreed that this is a topic that's very important and warrants
measurement, but we don't really have the technology or the capacity to measure it now. It's
something that needs to be kept in mind for further refinement of the coding.

For the second measure, the PSI 20 obstetric trauma, that issue is a little different tier. A few
releases ago the OB measures were refined to harmonize within existing Joint Commission
measures related to OB trauma, and that involved the removal of some procedure codes from
the numerator that were particularly relevant for caesarian deliveries, so that the codes that
were remaining were really not relevant for caesarian deliveries.

This was an issue that has been pointed out to us by many users over the years that those
codes really are not relevant for caesarian deliveries, and so that's the rationale for the
removal of that particular measure.

There are two primary changes to the estimation approach that's incorporated into
Version 4.1, and I will just mention here that this slide and the next one are topics that we will
definitely be returning to in our subsequent series. So all I'll do now is just briefly mention
the rationale behind these changes, and then we'll go into more of the specifics and details of
the computations in our more detailed topic sessions.

The first is the use of what's called "general estimating equations," or a GEE estimation in the
models. Both of these — the GEE and the Markov chain Monte Carlo — kind of fall into the
broad category of AHRQ co-modeling that you've probably heard talked about.

The purpose of the GEE is to take into account basically any kind of correlation between the
performance of the hospital and the patient level covariates, the case mix of that hospital. The
idea being that if you have a high quality hospital, that high quality hospitals tend to have a
more severe case mix. It's hard to distinguish between the impact of the hospital performance
and the impact of the case mix, so you might attribute the performance of the hospital to the

impact of the case mix. The GEE is attempting to account for that in kind of a non-parametric way.

The Markov chain Monte Carlo is really trying to improve the robustness of the impact of our patient factors, and this is particularly important for patient factors that are relatively rare, but may be potentially really serious.

For an ICO5, for example, patients that are assigned to risk category 4 they have really high mortality rates, but if they're a relatively rare risk for mortality subgroup — for any particular hospital — and so the Monte Carlo estimation gives us a better estimate of what the true impact of those patient factors are. Then it actually allows us to incorporate some predictions of the POA data, when the POA data are not available. I'll talk about that in this next slide.

So as part of the adoption of present on admission data, in Version 4.1 we no longer have separate risk adjustment models with and without present on admissions data. It used to be that there was a global flag that the user set indicating whether or not their discharge data had POA data in it, and then it used a separate set of covariates — depending on whatever the discharge data had POA or not.

In Version 4.1, there is no such global flag, and so the software, essentially what it does is that it evaluates each individual discharge record to determine whether each individual discharge record is coded with POA data or not.

The reason for this is that we recognize that POA data are not always available. There are some states where the data are not available, or even within states that have data for some hospitals the POA data are not available. For example, for critical care hospitals, they're often exempt from the POA data collection requirement, so you have some hospitals that have POA data and some that do not. And then even within hospitals you have some discharges

that might have POA data and other discharges that don't. For example, a hospital might have POA data for their Medicare cases, but not for their non-Medicare patients.

The software is structured to allow for an input data file where some of the discharges have POA data and some do not.

And then, where the POA data are not available, the model incorporates estimates of the likelihood that the numerator was present on admissions and ought to be included, and similarly includes estimates of the likelihood that a particular comorbidity was in fact present on admission and was not a complication, so it includes estimates of those likelihoods, and those likelihoods are incorporated into the computation of the risk-adjusted rate. Specifically, they're incorporated into the computation of the expected rate.

So then for users with POA data, it doesn't use these likelihoods; it just uses the determinant data element — yes or no — whether this particular adverse event was present on admission, or whatever a particular comorbidity was present on admission.

Again, I know that it's a little complicated and confusing, and so we'll be walking through some specific examples of these computations to make sure that you understand exactly what it is that the software is doing.

