Transcript
>> JENNIFER: There you go.

That's one of them.

We'll be recording this webinar and it will be posted to the AHRQ QI website at
qualityindicators.ahrq.gov. By staying with us, you are opting into the recording. And because
we do have so many attendees, all of our participation lines will be in Listen Only mode. You
can ask questions at any time during the presentation, but just know that we will be answering
them during the Q and A session at the end. You can ask your questions by using the chat
feature that appears in the zoom window. Just click "Chat" and a window will pop out and you
can enter your question there. If you find that you have any technical difficulties during the
meeting, please go ahead and contact Megan Lee and there is her email right there
mlee@panth.com.

And…sorry, and moving on, we have our agenda.

We have an overview of the AHRQ QIs. We have an overview of the software and the version
2021 improvements. Fiscal Year 2021 updates, indicator logic changes, population files, risk
adjustments. We'll be covering the origins of the QIs, what they're used for, the different
modules, and a little bit about the downloads. We also have some usability improvements,
specification changes for select QIs, and then we have some software resources for you.

These are today's speakers: Jennifer Newburg — that's me. I'm a senior project manager for
Pantheon Software. Commander Karen Ho Chaves of the US Public Health Service
Commissioned Corps. She's also director of the Division of Quality Measurement and
Improvement for the Center for Quality Improvement and Patient Safety at AHRQ. Alex Bohl is
the Associate Director for Hospital Quality Indicator Project and he is a Director at
Mathematica. Amanda Mummert is the Director of Data Asset Management and Sales for IBM's
Government Health and Human Services Solutions. And finally, Vivek Kumar is our project
director for the AHRQ QI project from Pantheon Software.

And now I'm going to turn you over to Karen.

>>KAREN: Thank you. Good afternoon, everyone. I'm excited to be here today to help introduce
the 2021 software updates. The QI program is an important part of our Division of Quality
Measurement and Improvement at AHRQ. Today I'm going to go over a little bit of history of
the QIs — how they're used, and we'll be doing the program to ensure that our indicators are
scientifically sound and evidence-based and meets the needs of our users like yourself.

So, a little bit of history for those of you who might not be aware. The quality indicators actually came from the Healthcare Cost Utilization Project — HCUP — where the QIs were originally developed at the request of state organizations and hospital associations as a quality improvement tool, and we used the Evidence-based Practice Centers methodology for their development.

The indicators were developed and tested using HCUP data from 47 States.

Next slide.

The AHRQ quality indicators are used for research, needs assessment, for planning at the local, state, and national levels. Also used for hospital and community quality improvement initiatives, public reporting, performance assessment, and also some indicators are used by health care purchasers that link performance with payment. With that being said, our focus at AHRQ continues to be on HCUP All-Payer data and used for measurement or quality improvement, population health, and patient safety monitoring. With over 60 measures, QIs have a broad applicability and can be used with readily available administrative data. The QIs are actionable. Hospitals and health systems use our QIs to monitor their performance over time, use their own data, and the results can be used to motivate, guide, and evaluate performance improvement initiatives. Users can also dissect the indicator results and relate them back to their individual records, allowing them to distinguish data quality issues from actual quality problems.

Next slide.

One of the hallmarks of AHRQ QIs is continuous quality improvement and transparency. On an annual basis, the QI program undertakes various activities to assess refinements, and evaluate the scientific acceptability of indicators. We conduct reviews of research evidence, rigorous empirical testing. We review changes to the administrative data coding and guidelines. We review measure enhancements and refinements based on literature review and environmental scans. We convene technical expert panels and work groups to provide recommendations to us, and we also take into account your feedback and suggestions for refinements that come through our Technical Assistance query line.

The QI program maintains transparency by making our technical specifications and associated documentation publicly available. The software is open source and it's improved over time based on public and private input.

Next slide.

As I mentioned earlier, the AHRQ QIs will continue to focus on the measurement for quality improvement, population health and patient safety monitoring, and in doing so, AHRQ will no longer be seeking NQF re-endorsement for some of those measures that gone through this process before. This will allow us to continue to focus on our measurement efforts on quality

improvement at the state, local, state, and National levels and support the science of rigorous measurement development and use of quality measures for improving the quality of health care.

To ensure that the measures meet National standards for measurement development, we'll continue to engage with a wide variety of stakeholders, including yourselves and our National and state and regional policymakers, private decision makers, and researchers. We will focus on developing and maintaining measures and tools that facilitate system and area-level quality improvement, and the program will continue to disseminate unbiased scientific evidence and analyses related to the risk-adjustment methodologies and the use of quality measures for improving the quality of health care.

Next slide.

And lastly, before we turn to the latest and greatest updates, a quick review of our four different areas of addressing in-patient care, patient safety and prevention, and pediatric care.

So, a quick review. The PQIs — Prevention Quality Indicators — are reported mostly tend to be recorded at the County level. They are population-based measures. These are for conditions for which high quality and well-coordinated ambulatory care can potentially prevent the need for hospitalizations, and for which early intervention can prevent complications of more severe disease.

