AHRQ Quality Indicators Software V2022 ICD-10-CM/PCS Release Webinar
August 4, 2022

Transcript

Jayshree Siddhanti: Welcome to the Version 2022 AHRQ Quality Indicators Software Release Webinar. Thank you for joining. We appreciate your interest in the AHRQ QIs. Before we begin, I have a few announcements to make. This webinar will be recorded and available on the QI website, qualityindicators.ahrq.gov. By remaining on the webinar, you are opting in to be part of the recording. Due to the very large number of attendees, all lines will be muted. Please submit questions at any time via the chat feature. Please contact Meghan Lee, at mlee@panth.com, for any technical difficulties.

The agenda for today: we will begin by providing an overview of the AHRQ Quality Indicators, followed by an overview of the Version 2022 Software and improvements. Next, we will review usability software improvements and the version 2022 release, followed by highlights of indicator changes. We will also review where you can find Version 2022 SAS QI and WinQI software resources. Finally, we will have a question and answer discussion.

Today's speakers: Jennifer Newburg, AHRQ QI Project Manager at Pantheon software, unfortunately could not be here today. I'm Jayshree Siddhanti of Pantheon and I will be moderating the webinar today. Commander Karen Ho Chaves, U.S. Public Health Service Commissioned Corps, Director in the Division of Quality, Measurement and Improvement of the Center for Quality Improvement and Patient Safety, Agency for Healthcare Research and Quality. Alex Bohl, Mathematica Project Director of the Hospital Quality Indicators Project. Veronica Hernandez, data scientist with IBM. Vivek Kumar, Project Director of the AHRQ QI Project, with Pantheon.

I will now turn it over to Commander Chaves to provide an overview of the AHRQ QIs.

Karen Chaves: Thank you so much. Welcome, everyone, to this webinar. Really glad to have you here. And it's an honor to be here with you. As the division director, I'm going to just provide a quick history and overview of the Quality Indicators program and then we'll turn it over to our technical discussion. As most of you know, the QIs were originally developed in collaboration with the HCUP program, the health care costs and utilization program. These indicators were developed and tested by our partners in those states years ago and have now grown to be 47 states in that program. Since the early development, the QIs have evolved to become measures of health care quality, as they have been revised to include risk adjustment, POA, and reference populations. Next slide, please.

Yeah. Thank you. The QIs are used for research and needs assessment for planning at local, state, and national levels. Hospital and community quality improvement initiatives also use them. And also for public reporting performance assessment through private and public reporting. And also information are used by health care purchasers. Our focus at AHRQ continues to be on the measurement for quality improvement and population health and patient safety monitoring. So, we continue to use the HCUP all-payer data with over 60 measures, the QIs have a broad applicability and can be used readily with available administrative data. The QIs are actionable in that they provide real time information, for instance, in hospitals and health systems that use AHRQ QIs to monitor their performance over time. Using their own data, the results can be used to guide and evaluate performance improvement initiatives, and users can also dissect indicator results and

relate them back to individual records in their own systems, allowing them to distinguish data quality issues from actual quality problems. Next slide.

So, finally, the QI program aims to make this work available for continuous quality improvement and for transparency. We make our technical specifications and associated documentation publicly available and the software is open source and is improved over time based on the input we receive from users like you and from technical experts.

These are some of the activities that we are involved in as we conduct our continuous quality improvement. We review research evidence, do rigorous empirical testing. Annual updates to align coding changes. We consult with our experts and working groups and also get feedback from users like you. So next slide, please.

So currently these are the modules that exist in the QI program. First are the prevention quality indicators, the PQIs. These tend to be reported at the county level and are population-based measures rather than the hospital-based measures within the other modules. The PQIs are conditions for which access to high-quality and well-coordinated care can potentially prevent the need for hospitalizations. The IQIs, the inpatient quality indicators are for adults only. They cover mortality, morbidity, and utilization and volume. This set of measures covers a range of measures that that are often used in public reporting efforts and are risk-adjusted. The patient safety indicators, PSIs, focus on potentially avoidable complications and adverse events during surgeries and procedures. And some of the examples include avoidable complications, such as pressure ulcers and post-operative sepsis. And some can be used for hospital-level comparisons as well and allow others to compare between geographic areas. The last module is the pediatric indicators, PDIS, and these are hospital-based measures covering patients under the age of 18, including neonates and cover a wide range of conditions. These are similar to the other modules but adapted for the pediatric population. The PDIs highlight problems that pediatric patients experience as a result of exposure to the healthcare system that may be amenable to changes at the hospital level. So that covers the four existing modules. And I'll turn it over to Jayshree for highlights of this year's software. Thank you.