And then, finally, just briefly in the SAS in particular, we just restructured some of the measures so that all of the indicators that were based on pediatric discharges were all computed in the same module. So that meant moving PSI 17 birth trauma, injury to neonate and PQI9 low birth weight into the SAS PDI module, so those are based on pediatric discharges.

And then all of the other modules — the IQI, PSI, PQI — are all based on adult discharges. The module sort of conceptually remained part of the original set, and so the documentation remains with the PSI or with the PQI.

One thing you'll notice when you run the syntax is that if you run the adult modules, then it will subset your input data to be specific to those adult discharges, and similarly when you run the pediatric module — the PDI — it will subset your input data to be specific to those pediatric discharges and so your output file will be smaller than your input file in both circumstances. As I mentioned before, we renamed PDI 4 to NQI 1.

Finally, we actually removed risk adjustment for a few of the measures, and the rationale is a little different depending on the measure. For measures that are categorized by the National Quality Measure Clearinghouse's sort of use of services measure where they're intended to just help consumers by informing them by how often a particular provider uses a particular type of procedure — and they're not really intended for comparison purposes — so we've removed the risk adjustment in those cases.

In addition, we only had very limited information upon which to base the risk adjustment since the measures themselves are based on DRGs so we had limited information to use anyway. Those are the IQI 21, 22, 33, 34. Those are the use-of-services measures.

For the process, the ones that are categorized as process measures as sort of mentioned, the typical methodology is to exclude patients that are not good candidates for the measure — whether the performance of the process is not considered appropriate. That's the path that we've taken trying to expand our list of indications for these process measures. That particularly applies to IQI 24 and 25, the appendectomy and the bilateral cath.

The issue with IQI 23 really has more to do with the fact that in more recent years, a very large percentage of those procedures are actually done on an outpatient basis. So the patients, because they are not included on the inpatient datasets, further refinement of that measure really involves incorporating the outpatient data.

And then for the OB-related measures like PSI 18 and PSI 19, there are in fact risk factors that could potentially be used to risk adjust these measures. We just used age in the prior releases, so the further development of those measures really involves refining the risk adjustment models to incorporate some of these more specific risk factors for OB trauma.

Lastly, I'll just mention that PSI 17 is another measure that is not risk adjusted in the current software, and there the early versions of the — the prior versions of the software gets used. Patient gender, that was the only factor that was included in that so we just dropped it.

Actually, it is operationalized in the software that the expected rate is basically the population rate, and so the expected rate is the same for every discharge. It's just the population rate. It doesn't vary based on the characteristics of the patient, so that's what you'll see when you actually run the data. John, I'll turn it over back to you.

John Bott [AHRQ]: Okay, thank you, Jeff. Moving to Slide 19, we'll talk a little bit about what's coming up next in these webinars that we had talked about at the top of the call very briefly, and then we'll have ample time to take your questions and comments.

So in this slide we show what our thoughts are on the next webinar to provide some additional detail in what seemed to be more significant areas to learn about up front. To quickly go through that, those topics are tracking the indicators, or I like to call it "directing traffic." We just touched on today what measures got moved where or got renamed, or if the code was moved to another module.

Secondly, the incorporation of new, additional data elements. Also, in incorporating new codes for fiscal year 2009, some examples were provided today and we'll provide additional examples and further detail in that webinar series.

Lastly, the ideas to discuss incorporating new data such as the use of going from a three-year reference population file to a one-year file.

Moving on to Slide 20, our ideas for a webinar series throughout 2010 in additional topic areas in greater detail, as noted before, one or two topics per webinar perhaps. Here is a list of topics where we go into much greater details throughout 2010. More information, detailed information on the risk adjustment model and there are a number of aspects of that. We've just talked a bit about how POA is being handled, GEE and there are a couple of examples using the composites and the area level measures, which we really didn't talk much about today. And then updates as they come up throughout the year such as could be activities occurring with NQF that we may think are important for you to know at the time — CMS and their use of a number of the RQIs as there are some significant dates come in 2010 to keep you abreast on.