The next one if the IQIs — the Inpatient Quality Indicators — are only for adults and cover mortality, morbidity, utilization, and volume. This measure set covers a wide range of measures that are often used in public reporting efforts. The patient safety indicators focus on potentially avoidable in-hospital complications and adverse events during surgeries and procedures. Some examples include measures of avoidable complications, such as pressure ulcers, and post-operative sepsis, and some can be used for hospital-level comparisons, which allow for comparisons between geographic areas.

And, lastly, the Pediatric Indicators are hospital-based measures covering patients under age 18, including neonates, and cover a wide range of conditions which are very similar to the other modules, but adapted for pediatric population.

So, that's a quick summary of our QI program, and now I'll turn it over to Alex.

>>JENNIFER: Thank you, Karen.

The AHRQ QIs are, as we've discussed, they're standardized evidence-based healthcare quality measures that hospital systems use with readily available hospital inpatient administrative data to create their indicators. AHRQ offers free software programs on two platforms to help users create those indicators. We offer SAS and Windows to create the quality indicator results, and the results can be used for highlighting potential quality concerns, identifying areas that need

further study and investigation, and tracking changes and quality over time. As we do identify new needs and refinements, the programs and technical specs are updated and posted annually.

We do provide a full suite of 2021 documentation for both platforms, including software instructions and release notes.

Both of our programs, SAS QI and WinQI, released on July 30th. SAS QI is offered as separate packages available for each module to download, and WinQI is provided as a single installer package, both with and without the APR-DRG grouper version.

And now I'm going to turn over to Alex for an overview.

>>ALEX: Thank you, Jennifer. Can you hear me?

>>JENNIFER: Yes.

>>ALEX: Okay. Great. Well, each year the fiscal year 2020…each year in the fiscal year process, we go through a variety of maintenance activities, and it all starts with the measure specifications. A group of subject matter experts, coding experts and clinicians sit down, and we review the existing specifications. We also go through an environmental scan for select indicators to see if there's any updates to clinical guidelines or other related measures that we could learn from. And then, of course, we go through all the user inquiries and determine if there are any refinements that we can introduce into the process. From there, we also then go on to determine if there should be any indicators that are retired. And, if you go onto the QI website, you'll see a statement on the required indicators from this year. But in general, we retire indicators if there's limited evidence based in the literature, if the events are rare, if there are advances in medical technology and practice, if there's significant analytic work for refinements, and so on. And so, in this case, we retired three indicators this year.

For IQI 32 and 34, we determined there was substantial overlap with other IQIs. In the case of IQI 32, there is another IQI, 15, which includes transfer cases, but considers transfer during the risk adjustment process. And then for IQI 34, the cesarean measure, there are three other IQIs, 21, 22, and 33, that are on a similar topic that get a similar rate. IQI 02 hasn't been maintained for the last three versions of the QI software, and we determined that it wasn't quite actionable from a quality improvement perspective, as specified, so it's now been retired.

Now, with those decisions in place, then we update the reference population. And at the time when we've developed the software, the 2018 HCUP state inpatient databases were the most recent data available, and they were used to update the risk adjustment models, which includes, when we refer to that, we also refer to the reference population rates, the signal variance using smoothing and composite weights, which are used to construct the composites. And then, of course, this year we had to include some considerations for how to deal with

COVID-19. And so, we've implemented an exclusion that we'll discuss later where the default is for any discharge that includes a COVID-19 diagnosis, it will be excluded from calculation.

Next slide, please.

And the QI software is designed to be backward compatible. And so, we've already seen some questions come in about older versions of the technical specifications, such as Version 7. We encourage users to not use older versions, and the reason why we do this is because we make the software backward compatible. So, for the ICD-10 period, the Fiscal Year 16 through Fiscal Year 2021, the software will be able to handle all the coding changes across that time period.

So, we need to make all these updates to the diagnosis and procedure-based what we call setnames that are used in the specifications to identify inclusion and exclusion criteria, as well as the other MS-DRGs, CCSRs Comorbidity terminology sets and groupers, as well as the APR-DRGs that are used, at times, in measure specifications, but also use in risk-adjustment.

So those are all updated, and it allows for the use of across the 16 through the 2021 data. If you want to find more details on what fiscal your codes were updates, you can go to the Quality Indicators website to see a general release statement as well as a detailed log of changes.

Next slide, please.

Some of the indicators are area-level, meaning that the numerators from the measures are counts of discharges that meet a certain criteria, and the denominator is the population at risk in a certain defined geographic area. So, with the Version 2021, we updated the QI Population file to cover through 2022, to include the intercensal and postcensal estimates of County-level populations. As you can see, we allow some options for different demographic categories, and if you'd like to learn more, you can go to the link to learn about the methodology for how we develop these population estimates.

Next slide, please.