Jayshree: Thank you, Commander Chaves. Again, hospital or systems would use readily available administrative data to create the indicators, observed and risk-adjusted rates. AHRQ offers two free software platforms to help users create the indicators: SAS QI and WinQI. As needs and assignments are identified, the programs and technical specifications will be updated and posted annually. For more information, please refer to the software instructions documents that can be found on the AHRQ QI website.

We want to provide a brief update on the Version 2022 software releases. The SAS QI platform was released on July 29. There is a separate software package available to download for each module. The WinQI platform was also released on July 29. A single installer package may be downloaded for all four modules. I will now turn it over to Alex Bohl to provide an overview of the Version 2022 software and improvements.

Alex: Thank you, Jayshree. Next slide, please. So, thank you again for attending the webinar. We know that everyone is eager to learn about the new version of the quality indicators software. And this section will talk about the process for refining the software and updating the software, as well as talk about some impacts that we observed due to these changes. So, the beginning of the process is always focused on coding and data. The quality indicators logic requires many different code sets and terminologies in order to implement the specifications, the inclusion and exclusion criteria, as well as the risk

adjustment that's used for the hospital-level rates or compositing. As we start off with this here, we focus on trying to make this software compatible from fiscal year 2016, which was the beginning of the ICD-10-CM/PCS period, all the way through fiscal year 2022. And so we go through all the different terminologies, whether that's the ICD-10-CM/PCS codes, the MS-DRG codes, etc. and we update all the code sets in the software for that compatibility. And that's very important for users because, even if you're using historical data, we always encourage you to use the most recent version of the software, even when studying trends over time. In addition, we require data to build the risk-adjusted model and we use calendar year 2019 HCUP state inpatient databases for the reference population. Because of the calendar year, it includes three-quarters of fiscal year 2019 and one quarter of fiscal year 2020 data. Next slide, please.

Then, once we make these more wholesale changes, we focus on more specific tailored changes that go through a testing process. So, we implement changes to the specification such as the numerator and denominator inclusion/exclusion criteria, as well as programing changes that could improve the user experience. And Veronica will talk about some of those in the next section. But this is a deliberate process where we work with our clinical and coding experts who do testing. And, sorry, to the question, yes, that's federal fiscal year beginning in October. So, we do go through this testing process and only the ones that pass our process are pushed into the software and ultimately reflected in changes to the to the public0facing documentation. Last year, in version 2021, we implemented an option for excluding COVID-19 discharges, and those same options remain in version 2022. This year, due to some updates to risk adjustment, we've removed the APR-DRG limited license grouper from the IQI module because it's no longer needed for risk adjustment. We've also made some adjustments to the outputs from the composite programs in the hospital-level modules for both the SAS and the WinQI software. These are the high-level changes that were made for version 2022. But to see to get more information and see what specifically changed, you can follow the link below to see the release notes and the corresponding changelog. Next slide, please.

So, going into more of the specifics by module by module, the largest overall change this year, across the board, is the change in how a major diagnostic category imputation logic. Basically, it's been removed. So, for the past few years and releases, we've been encouraging users to supply their own major diagnostic category, or MDC codes. The reason why is for MULTIMORBIDITY or polytrauma patients, there are situations where the MS-DRG does not cleanly map to the MDC, and therefore the imputation was overly simplistic, which can impact risk adjustment. In this case, typically risk-adjusted rates would be too high because it didn't capture the risk appropriately. And so last year, we introduced basically a criteria for the user to indicate whether they have MDC or not. This year, we give that option, but we no longer impute MDC and we removed that logic from the software. So that means that users now have to supply their own MDC and if they don't, they'll only get numerators and denominators. There are, from the IQI modules, specifically, there are no changes, but for PDIs, there are two specific changes to point out and you'll see some similar changes to the corresponding PSIs. So, for PDI 8, which is post-operative hemorrhage or hematoma, we modified the denominator exclusion codes. And this is something that we've seen over the past few years where there were certain situations where the numerator and denominator criteria depended on each other too much. So, there were certain situations where you could be in the denominator, but you could never qualify for the numerator. So in that case, how could you be in the population at risk? So we've removed that contingency from PDI 8, and you'll see some similar examples for in the PSIs. For PDI 9, which is post-operative respiratory failure, you'll see the changes to the logic, where we're trying to identify a difference in how we identify the

last occurrence of certain procedures, in this case, prolonged mechanical ventilation or intubation. We also slightly narrow the denominator to limit to neurological disorders that were present on admission. Sorry, we narrow the denominator exclusion that was focused on neurological disorders, only focusing on those that were present on admission. Next slide, please.