We have a number of developments underway that the quality indicators, that as they evolve and hit certain milestones, we will keep you posted on. So if you have other ideas for topics or prioritization of topics on this call, and we'll talk about how to take questions and comments in a second or at another time you could submit your comments also on the support line.

Our thought to date is to start with broad topics that affect essentially all of the indicators, or most of the indicators, and then get into webinars specific to the various modules and PSIs that we'll talk about it in a session or two.

So the next slide, Slide 21, this is moving into the discussion portion. That can range from getting your comments and your feedback such as we noted other topics, for the January webinar our topics and their priorities for 2010. This is also an opportunity to field any questions that you might have verbally or typed in over the Internet.

So at this time, I'd like to turn it over to Emily to explain to you how to verbally ask questions and how to type in your questions. While I'm turning it over to Emily, I'll just move to the last slide, Slide 22, which is some core information that we always provide when we discuss

the quality indicators, and some resources that you'll see in that slide. At this time, I'll turn it over to Emily to explain how to ask questions or make comments. Emily?

[Emily]: Thank you. At this time, anyone wishing to ask a question or make a comment, you may press "*1" on your touchtone phone. All questions will be taken in the order that they're received, and you'll be announced by name when we're ready for your question. If you are wishing to ask a question or make a comment, please press "*1" on your touchtone phone and record your name at the prompt. One moment, sir, for the first question.

John Bott [AHRQ]: Okay, we'll start out with while people are queuing up either to ask questions over the phone or to type in their questions, we have received a couple of typed in questions. The first question is when will the Version 4.1 Windows version be released? I'll turn it over to Jeff for a response.

[01:00:00]

Jeff Geppert [Battelle]: There hasn't been a definitive date announced yet for the release, but it's forthcoming shortly. As you know, in addition to the Windows version there is a new AHRQ product known as "MONAHRQ," which is similar to the Windows software. Both of those products are undergoing their final, external development phases. As soon as that process is completed, both of those pieces of software will be posted and released and we'll send out a listserv. We do anticipate that this will happen pretty shortly.

For those of you who haven't heard of MONAHRQ before, just a quick note that essentially what MONAHRQ does is that it provides some tools for users that want to create their own internal websites based on their own data. It provides tools for creating the Web pages and some textual information around explaining the indicators to the potential users of those Web pages.

John Bott [AHRQ]: Okay, thanks for the question. Another question that we had typed in is as follows: we are going to run the 2006 and 2007 data. Given all of the changes, should we use this version of the software or use the prior software? Jeff?

Jeff Geppert [Battelle]: Well, I think that our general recommendation would be to use this version of the software because a lot of the changes that have been implemented are really intended to improve the utility of the measures as we're finding the specifications and the models. Plus, the benchmarking data is much more current in the current version of the software, so I think the data would be a little bit easier to interpret if you have the most recent release.

John Bott [AHRQ]: Okay, thank you for that question. Emily, do we have any questions at this time from the people on the phone?

[Emily]: Yes, sir, we do.

[Panelist]: I have a question. There's a composite program that comes with the 4.1 software, and I was wondering if we could use this with the new risk adjustment method, the Markov chain Monte Carlo method? In the documentation — I had gotten some documentation from Markov 2008, and that referred to the composites using the logistic regression, but I think that the 3.2 was the last version that used the logistic regression for risk adjustment. I didn't know if that was going to be compatible or not.

John Bott [AHRQ]: Thanks for the question. I'll turn that over to Jeff.

Jeff Geppert [Battelle]: The answer is yes; you can use the composite syntax that's included with the modules to estimate the composites, and then the composites have been sort of refined to be consistent with the risk-adjusted output using the new model.

John Bott [AHRQ]: We'll see if there are any other questions over the phone. Do we have any other questions verbally?

[Emily]: Yes, sir, we do. Our next question comes from Terese.