So, at this point, again, we've gone through the measure specifications and come up with our plan. We have new data, we've updated all the coding, so we're ready to make some changes. And if you go through the log of changes, there are a substantial number of changes. But if we were just to highlight the main changes at the specification level, it boils down to this slide.

So the first thing you'll see is that overall, all the modules use the Medical Surgical list, which are based on Medicare severe diagnosis related groups. And I've been told that it's very rare for a set of MS-DRGs to move between the medical and surgical list. But, of course, that happened in 2021. So we introduced a new setname to account for those changes over time and this change is implemented in all modules.

For the IQIs, the biggest change is really, and really for almost all the modules, is that we've now aligned the IQI 20 denominator for pneumonia mortality rate with CMS Hospital 30-day all cause risk standardized mortality rate following pneumonia hospitalization. These, conceptually, have some overlap, but the major difference previously was that CMS's measure was including sepsis pneumonia, where sepsis is coded in the first position and pneumonia is coded second. I've been told that clinically or from a coding perspective, that oftentimes there's a gray area and it's a judgment call as to what to put first or second. But, more recently, the coding guidelines have been pushing for sepsis to be coded first. So, to align the measure, we've now changed the denominator and updated some of the exclusions between IQI 20 and the CMS measure.

We also expanded exclusions for three of the necessary feedback IQIs, as mentioned here, based on an indicator environmental scan. As we go down to the PSIs and PDIs a lot of these changes were around exclusions for PSI 8, PSI 11, and PSI 14, based on the clinical review, we've removed some exclusions because at this point it's determined that those exclusions would be better handled or considered during risk adjustment because it is possible to potentially prevent some of these events through clinical quality improvement. And you can see there's also a corresponding removal of exclusion for PDI 9, which overlaps with PSI 11.

For PSI 4, periodically we review the hierarchy for the strata based on risk. We do this using an empirical analysis, and the new order is reflected there, where shock and sepsis remain the top two, and pneumonia is the third, and then GI hemorrhage, I believe, and DVTP, they switch positions.

For PSI 3, we also made a change based on feedback, feedback that we received from users. In Version 2020, we added a new exclusion, or a new set of criteria based on deep tissue injury coding, but we realized that wasn't working exactly how we intended for all cases, so that indicator logic has been updated.

And then we've also renamed PSI 9 and PDI 8 back to post-operative as opposed to perioperative in the name because of a coding change. For PQIs, there were no significant changes to the logic to report for this year.

Next slide, please.

So, of course, as we change the logic, then it's going to change the rates. And so, looking at observed rates, so just numerators over denominators — really, at an overall level — for PQIs, we'll see that most rates were stable. And of course, that's because we made no indicator logic changes. However, we did see some change to PQI1 and PQI 5, and that's due to changes in coding guidance. We had potentially made coding changes either this year or the years prior, but we maybe didn't observe that in our reference population, so those changes are now getting captured in the reference population. And do if you're analyzing data, and see PQI 1 and 5 change, remember that it might just be because of these coding changes.

As I mentioned, for the IQIs, IQI 20 had a large measure specification change, so that'll be reflected in the observed rates for the PSIs and the corresponding PDI, again, we removed some denominator exclusions, which therefore for PSI 11 and 14 and PDI 9 led to large changes, large increases in rates, and for PSI 8 we really saw no change, because although there were changes in numerators and denominators, they were somewhat proportional, so observed rates stayed about the same. And for PDI 5, due to some smaller specification changes that we didn't necessarily highlight, but a correction in this case. Sorry, not a correction, but just a smaller change. It did lead to a decrease in rates as we cleared up some of the logic.

Next slide, please.

A major component, as we highlighted earlier, of the Quality Indicators software, is risk adjustment. Risk adjustment helps to level the playing field and allow for comparisons to National benchmarks such as the National average or other benchmarks that the user specifies, and it does so by trying to make more fair comparisons based on hospitals with variations in case mix. Not mentioned here, we also offer smooth rates or shrunken rates in this case that account for differential volume at different hospitals, but it's always important to remember what the risk adjusted rates, what to do and not to do.

The QI software allows users, and intends for them to compare risk-adjusted rates to a benchmark such as the National Average to determine whether they're doing better or worse than average, holding case mix constant of accounting for case mix. However, we do not advise that a user take two hospitals' risk-adjusted rates, smoothed rates, or composites, and compare them to determine who's doing better or worse, or rank them just based on those point estimates. And the reason is because of not only that these are statistical estimates of a hospital's performance based on the sample, but the user might not have a full sample and may not be able to make generalizable conclusions based on their data alone.

Next slide, please.