So, while we saw no significant changes to the PQI module, there are PSI changes. So, some of those that I just mentioned for the corresponding PDIs, we see also in the PSIs, such as for PDI 8, we see corresponding changes in PSI 9 and 14. That's the second sub-bullet. For PSI 3, we've implemented a new site-specific exclusion logic that tries to tease out situations where there might be a stage three or four pressure ulcer and one site that's present on admission, but a stage three or four pressure ulcer manifested at a different site during the hospital stay. We'll talk about the impacts of these changes in a few slides. For PSI 14, there's an important change to point out where the logic has changed, not only to try and find the last occurrence of a re-closure of a wound, but also to omit zero-risk percutaneous procedures. The issue here is that these procedures that we've observed over the past few years, both empirically and through the literature, they have a very minimal contribution to the numerator, and basically are a very low risk and are, in this case, considered almost zero-risk procedure. And so that makes the event seem very rare, which it is, over the entire denominator. So, in this case, we're now removing these cases from the denominator to refocus the measure on those at highest risk, and therefore those that should be the focus of quality improvement efforts. Next slide, please.

As I mentioned, we also update the data. So, we use the 2019 HCUP data. But for certain states, we don't calculate the reference population rate or conduct risk adjustment on their data. So, for example, Delaware, Connecticut, Wyoming did not have sufficient POA data. And so, we therefore excluded those states when measuring, for example, population rates or those measures that required POA data such as the patient safety indicators. And we set the default to remove records that are missing MDC or exclude records with COVID. And then because PSI 15 depends heavily on procedure dates, we exclude any records from the PSI 15 denominator that are missing procedure dates. Next slide, please.

For the area-level indicators, we also updated the population file, a reminder that the hospital-level indicators use eligible discharges or qualifying discharges as the denominator population. So, of those people that are discharged from a hospital, that's the denominator. For area-level indicators, it's a population-based indicator that's focused on the number of individuals in a community or an area. And so, we update this every year and embed this into the software based on intercensal and postcensal estimates. And this year, we've updated it to go through 2021. If you'd like to read more, you can visit the site located at the bottom. Next slide, please.

So, I just went over a lot of changes. And so the question, what impact would that make? And the largest impacts in this year are going to be on the patient safety indicators of the PSI module. So, this slide compares version 2022 to version 2021 when we run 2019 HCUP data through both of those versions. And so, a positive percent means that it goes up in 2022 compared to 2021, and then negative means it goes down. So, as we can see, your PSI 11 has an 8% increase in observed rates because of the changes to the last date logic and the narrowed denominator exclusion criteria. And so this highlights, again, the importance of using the most recent software version, even if you're using historical data. PSI 14 had a substantially large change and that was, in some part, due to the last date logic change, but really, primarily due to the removal of the zero-risk percutaneous procedures from the denominator and the refocusing of the measure to higher-risk

procedures and discharges. PSI 2 -- I did not mention that in previous slides, but as a reminder, every year we update the low-mortality DRG denominator. Empirically, we look at the reference population and we see which collection of DRGs meet a threshold. So, in this case, we added more and we changed the DRGs that go into the denominator that resulted in a 10% reduction in observed rates. And then we saw smaller changes in the other pieces that I called out earlier. Next slide, please.

So, as I mentioned, there were very few changes to the specifications for PQIs and IQIs so we have stable rates for the PDIs at the hospital level. We do see some smaller changes. So PDI 9, that's post-operative respiratory failure--we see a small change due to the last date and narrow denominator and PDI 8. Again, that's post-operative hemorrhage and hematoma. Again, we see a smaller change, but the changes that we see in the PDIs are much smaller compared to the PSIs for two reasons. One, the PDI population is different than the PSA population. It's children. And therefore, because the risk is lower and the population at risk is also smaller, we see smaller changes based on these refinements. Next slide, please.