[Panelist]: I have a question about the SAS version. Typically, we take the software and we imbed it in our process or in a server environment, because we apply a number of methodologies to house the administrative data. We haven't, at least from our evaluation thus far, we aren't able to do that with Version 4.1, because there is an executable file that we aren't able to imbed. I'm wondering if you're going to have some quick release perhaps that would allow us to run it in a non-Windows, you know, server environment?

John Bott [AHRQ]: Thanks for your question. Jeff?

Jeff Geppert [Battelle]: If by non-Windows, if you mean like UNIX — ?

[Panelist]: Right.

Jeff Geppert [Battelle]: Yes, the intention is to provide a version of the executable that's compiled for use in the UNIX environment. There are a couple of internal AHRQ processes that also run the software in a UNIX server environment, and so there is great interest and need for the development of that module. We anticipate the release fairly soon, early in the first quarter.

John Bott [AHRQ]: Okay, that also addresses one of the questions we had typed in. To move on to another question typed in: will the new Windows Version 4.1 documentation be published when software be available? Jeff, your thoughts?

Jeff Geppert [Battelle]: This is the documentation that is companion to the Windows version will also be posted along with the software, so the documentation is then updated to reflect sort of the new data requirement for Version 4.1.

John Bott [AHRQ]: Okay, thank you for that question, for the person that typed it in. Another question that came in over the Internet: are older, retired codes included in the new specifications? The person goes on to say that this is related to the question about using the new software with old data. Jeff?

Jeff Geppert [Battelle]: So the AHRQ software is designed to be what we call "backwards compatible," and so it's designed to work on older data going back to about 1998, the fourth quarter of 1998. The coding actually goes back to 1994, but there were a lot of important codes that were added in the years just immediately after that, and so around 1998.

What we mean by that is, you know, if a code has been deleted and refined so that there are some subcodes that replace the older code, we've retained both the old deleted code and the new subcodes into the specifications and into the software. So when you run the older data, it will just use the older code.

There are a few cases where we couldn't exactly do it that way, and in those cases we've included in the software, logic that looks at the date on the discharge record — basically the ICD-9 version that's being used on the discharge record — and then we used alternative logic based on what ICD-9 version is being used in the discharge record.

The way that we determine the ICD-9 version is we look at the discharge year and the discharge quarter, and we use that to compute the ICD-9 or the DRG version. So we do assume that the discharge record is coded with the coding that was valid as of the date of the discharge.

John Bott [AHRQ]: Thank you for that question. Emily, do we have any other questions on the phone at this time?

[Emily]: Yes, sir, we do. Our next question comes from Glenn.

[Panelist]: Hi, this is Glenn, here in Cincinnati. I'm doing a trend analysis on PDI data, 1998 to 2007. My question is do you have this data combined already meshed together that I can go and get it, or do I have to go through each dataset and find out all the changes and then recode each year — and then combine them together and analyze them? This is one question. The second is if there is anything where I can compare my findings, at least say descriptive statistics, to make sure and validate my findings with yours.

John Bott [AHRQ]: Okay, thanks for the question. Jeff?

Jeff Geppert [Battelle]: As long as your input data file has the discharge year and the discharge quarter, you can run the software on a pooled dataset that combines years from 1998 to 2007 — and the software will apply the appropriate logic in the definition of the measures.

In terms of comparing your results, the best available resource for that is HCUP, which is www.hcup-net-ahrq.gov, and descriptive statistics based on the nationwide inpatient sample or the pediatric version of that. The kids' database for years, I don't think that it goes quite back to '98, but it goes to the early 2000s for all of the IQIs, or all of the RQIs are included on HCUP-net, and it does break it down by some major demographic categories so you can always compare your results on a subpopulation basis.

John Bott [AHRQ]: And if you didn't catch that website, you can go to AHRQ's general website, www.ahrq.gov, and in the lower right portion of that page you'll see a number of links to various HCUP sites. A question that came in over the Internet is just to clarify, can

records with POA and records without POA information be mixed and sent together?   Prior documentation for Windows says not to do this. Jeff?