So, with that there are a lot of changes to risk adjustments this year and some of that comes standard. So first of all, if you're getting risk adjusted rates, you just might notice that the coefficients are changing. And of course, those coefficients that feed into the risk adjustment models are based on fiscal models. Because we updated the input data from 2017 to 2018 data that we used to train the models, that alone is going to introduce a change in the risk models. And then also at times we need to re-specify some of the risk factors due to fiscal year updates, as I showed earlier on — I mentioned the HCUP CCSRs, the Elixhauser comorbidities, and so on. Those incorporate fiscal year updates. So again, there might be changes year-to-year just on those coding updates alone.

But going down to the CCSR, the clinical classification software refine that come out of AHRQ's HCUP team, our project. In this case, we added the CCSRs to the IQI module this year, and that allowed us to replace the APR-DRGs for IQI condition-based measures. And we now use the CCSRs alongside the APR-DRGs for IQI procedure-based measures.

To better account for comorbidity or multiple comorbidities we added comorbidity counts to the PSI and PDI risk adjustment models. To allow for more simplified measure maintenance, but also because we use the CCSRs, we remove the MDCs from PDI risk-adjustment models in Version 2021. To improve risk adjustment for PSI 4, we added stratum-specific complication risk factors. For certain PDIs and PSIs, we added a medical surgical indicator to the risk model, but of course, it's important to remember that many of the quality indicators are focused on surgical populations, so we'll only see this as considered as a risk factor when the denominator for the measure includes both medical and surgical patients.

We added a do not resuscitate risk factor to PSI mortality indicators, including PSI 4 this year. We had previously considered it as an exclusion, but after a long deliberation didn't seem appropriate as an exclusion, so we're now using it as a risk factor. And then lastly, this is a good segue to get into the user section that Amanda will present in just a moment, but we did create a new option that suppresses risk-adjusted rates as well as their components — so, expected rates, smooth rates, and composites — when certain key variables are missing that are required to measure that are part of the numerator and denominator logic, or for risk adjustments such as MDC or procedure dates.

So, you'll hear about some of these in more detail as I had it over to Amanda as she can talk about the changes from the user perspective.

>>AMANDA: Okay. And thanks, Alex, for providing such a detailed overview of these Version 2021 improvements and changes. So just for the next few minutes, I'll highlight several Version 2021 changes that users of the SAS-based quality indicator software should be particularly aware of and go into a little bit more detail on a few of the points that Alex just made.

Next slide.

So a major change implemented in Version 2021 addresses the handling of COVID diagnoses in the user input discharge data. Since the Version 2021 software were developed and tested with 2018 pre-COVID discharge data, we cannot yet produce risk adjustment algorithms that take COVID into account. So therefore, options were added that exclude COVID diagnosis from the discharge data when calculating rate. This is the default option in the SAS QI software that users can actually override this exclusion and produce observed rates that include their COVID-related discharges.

Next slide, please.

The Version 2021 SAS QI software also includes additional user options that can suppress expected risk-adjusted, smooth, and composite rates. This includes three revised options. First, logic was added to handle cases where procedure day — or PRDAY — is missing on users' discharge data. This improves calculations for several of the PSIs and PDIs. Second, users are now asked to specify in the control program itself if major diagnostic category, or MDC, is

included in their discharge data, which impacts both the PSI and IQI modules. And finally, because the risk adjustment methodology for the QIs incorporates age, sex, and birth weight into the models for some measures, the corresponding stratification options were then modified to suppress those risk-adjusted rates.

Next slide, please.

In a similar vein, the smooth rates are now capped at one, and this change makes the smooth rate calculation conform better to how other components of the risk adjustment were already being calculated, and it's the common approach to make sure that the rates are reasonable.

Next slide.

Each year, a large number of updates are incorporated to reflect fiscal year coding updates, as well as to reflect the technical and subject matter expert recommendation. Additionally, the QI support team receives a large volume of user suggestions which are evaluated and often incorporated to further enhance the software performance. This year, for example, user suggestions led to an updated and expanded list of operating room procedure codes in the ORPROC setname, which impacted several PDIs and PSIs. Setnames addressing thoracic surgery, infection, diagnosis, and delivery complications were updated, removed, or added to improve consistency with the clinical intent of those measures as well as to further reflect ICD-10 coding characteristics.

Next slide.

Further user suggestion impacted how we aligned the indicator name for PSI 09, changing it to post-operative hemorrhage or hematoma rate, which further aligns the indicator name with the measure's intent. And finally, incorporating several revisions to address denominator exclusions, including those for PSI 03, pressure ulcer rate, as well as IQI 20, pneumonia mortality rate.

And with that, I'll actually turn the controls over to Vivek, who'll go through the WinQI software changes and improvements and then also highlight several key indicator changes.

>>VIVEK: Thank you, Amanda. To continue with the discussion we're having around the changes, I'll go through some of the high-level changes done in WinQI specifically.