Okay. For risk adjustment, as I mentioned, we use the HCUP staging patient databases for risk adjustment. So that's a big change, changing the underlying data. But we also have to update the entire models because the numerator and denominator specifications are changing as well as we're updating specifications for risk factors not only because of fiscal year updates, but sometimes we're changing and updating them as well. So new this year is we use a different method for selecting risk factors that go into the model. So, we use a feature selection procedure called lasso and we usually implemented that in SAS, and this year, we used in R so we could basically change how we optimize, or tune, some of the parameters in that model and R gave us that flexibility. And we also changed the working correlation matrix that we use to estimate the generalized estimating equation models, the GE models, which really resulted in no impact on the resulting models, but the runtimes are substantially faster. Just to be clear, though, the risk adjustment is not a fully automated process where we throw in a lot of risk factors and see what comes out the other side. There's a lot of clinical coding and health services research deliberation to make sure that the models are parsimonious and actually make sense. In addition, we introduced two different new types of risk factors for some of the PSIs. And so for PSI 13 and PDI 10, we introduced risk factors that can calculate or that capture immune-compromising conditions. And for PSA 15, we try to measure the intensity of diagnostic and therapeutic procedures during the discharge, which literature has shown us correlates to the risk of these events. Next slide, please.

As I mentioned earlier, we no longer use the APR-DRGs. They've been replaced by the CCSRs for procedures. So, last year, in version 2021, we introduced the CCSRs for diagnoses into the IQI risk adjustment. And this year, we also, correspondingly, introduced the CCSRs for procedures. By leveraging these two HCUP tools together, we've been able to produce similar results or risk-adjusted results that are scientifically acceptable. And this gives us a little bit more flexibility when developing the models and tailoring those to the quality indicators. And so, there's no longer a need to run that limited license model for the APR-DRGs for risk adjustment. Lastly, we've also in the past, mentioned we've explored the idea of a Do Not Resuscitate exclusion criteria for certain indicators, although there was not enough evidence to support including that. But this year, we've now included that as a risk factor when it's present on admission for the IQI mortality indicators. Next slide, please.

Okay. Well, with that, that goes over the changes to the software for this year. But I'll hand it over to Veronica, who will talk about some other changes that are that are more user-centric and user-driven for usability in software. Veronica, take it away.

Veronica Hernandez: Thanks, Alex. Okay. So as Alex mentioned, we'll discuss software, usability, and improvements. Next slide, please.

Okay. So first, we'll discuss some options impacting usability. Now, in version 2022, we continue to have options that will suppress expected, risk-adjusted, smoothed, and composite rates whenever users cannot supply certain data elements. And some examples in which these rates will be suppressed are listed on this slide. So, this includes situations where users cannot not supply procedure dates. In this case, the software is designed to suppress certain PSIs and PDIs because there isn't alternative logic to address situations where procedure dates are not available. In the IQI modules, procedure data and now required data elements and therefore any users running the IQI software will need to supply procedure dates. And this is because the new CCSR categories in risk adjustment require the use of procedure dates. And Alex spoke a bit about that earlier. So, another option that works differently this year is the use of the MDC-provided option. So as Alex mentioned, MDCs are required on the input data for accurate indicator calculation. In version 2022, we asked users to specify in the control program whether MDC is included, as calculated by the federal MS-DRG classification software. And so, I'd like to emphasize that MDC needs to be a valid value from 1 to 25 based on the principal diagnosis. So, we ask that you search, not map, MDC from MS-DRG values. So, to that effect, we've added logic to delete records with missing MDC when the control program specifies MDC is provided on the input data. And we've also added a check in the software to confirm the MDC field is not empty when a user indicates MDC is provided. So if the MDC field is completely empty, meaning it's null, the software will not allow you to calculate the indicator rates. And again, these changes are to ensure users are providing non-missing MDCs is for accurate indicator calculation. And the last example we have on this slide, which also continues to be available in version 2022, is the suppression of rates when certain strata are selected. So, if users choose certain stratification options such as age, the software will only output numerators, denominator and observed rates because age is typically a risk factor in our models. And next slide, please.