Jeff Geppert [Battelle]: Exactly. So that's a difference between 3.2 and 4.1; in 3.2 you had to separate the data files into data that had POA and data that didn't, and 4.1 you don't have to do that. You can combine discharges — some with POA and some without — into a single data file. The software logic will determine the appropriate logic to apply for each discharge record.

John Bott [AHRQ]: Thanks to the person who typed in that question. Emily, do we have any questions over the phone at this time?

[Emily]: Yes, we do. Our next question comes from Michelle.

[Panelist]: Yes, my question is that our company uses the QI tool, Version 4.0, and the CMS Version 24. Last year I just ran my input file that had DRG field with data on it. After I ran the file, the output doesn't have output? I lost all the data in there, and I don't know why.

John Bott [AHRQ]: Okay, thanks for that question. Jeff?

Jeff Geppert [Battelle]: If you want to have some further dialogue along these lines, I'll just suggest that you send an email to the support at the support@qualityindicators.ahrq.gov email, and we could probably have some dialogue back and forth to exactly determine what's going on.

Essentially, in the SAS syntax it does subset the data elements that are included in the output file. That's something that you could modify if you wanted to include additional data elements in the output file. And in the Windows software there are checkboxes that you can select to specify which of the input data elements you want to include in your output/export file.

[Panelist]: Yes, I do have the checkmark for the output for diagnosis, but it comes out and it's empty. I did send the email to the support a week ago, and I still haven't gotten help on anything. Nobody has returned my call.

Jeff Geppert [Battelle]: Okay. We'll follow up with that, and we'll get back to you and try and resolve it for you.

John Bott [AHRQ]: We'll go now to a typed in question. A person asks, "Are older retired codes included in the new specifications?" This is related to the question about using the new software with old data. Jeff?

Jeff Geppert [Battelle]: Yes, and so the older, retired codes are included in the specifications documents as well.

John Bott [AHRQ]: Okay, thank you for the question for the person who typed that in. Emily, do we have other questions on the phone at this time?

[Emily]: Yes, we do, sir. Our next question comes from Bruce.

[Panelist]: Hi, by the way, this is a really great conference. I have two questions. The first one relates to something that I think I heard. Did I hear that we're going to used compiled-only software that is not Open Source for even the SAS version? And the second question is — I know that things pile up, but sometimes people don't know if their emails arrived. I've had a couple of questions into support, and I was just wondering is there some time period that I should wait before calling or — ?

John Bott [AHRQ]: Thanks for the question. Jeff, your thoughts?

Jeff Geppert [Battelle]: With regard to the support, the goal is to respond — to at least acknowledge the receipt of your emails within three business days. So if you haven't heard by the fourth business day, I would definitely follow up.

[01:15:00]

You can send an email to me directly, or call the support telephone number and say that you haven't received a response. There are occasions where the email response that the system generates, you know, they get triaged someplace and so the user doesn't receive the response. We can usually diagnose those circumstances and resolve them, so please do let us know if you're waiting on a response. Probably the best way is just to leave a voicemail message with us so that we can follow up.

With regard to the Open Source, so the current SAS module is the same as it's been in prior releases. It's just text files that the user then has to procure the SAS license and execute those syntax text files. What is compiled, there's a specialized module that actually computes the expected rate for each discharge. The only reason that's compiled is because it uses some very specialized and efficient routines to compute the relevant parameters, and so it's a called routine that is executed from the SAS and from the Windows.

The earlier question had to do with the fact that that called routine is compiled for execution on a Windows machine, versus a UNIX machine. It's similar to like in the old SAS when you would do a prior logic ticket *[phonetic]*, that the calls are compiled routine to execute that empirical estimation, and this is kind of the same thing — only it's a tailored version.

We had to do it this way, because the methodologies are complex enough that in order to make sure that the software ran in a reasonable amount of time, we had to develop some more efficient methodologies for doing it.