So, the changes we have discussed so far are also implemented in WinQI, such as WinQI now supports fiscal year 2021 coding updates, other refinements that you just heard. One of the significant changes this year is to allow you to do rolling updates to your input data. This has been requested by many users and we are pleased to include this in this version. In the past, the data would get overwritten during the import process. For example, if you needed to upload your monthly data, you would have to combine the data outside of WinQI and then upload it and kind of go through the import process that way. Now you can append your newly

imported file with the one previously imported in WinQI, so you don't have to do that outside of WinQI. This is this is very useful, but more useful if you're running the WinQI app in the automation mode using schedule runs. This can now allow you to keep appending the data instead of replacing them. You can see when you upload, you update your software, you will see an append checkbox on the window where you select your file to import. Checking that will enable this feature so it's simple and pretty easy to use.

There are some limitations around this append feature, which is newly added. At this time, only the CSV files can be appended. Other formats such as Excel cannot be used for appending at this point. However, you can still import the Excel file without appending. In other words, the version still supports all other formats previously supported except that for the append feature, it is limited to CSVs.

Also, depending upon the size and configuration of your machine, keep an eye on how your file size is going, because if your data grows too large and the reason being you're appending now instead of replacing the process can suffer, depending upon your machine configuration. So, I would suggest to keep an eye on how you're appending your files.

So, speaking of automation features in this version, we have now added capabilities to run WinQI as a service. You can now use this service to run your automation in the background. In the past, you would need to keep the WinQI app running on your desktop and just so that you're able to run your automation script. This requires you to stay logged in to the machine and machine and all that. Now you can have the WinQI running as a service on a server and you can run your automation script on a scheduled basis with you not being logged on to the server. This reduces the overhead of running WinQI. This was also requested by many users, and we are excited to include it in this version. So that said, you can still continue to run your automation using previous methods that we had. Service is an add-on, not a replacement of what we already had. Instructions on how to call WinQI service on a command prompt is in the software instruction document, so certainly check that out.

In addition, you will notice some significant performance improvement in this version. Specifically, during the rate generation process. We have noticed about an 80% improvement in our testing, so depending upon your machine configuration, you should notice this improvement, and this should also improve your overall experience with the software.

Similar to SAS QI, WinQI also provides a screen to now let you choose COVID-19 options when generating the rates. Also like, similarly like, SAS QI, the risk-adjustment suppression is applied in WinQI as well. This will depend on your selection for the flags such as days and procedures and MDC flag and also your stratification choice can impact the risk adjustment computation. We have provided on-screen instructions and rationale that should be intuitive for you to understand this function. If you are running a prior version of the WinQI software, the app will notify you that a new version of the software is available. Once you accept and proceed to update, the update process will automatically uninstall the prior version and install the new version, which is version 2021.

There are — we have added a little bit more visual cues for you to get notified on the updates. Please know that the SQL Server database gets refreshed as well, so your prior data will be deleted as part of the upgrade process when you go through that.

I also want to confirm that there were no changes made to the data structure of the input file, so your existing formatting and mapping files will all work seamlessly in this version as well.

Next slide, please.

Next, we'll go through the highlights of the indicator changes.

In version 2021, specifications and programming changes are made across all modules, as you heard that before in previous slides. The changes go through many iterations of detailed assessment process with clinicians and expert coders out before incorporating in AHRQ QIs. These changes are updated in the Change Log documents and are available on the website.

We are pleased to let you know that this year we have published two additional supporting documents in addition to the Change Log documents that you're familiar with. This year, we have added a document with Annual Fiscal Year Coding revisions. This document contains Fiscal Year ICD-10-CM/PCS coding revisions made to the setnames that are used to specify the QIs in the AHRQ QI software. So, for the new users here, setnames are basically distinct names for the group containing a code list listing AHRQ QIs. So, certainly check this out. This document will be useful for you to understand the changes. Additionally, we have included an Excel version of the coding revisions. This file is intended to help you identify which code sets are present in the current version of the QI software. This also allows you to filter the list by code set that have been removed from the current version or added as new code. And there are other filters available as well to do your analysis. So we are excited to make this Excel sheet available to you. We think this would be very useful for users who would like to do their analysis on the updated codes in 2021. This has been, again, a consistently requested feature or document by many users, and as a result, we have decided to add it. Please do review and provide your feedback.

The location for each module is listed here on the slide. When you go there, you will see these three documents for your review.

Next slide, please.

Like I mentioned, the Change Log documents provide you a full log of all indicator-level changes. We have already discussed a few in previous slides. Here, we are kind of listing them out. Like the slide shows you a side-by-side view of all four modules and as I mentioned before, out of all four modules, PQI underwent the least amount of changes. Only PQI 11, 12, and 16 went through annual coding updates, so you may expect to see some changes in the rates. Other than the coding updates, there were no significant changes to PQI.

In the IQI module, IQI 18, 22, 33, and 34 went through annual coding updates. Other refinements were done to the indicators that are listed under the other updates that are here. Almost all PSI went through coding updates in version 2021. In addition to the annual coding updates like PQI, out of 4 modules, PSI indicators went through the most of the changes and they are listed here.

Similarly, in PDI modules, the indicators that got updated with annual coding updates are listed here as well.