Okay. So now we'll get into how we've improved the software in version 2022. And I'd like to acknowledge that many of these changes, they start with our users, and many of our users are on this webinar, so I'd like to thank everyone for providing your feedback on how to improve the measures, and please continue to do so. We always welcome and appreciate any feedback from our users. So based on our user feedback, we've reviewed and expanded the list of operating room procedure codes and this impacts several PSIs and PDIs listed on this slide. We've also refined starting code lists to better align them with an indicator's clinical intent and to take any new coding guidance into consideration. So, for example, many users have suggested we remove certain codes that were previously used to identify accidental punctures and lacerations during an abdominal pelvic procedure. And this was to avoid any false numerator positives in PSI 15. Some users also suggested corrections to add certain codes for defining denominator exclusion criteria. And again, the intent is to avoid any false positives. So, this slide here provides some examples of code lists updated for PSI 6, 12, and 13 based on this user suggestion. And to provide a specific example of how we add codes to denominator exclusion criteria to avoid false positives, we expanded the code list identifying procedures potentially performed by the trans-pleural route, therefore expected to cause a pneumothorax. Adding these codes in the exclusionary criteria avoids these procedures being flagged under PDI

5 and also PSI 6. And so, the last example here that I'd like to speak to was also a result from direct user feedback, and it's an update to the software on how it produces composite-specific reports. So, many users have requested more detail around the calculation of composites, and so we've refined our composite output to provide users with more information. If you're specifically running the SAS QI software, you'll notice that PSI and PQI, the control program will now include an option to output a text file containing component indicator information.

And with that, I'll turn it over to the next so you can walk us through the improvements we made in the Windows-based software.

Vivek Kumar: Okay. Thanks, Veronica. So, continuing on the usability improvements that we have done in the next few slides, we'll talk about some of the improvements done in WinQI. So let me begin by saying that we are very excited to roll out the newly redesigned WinQI version 2022. One of the significant changes in WinQI in version 2022 is the redesign of the application. The screenshots here compare the look and feel of the home screen in the prior version, which is on the left side, to the new version. So, you know, there's a significant sort of improvement in in the user interface in this version. Some of you might have already upgraded to version 22 and some may be in the process of upgrading. But you would notice that we have modernized the design and provided a fresh look and feel to the application. We have also used common user interface elements to bring consistency across the entire application. We have had positive feedback during our beta testing and we hope that you would also have an improved experience going forward. Please do provide your feedback as you continue to use the app. Your feedback is important to us and definitely those help improve the product. Next slide, please.

So, to mention some of the changes like SAS QI, WinQI 2022 also now supports fiscal year 2022 code updates. As part of the redesign, we focus on making it easier for users to understand the workflow. So, on the home screen, the layout has been significantly changed to represent the process workflow explicitly and intuitively for users. You will notice that the steps are numbered as one, two and three, which comprise the process of generating the rates and reports. Each next step gets enabled once you complete the previous step, so it kind of makes it more intuitive for users. Additionally, you can now upload your input file by just dragging and dropping them on, as an option. One of the new features is that we have added a section on the home screen showing last-run reports so users can quickly and easily rerun the report if needed. For example, let's say if you ran a hospital report, you will see that that listed at the bottom of the screen with a timestamp and the modules contained in that report. And that will allow you to quickly run it with just one click. Next, please.

Some additional improvements include changes to the data mapping screen. You will see that the boxes for the required and recommended variables are visually separated out to make the mapping process intuitive. Also, we have now added additional composite indicator report. That's what Veronica talked about, which kind of allows you to see components of a composite indicator. These are for IQI 90, IQI 91, and PSI 90. So, as was mentioned earlier, this is a result of direct feedback from users. And we hope that you will find it useful. We know that many WinQI users use automation and they run the QI as a batch program. One of the limitations we had was that the automation script files could not be called with parameters, so you can only just call the file, you cannot make it dynamic. We have now added capabilities to call the WinQI-generated automation scripts with parameters such as input files. So now you can sort of change the location of the input file while you're calling it on command line. You can also change the mapping file location,

which are generally they are typically .qim files. And then also you can update or change the location where you want to export your files. So, these make automation a bit more dynamic and can help in scheduling your automation jobs. In addition, there are some user interface related improvements in the screen, such as, you know, users can now initiate the command line automation and you'll see it in the screen there. There are three options now, in addition, and then you can also automate, run it as a command line batch, or you can also run it as WinQI as a service from within the application. And this is in addition to running it natively in the application, which was already there in the past as well. Next slide, please.

So, as you heard before, APR-DRG is no longer used in version 22, hence also removed from WinQI. So, users no longer need to provide APR-DRG values or related fields such as severity of illness or risk of mortality. These are no longer used in IQI risk adjustment. You may want to check your mapping files to remove these fields if you have used that file in the past before importing your file. A good way to do it is to just recreate your mapping file in WinQI and just save it. WinQI also provides users an interface to select the MDC option. That's what we've also discussed before. Similar to SAS QI, it allows you to indicate to WinQI whether you are providing immediacy, value or you're not. If you are providing, but the values are missing, those discharges get deleted or removed from the calculation. Or if you say you did not provide it, then risk adjustment rates are suppressed.