The intention, certainly, is to make sure that everyone completely understands exactly what the software is calculating and why it's calculating. Most of the parameters that are actually used are still in text files that are readily readable, and the documentation itself is a technical manuscript that describes the actual equations that are being estimated. And then in our webinars going forward, we're going to actually walk through computations so that everyone understands exactly what's being done.

John Bott [AHRQ]: Emily, do we have other calls on the phone at this time?

[Emily]: Yes, sir, we do. Our next question comes from Greg.

[Panelist]: I had a question about hospital ID. It was my understanding in the data that it looked like it should be character. I definitely have some hospital IDs that have like "t's" and "s's" in them, but in the PSI program that generates the risk adjustment unit with the Windows executable and what not — it declares that it's numeric, and therefore if you have a character it won't work. I had to use quite a bit of coding to get around that. I'm not sure if you've heard anything else about that, or why it was declared numeric so if you have any comments on that — ?

John Bott [AHRQ]: Yes, thanks for the question. Jeff?

Jeff Geppert [Battelle]: Yes, we used sort of at the basis for our data specifications is the HCUP data, which is kind of what we used as the default. So when we specified a data element as character or numeric, we're basically trying to use the same data definition that's used in the HCUP files. So in those data files the hospital ID is numeric.

There is a simple work-around, which we can email to you if you just want to send a note to support. It's actually just one line of code that we can insert into the syntax so that you can use a character field as the hospital ID. The other alternative would be just to recode the hospital ID, but it's a fairly simple fix if you want to try to implement it.

John Bott [AHRQ]: Emily, do we have other questions on the phone at this time?

[Emily]: Yes, sir. Our next question comes from Glenn.

[Panelist]: Yes, this is Glenn again. I think you answered my question, but I want to make sure that I understand it correctly. After, as I said, doing the trend analysis for data '98 to 2007, my question was if there is a combined already meshed data — some that I can go and grab it? The answer was that the SAS 4.1 will do it for you.

I want to make sure that I understood it correctly, so in SAS 4.1 you cannot use it yet — you can manage all of the data without any problems and without going back and changing any code inside any of those data? The variables changed and the name changed, where some of them are not there anymore? This 4.1 can do it for you?

John Bott [AHRQ]: Thank you for the question.

Jeff Geppert [Battelle]: That's right. We're assuming that you have the data. All of the QI programs always assume that the user has the data for the input file, but you're right; you can compact all of those files into a single dataset.

If there are new data elements that are only available in the more recent files and not on the older files, you just include them, but you just leave them blank — missing — depending on how the data element is specified and whether it's character or numeric. They just need to be on the input file, but they can be set to "missing." Then you just need to make sure that you have this discharge year and quarter specified, so that the software can determine the logic to apply.

[Panelist]: Okay, that's a big improvement. Thank you.

John Bott [AHRQ]: Emily, are there other questions on the phone?

[Emily]: Sir, at this time I am showing no further questions.

John Bott [AHRQ]: Okay, we have some questions typed in. The next question is what is the difference between Version 4.0 and Version 4.1? What are the changes from Version 4.0 to Version 4.1? Jeff?

Jeff Geppert [Battelle]: The major difference is the implementation of the risk adjustment model, so that's the most important change. You can look at the change log and identify any other changes. There are relatively few. Some of the OR procedure codes were updated to the most current fiscal year.

There are probably a handful of other changes and corrections that were provided to us by external users that we implemented — relatively minor changes. The major changes that we've described in terms of like the data element and some of the new measures were also incorporated into 4.0, and so the major change is the risk adjustment itself.

John Bott [AHRQ]: Thank you for the question, to the person who typed that in. The next question typed in is have the tiers changed for any of the indicators? Jeff?

Jeff Geppert [Battelle]: Not since the most recent posting of the tiering document. I think the most recent change was the endorsement of post-operative respiratory failure, so that was incorporated into tier one, but there haven't been any more recent changes than that.