These are just a few examples to kind of give you an overview of what changed. But please certainly do review the Change Log documents for full log of changes.

Next slide, please.

And certainly, you can contact AHRQ QI Technical Assistance any time with your questions. The support email information is on the slide. You can access the software documents on the website. You can also go to the FAQ page to see Frequently Asked Questions related to Version 2021 updates. And this will take us to the next section, which is the Q & A and discussions. I'll hand it over back to Jennifer.

>>JENNIFER: Okay, thanks, Vivek.

We now have some time allotted for Q & A. If you haven't already done so, you can submit any questions you have using the chat feature in the Webinar menu. And, just as a reminder, because we have so many attendees, participants are going to remain in Listen Only mode, so that really is the way you need to submit a question. If you do have one. And we know that we're not going to have time to answer every question. And if we don't get to yours, please know that we review all the questions that we get and that, in turn, informs our future communications about AHRQ QIs.

Having said all that, we do have a few questions that have come in during the course of the meeting. So, let's get started and see what we can answer.

We have a question from Nurzhan Mukashev. He says, "As a researcher, I am working with calculating PQIs recently, and I see that there are some discrepancies between PQI 7 exclusion criteria in Appendix B for PQI version 7, tech specs versus the same codes for PQI SAS — which list of cardiac procedure should be used, the ones from the SAS software code or from the PQI tech specs, which are the files from the AHRQ QI website?

And I think that's going to be a question for Vivek.

>>VIVEK: Yeah, sure, I can take that. Thank you for your questions. And thanks for bringing this to our attention. We would like to go back and check if there are discrepancies, but to answer your question, we would recommend you to use the code list in the SAS software versus what

you see in the tech specs. For our purposes, the software is the kind of gold standard, so you can use that for your calculation, but thanks for bringing up for attention. We'll go back and check it and fix the issue if there are.

>>JENNIFER: Okay. Thank you, Vivek.

The next question is going to be for Heidi.

Ronald Stern wants to know that in PSI 12, the following code, is it meant to be commented out as shown below, if ORCNT = MPRCNT + MPRCNTV, then—

>>HEIDI: It's okay, Jennifer.

For PSI 12, the code that Ronald put into the chat is not correct. The comment basically, what happened is the comment is missing a terminating semicolon, or colon, and so that would have to be changed for it to run as intended.

>>JENNIFER: Okay, great. Thank you, Heidi.

Next up, we have a question for Alex and Vivek from Michael Laviolette. He says, "We are a small state and interested in computing PQIs at areas other than a county, something like a hospital service areas. And what approach would you recommend that we take?

>>ALEX: This is Alex. In this case, you can still…you'd have to modify the software when you run the PQIs, it would allow you to construct numerators based on place of residency. And so you would then have to basically provide some kind of crosswalk. And, again, I don't know off the top of my head, if hospital service areas could be crosswalk by County or if you need zip codes, but you need some kind of crosswalk there, and it would be possible. But, of course, on the fly, I wouldn't be able to give you detailed recommendations. So please submit a ticket to AHRQ Quality Indicators Help Desk, and we can provide some methodological guidance on how to achieve that.

>>JENNIFER: Thank you, Alex. Next up, we have a comment from Joie Bjork, who says, "How are we to capture the population where the identified sex is not indicated as male or female?"

>>ALEX: So, this is Alex. Again, this is something that we've been checking into because I believe we received a user inquiry on this. And right now, there's really two ways in which it's important to be able to capture when the sex is no male or female, and one is for the…I believe there are some specifications that use male or female, but there also are stratification variables, and there also are risk-adjustment variables. It's important to remember that right now, the software really does not allow for any stratification when the sex is not male or female. And the challenge right now is that there are some upstream challenges on the guidelines of how male and female are coded even before the discharge records are received. However, in these cases, when the sex is not coded as male or female for stratification, typically

it's not included. And for risk, however, it would be included in risk adjustment. And in this case, typically, if the sex is not coded as male or female, it's included with the female group for risk adjustment. But this is something that is on our radar, and we will take into consideration of how to improve the user experience in the future.

>>JENNIFER: Okay. Thanks, Alex.

We've had a couple of people wanting to know where and when they'll be able to access these slides, and I'm going to let Vivek take this one.

>>VIVEK: Yes. So, we will be posting it on the website. And there is a section within the website for webinars. You would see that appearing there. It takes a couple of weeks for us to finalize it with making 508 compliance and all. So, give us a couple of weeks and you should be able to see that on the website.

>>JENNIFER: Great. Thank you, Vivek. And we have a question. Looks like it's also for you, Vivek, from Dayanna Whittington, who wants to know — "We are currently using version 2020. Would you recommend that we upload and begin using version 2021 even though it's already Q3?"

>>VIVEK: Yes. So, I assume when you say Q3, you mean the Q3 of 2021? The software that we just released is compatible with FY2021 data, which is from October 2020 through September 2021. So, if you are using Q3 data, we actually recommend you to use 2021 now, which will give you more accurate results than using 2020.