John Bott [AHRQ]: Thanks to the person who asked that question. The next question typed in is does the software address expected adjusted rate based upon hospital case mix? Jeff?

Jeff Geppert [Battelle]: Right. So the risk adjustment uses what's called an "indirect" standardization, and so the first step in that is computing the observed or expected ratio. The

observed rate is just the raw rate — the numerator counts divided by the denominator counts — and then the expected rate is based on the case mix of the hospital. It will vary depending on the case mix of the hospital.

Essentially, you can think of the expected rate as the average rate in the reference population for patients that are like the patients that go to that hospital — like the case mix of that hospital. That expected rate is based on our reference population. In Version 4.1 the reference population is the 2007 SID.

Just to finish it off, in terms of the computation of the risk-adjusted rate. So you'd take this OE ratio and then you sort of scale it by the reference population rate — so the population rate for the entire reference population for that particular indicator — and that OE times the reference population rate is what the risk-adjusted rate is. The risk-adjusted rate is essentially just a rescaling of the OE ratio for the population rate.

John Bott [AHRQ]: Thank you for the question. So far, this is the last typed in question, and then we'll go to the phone. The last typed in question at this time is to clarify the DRG version qualifier that is accepted as an input to override the discharge data coding version refers not only to the DRG version, but also the ICD-9 version for diagnosis and procedure codes. Correct? Jeff?

Jeff Geppert [Battelle]: There is a data element called "DRG version," which tells us the fiscal year version for the DRG code. That might be 24, 25 or 26. We used that in order to determine which logic to apply — whether the CMS-DRG logic ought to apply or the MS-DRG logic ought to apply. That's our default, is to use the DRG version data element.

If that DRG version data element is missing or blank, then we'll look at the discharge year and quarter to determine the version of the DRG, but we don't do that for the ICD-9s. So for the ICD-9s there is no ICD-9 version data element, and so we use the discharge year and quarter to determine the ICD-9 version.

You could have, for example, a dataset that uses this version 24, this CMS-DRG in 2007 after the implementation of the MS-DRGs. Some users do that; they use the CMS-DRGs, the Version 24, with more recent data. The software will allow you to do that, but you need to tell the software that that's what you're doing and that you're using Version 24, the DRGs.

John Bott [AHRQ]: Thanks for that question. I'll ask another question that came in, along those same lines and so we'll go ahead and ask that. The next question is do users have to do anything about the DRG changes? Are any other code changes effective every October 1st? Jeff?

Jeff Geppert [Battelle]: No, users don't have to do anything. The software will account for the coding changes, as long as those data elements are specified. All users need to do is provide the input data; they do need to provide the DRG and DRG version, and the MDC, or the major diagnostic class — all of which are output from the DRG grouper. The AHRQ software does not have an imbedded grouper that will calculate these data elements for you; you need to provide them on the input data file. That does not apply to *[unintelligible]* DRGs, because there is an imbedded grouper for that, but not for the CMS or the MS DRGs.

John Bott [AHRQ]: Okay, thank you for the question. Emily, are there any other questions on the phone at this time?

[Emily]: Yes, there are. At this time we have a question from Terese.

[Panelist]: I have a two-part question. The first is about the release schedule. You indicated that you'll be releasing a UNIX-compatible version; the Windows version is still to come, and then in late spring you'll be doing 2010 federal fiscal year codes. I wondered if we should expect other releases later in the year, and whether we should see any issues with running 4.1 now on 2010 federal fiscal year data?

John Bott [AHRQ]: Thank you for the question. Jeff, your thoughts?

Jeff Geppert [Battelle]: So we don't anticipate any further releases after the FY '10 coding update, so the next scheduled release after that would be the FY '11 coding update. I think that you'd have to be cautious about running 4.1 on fiscal year 2010 data. Our preliminary analysis shows that there are not a tremendous number of coding changes that were implemented, but there were some, and so I think that you'd have to use some caution to do that.

John Bott [AHRQ]: A question that we have typed in: is there any number that I can call to directly speak with software support personnel? Jeff?