>>JENNIFER: Okay. Great. Thank you, Vivek. And it looks like another one for you: "Will you be able to provide more detailed inclusion and exclusion criteria and SAS codes for creating National benchmarks?"

>>VIVEK: So, National benchmarks are available on the website. Yeah. So, so the inclusion and inclusion criteria area are also available in the Technical Specifications document, which is available on the website. So, I don't know if you have any further questions? The way we are interpreting your question is you're looking for information on inclusion/exclusion criteria and the benchmark. They are all available on the website for you to look at it. If you have any other specific questions, please do reach out to us through the support email and we can further help you with your question.

>>JENNIFER: Thanks, Vivek. So, moving along, this is a question for Alex. Kristin Battis has asked, "You mentioned it not being appropriate to compare risk-adjusted rates for Hospital A versus Hospital B. Does that mean it would also be inappropriate to compare risk-adjusted rates for County A versus County B? Should we only compare risk-adjusted rates to the National benchmarks?"

>>ALEX: Good question. Yes. But typically, we don't encourage County to County comparisons. However, oftentimes we're looking at County-level variation. I think it's important to note that

of course, we can make a comparison, but because it's natural, but we just don't want to make a strong conclusion based on that. If we see that County A or County B vary, there might be other factors that we're not accounting for. So, we could say that of course, a rate is higher or lower, but we don't want to say, we don't want to report that, for example, statistical significance somehow implies that quality is statistically different or substantially or meaningfully different. So, yes, the answer is we should really try to compare strictly to National benchmarks or other published benchmarks that are available and also accounting for uncertainty using either the confidence intervals that we provide or if you feel comfortable using a different approach, such as the exact method for confidence intervals.

>>JENNIFER: Okay. Thanks, Alex. I have another question for you from Disha Sheth, who asks, "Do the logic changes and the DRG used for the patient safety indicators align with CMS specs that are used for care compare?"

>>ALEX: So, in general, there is a very close alignment between the AHRQ and CMS specifications. We do coordinate with that team. However, at times, there might be differences for a variety of reasons, but in general, they are very closely aligned.

>>JENNIFER: Okay, great. And another one for you. Dayanna Whittington asks, "Our organization had an issue with an account that flagged inaccurately for PSI 3 due to Version 2020 software logic over-including cases where a patient has stage 3, 4, or unstageable pressure ulcer present on admission and a DTI not present on admission. I was told by the AHRQ QI team that the concern will be resolved in 2020. Is this the update that was mentioned earlier in the presentation?

>>ALEX: The simple answer is yes. That's it. Thank you for submitting your question, and I really appreciate you following up, but this, I think, shows that AHRQ is really listening and does try to make the changes that the users suggest whenever we can. So yes, thank you for submitting. That is what we were referring to earlier.

>>JENNIFER: Okay, perfect. And another one for you: "Version 2021 is backwards compatible for all ICD-10 years. Can we use the covariance, signal variance, etc., Version 2021 files for all ICD-10 years? Or if we wanted to do risk-adjustment for, say, 2018, would we want the covariance, signal variance, etc., files from that year's release?

>>ALEX: So, the simple answer is you can use everything from Version 2021 for different years or across all years. You don't need to use different versions of risk adjustment. There's no need to. However, there could be a reason that you might want to, and that's the benefit of the open source and public nature of the software. So, again, the software is intended to be used so that you could put in multiple years of data and not have to worry about slicing and dicing and piecing different pieces of the software together. However, there might be a reason that you want to do this. I won't come up with examples here, but you're allowed to, if you think that it's appropriate and you feel comfortable. However, we generally encourage everyone to use one

version, the most recent, and use all the parameters, the covariance, signal variance, etc. from that one version for all years that you're analyzing.

>>JENNIFER: Okay, thank you again. And we have another question. "We leverage PQI code sets but skipped 2020. What's the best way to go from 2019 to 2021?"

>>VIVEK: Oh. I can try to answer this question. So, if you are using PQI code set from 2020, so if you want to go from 2019 to 2021, depending upon in you're using WinQI, you can certainly upgrade it to the 2021. So, the code set that you're using, assuming that you're using it to do your own implementation. In that case, depending upon what year of data you're processing, you'll have to sort of use that year of coding details that are available to you. I think it requires a little bit more explanation to this question, so we can answer it accurately. If you want to reach out to us through our TA email, we will be happy to further explain this.

>>JENNIFER: Okay. Thank you. Next up, we have a question from Rebecca Greenberg and she asks: "The Denominator exclusion for PSI 3 for DTI states exclude cases with any secondary ICD-10-CM code for deep tissue injury present on admission. This seems to me that if a secondary diagnosis of DTI is not present on admission, the case will be excluded using this criteria?"

>>ALEX: And this is Alex. I can take this one. First to answer, the question is correct. DTI not POA, would not exclude a record from the denominator, but would not qualify for the numerator. And I think we're continuing to explore different types of specifications of PSI 3 to make them more site-specific, and that's something we hope to release in a future version of the software. Sorry to make the exclusions more site-specific, but we're exploring that in a future version.

>>JENNIFER: Okay, great. We have another question from Fengwei Zhong, and the question is: "Not sure if AHRQ can answer this question. For next year CMS, HAC, and VBP pay for the program. Do you know which AHRQ versions CMS might use?"

>>ALEX: This is Alex. I can answer this one. Yes. We cannot answer this definitively. As I mentioned before, we coordinate. So, for example, AHRQ version 2020 provided the basis for CMS version 11, which was used for the HSRs released this year. And so, in this case, again, we're coordinating. So AHRQ Version 2021 will provide the basis for CMS version 12, but that's currently under development. And again, they have other scientific testing that occurs in clinical considerations that occur for their program, so it might not exactly match Version 2021.

>>JENNIFER: Okay. Thank you. I think this one is for Vivek. From Emmanuel Erksine. And the question is, "Do you have a comparison of results from WinQI and SAS QI? And can you provide a link?"

>>VIVEK: Yeah. So, we do have a report available on the website to see the comparison results. Starting with a couple of versions ago, we stopped kind of showing you a more detailed report because in our testing we found no differences between the results from WinQI and SAS QI for

the data set that we use, so in that report, you will see that we report that there are no differences between those two software. But if you do see anything different, certainly reach out to us, and we can look into your issue specifically, but the reports are available for you to look at it.

>>JENNIFER: Okay. Great. Thank you. Next up, we have a question from Michelle Bohannon, and she asks, "In the PSI change log, immuno-compromised state, diagnosis and procedure codes were updated for PSI 2, 7, and 14, but the specs for PSI 14 do not appear to mention the IMMUNID and IMMUNIP exclusions. Have they been unintentionally omitted from the PSI 14 specs?

>>ALEX: Yes. Thank you. And no, these exclusions have been removed from PSI 14 this year because they've been found to have a minimal impact on the risk of PSI 14, so that was an intentional change.

>>JENNIFER: Okay. Thank you. Next up, we have a question from Jamie Penrod who asks, "I see that COVID-19 is an exclusion for PSIs as a default, but these accounts are still showing up on our reports as PSIs. How is COVID excluded from PSIs when reporting to CMS? Is someone responsible for manually removing these cases?

>>ALEX: So. At this point, unfortunately, we cannot comment on CMS reporting. So we request that those questions go to CMS. As mentioned earlier, we're closely coordinating with CMS. And as you've seen, we just released version 2021 with the software logic to exclude COVID cases in the PSI software, for example. And we have user guidance on the AHRQ website. But, again, please point that question to CMS because we can't comment. We do want to point out, though, that the IPPS final rule was published earlier this week. So there may be some information there that might be relevant to PSIs and COVID, etc. But yeah, please submit that to CMS.

>>JENNIFER: Okay. Thanks. And I have one more for you, Alex. "Will AHRQ consider to use exact confidence intervals in the future?"

>>ALEX: Yes, we will. This is something that's on our list of potential refinements, and we consider both logic refinements, user experience refinements, as well as methodological refinements. So we will consider this in future years, but just as we just haven't had resources to address in the past, but it is something on our radar. Thanks for bringing it up again.

>>JENNIFER: Okay. And we have time for one final question, and this is going to be on WinQI rolling updates, append input file data. What exactly does that mean? Is it going to append file data to quality to the database for every new file? Vivek?

>>VIVEK: Yes. So what it means is that if you are in your practice, if you're using WinQI more frequently where you are updating, you're uploading your input file on a regular basis, let's call it a weekly or monthly basis, and you want to kind of use a rolling update where you want to

append your data as you go along. In the past, WinQI will not allow you to add on to your existing data, which you have uploaded in the past. So what you would do is you would build your file outside of WinQI that would include the period of data that you want to include and then upload it back. But now with this append feature, it will allow you to append into your existing file, but not. Yeah. So every time you upload a new file, you can let WinQI know that you want to append this file instead of replace, and that will basically add on to your file. But if you are uninstalling, installing a new WinQI version, you're going to lose that data. You will have to kind of start afresh, we don't retain your previous data in the database at the time of upgrade of the software.

>>JENNIFER: Okay. Thank you very much, Vivek. We are now at time. That is all the time we have for Q & A today. If we haven't been able to address your question, we encourage you to submit it to the AHRQ QI team at this email address that you see here. We do address all queries that are submitted to us, and they also help us to plan for future communications such as FAQs and things like that.

Thank you so much for joining us. And this concludes our webinar for today.

>>KAREN: Thank you, everyone. I just want to say thank you to the team and our speakers here and those experts who have been answering these questions for us. Thank you, all.

>>JENNIFER: Thank you.