[01:30:00]

Jeff Geppert [Battelle]: No, either you submit an email to support and you can ask us to contact you if you have a question that's really too detailed or intricate to really resolve via email. We do have a voicemail, but it's just a voicemail. Our preferred method of communication is email, because then we can track it and we can know when the email was submitted and track any responses.

With the voicemail, what we end up doing is just basically making an entry into the email system and then returning the person's call. But if at all possible, the preferred method is the email. It just makes it easier to track. But if you really need to talk to us, then just let us know and we can give you a call.

John Bott [AHRQ]: Okay, thanks to the person who typed that in. That's the last of the Internet-based questions. Emily, are there any questions on the phone at this time?

[Emily]: Yes, sir, there are. Our next question comes from Greg.

[Panelist]: I was just wondering if you had newer documentation for the composite program? The last one I could find is March 2008, and I was looking at the composite program and they obviously didn't match up. It sounds like if it's in the new program, the documentation references are similar to what you guys said. I was wondering if that documentation exists somewhere that I can easily reference for 4.1?

John Bott [AHRQ]: Thanks for the question. Jeff, thoughts?

Jeff Geppert [Battelle]: Well, the earlier documentation that you refer to is really the technical reports that came out of our composite technical workgroups, the workgroups that we convened to develop the composite methodologies and so those documents are sort of fixed. They're kind of the final report from the workgroup.

There is an NQF report that talks about sort of the NQF version composites. What we'll do is sort of combine those two documents into a newer document that describes how the current composites are implemented, and kind of the manner in which they're computed. That documentation isn't available yet, but it will be shortly.

[Panelist]: Do you know how shortly you might have that?

Jeff Geppert [Battelle]: Well, it's typically something certainly, you know, within the next month.

[Panelist]: Okay, and so should we just look for it on the site where the other documentation is, you think?

Jeff Geppert [Battelle]: Yes, and we'll probably send out a listserv announcement.

John Bott [AHRQ]: Emily, are there other questions on the phone?

[Emily]: Yes, sir. Our next question comes from Michelle.

[Panelist]: Hello, yes, earlier I heard you answer to somebody that if you use the CMS Version 24, you had to let the software know that you're using still Version 24. I don't know how that you can — they have an option, a checkbox or anything in the software?

John Bott [AHRQ]: Okay, thank you for that question. Jeff?

Jeff Geppert [Battelle]: There is a data element that's called "DRG version." It's d-r-g-v-e-r. So when I say that you have to let the software know, what I mean is that you have to —

[Panelist]: Oh, so my input file has to include that column? *(Yes.)* And if I don't have that field, does it affect anything?

Jeff Geppert [Battelle]: It's really only important, you know, if you're using a version of the DRG that was not sort of in effect on the data discharge. So for example, if you're using Version 24 after October 1, 2007, for example, and so you're sort of out of sync. A lot of people have for whatever reason, because not all payers required the MS-DRG, so not all data systems coded their discharge data with the MS-DRG for payers other than Medicare.

We wanted users to be able to use the software, even if they didn't convert to MS-DRG for some payers. If that's the circumstance that you're under, then you need to use the DRG version data element. If it's not, if you're using the DRG that was in effect as of the data discharge, then the only thing you need to do is specify the discharge year and the discharge quarter.

[Panelist]: Yes, I do have that column in the input file.

Jeff Geppert [Battelle]: Yes, and so that will be fine. That will not be a problem.

John Bott [AHRQ]: Emily, are there any other questions on the phone at this time?

[Emily]: Sir, at this time I'm showing no further questions.

John Bott [AHRQ]: Okay, and we're all caught up with the questions over the Internet. If you think of a question later, you could type that into the AHRQ QI website, through the support line, and we'll post that Q&A online. In the future, please watch the listserv for emails regarding announcements for future webinars. We'd like to thank you for participating in this webinar today, and that will conclude our session.

[WEBINAR CONCLUDES]