Lastly, you may know, your currently installed application will notify you of the new version, which you can choose to install to upgrade your WinQI installation to version 2022. Next slide.

So next we will see some highlights of the indicator changes. Next slide.

So in the previous slides, previous speakers, you heard about the changes made to various indicators in version 2022. This slide shows you a side-by-side view of all four modules. The indicators are grouped in two categories: changes because of the annual coding updates and other updates. Other updates being the changes related to refinements in the indicator logic. These refinements are either driven by user-provided feedback or as a result of our annual clinical review. Details of these changes are listed in the Change Log documents available on the AHRW QI website. The links for those are also available in the next slide. And go to the next slide, please.

As I mentioned in version 2022, specifications and programing changes are made across all modules. These changes go through many iterations of detailed assessment process with clinicians and expert coders before incorporating into AHRQ QIs. The changes are updated in the Change Log documents and are available on the website. Along with the Change Log documents, we continue to publish two additional supporting documents: annual fiscal year coding revisions and an Excel version of the coding revisions. We started publishing them last year with version 2021. We hope you found them useful and will continue to support this. The location on the website for each module is listed above on the slide. Next, please.

And certainly you can contact AHRQ QI technical assistance any time with your questions – the support email information is on the slide. QISupport@ahrq.hhs.gov. You can access the software documentation on the website. You can also go to the FAQ page to see FAQs related to version 22 updates. Yeah. That sort of concludes my thank you. And back to you, Jayshree.

Jayshree: Thank you, Vivek. We have time now for some questions and answers. You may submit your questions via the chat feature in the webinar menu. As a reminder, due to the large number of attendees, participants will remain in listen only mode, so questions must be submitted through the question box. We know that we may not have time to answer all questions, but please know that we do review all questions that are submitted, which informs our future communications about the AHRQ QIs. I will read out the questions to be answered. It is likely I may not pronounce some names correctly, so I ask for your forgiveness in advance. Some questions that have been submitted here.

This question is from Kathleen Bell. Alex, this may be for you. Do you know of any education opportunities to explain how the high risk and intermediate risk works for PSI 13 and 15? We have read the parameter estimate documents and it wasn't completely clear. Thanks, Alex. Do you want to take this one?

Alex: Sure. Son it's a good question. And actually, this is a feature, a new feature that we're adding to the parameter estimates document, which is a definition of some of the risk factors. So, this in the past, has been a challenge because a risk factor, if it's not used in the numerator or denominator, it wasn't defined clearly in the technical specifications. And then typically the parameter estimate document was, more or less, showing the risk factors and their corresponding regression coefficient in that document. So, there's a new appendix in all the parameter estimate documents for that, for this question, in particular, for PSI 13 and 15, you would go to Table A-5. So, Appendix Table 5. In the PSI parameter estimate document, it has a more full definition, and you'll find, for anyone looking for definitions of other risk factors, you can look at the appendix tables of the parameter estimate documents.

Jayshree: Okay. Alex, should we move on to the next question?

Alex: Yes.

Jayshree: Okay. Thank you, Alex. The next question is from Hannah Reinhart. Can you confirm how many individual patient codes SAS QI versus WinQI looks at? I understand this was different between the software options. Veronica, do you want to take this one?

Veronica: Yes. So, SAS QI, users have the option in the control program to specify how many diagnoses and procedures they'd like to use. The default values are 35 for diagnoses and 30 for procedures. This works slightly differently in WinQI and I'll let Vivek speak more to that.

Vivek: Yeah, sure. Thanks, Veronica. So, the default is still the same in WinQI as well, which means you have up to 35. So first, being the principal diagnosis. For diagnosis code, you have total of 34. So second to 35, secondary codes. So up to 35. That's what diagnosis codes are. Again, 34 procedure codes. But again, if you don't supply it, it won't use it. You don't have a way to configure, as you have in SAS, how many you want to provide. But it will process it if you have less number than what it can take. But the maximum is 30, which is up to 29 procedure codes, secondary procedure codes and 34, total of 35 diagnosis function.

Veronica: Thanks, Vivek. And I will add that, in SAS QI, there isn't a maximum, but there is a default of 35 diagnoses and 30 procedures.

Jayshree: Okay. Thank you, Veronica and Vivek. The next question. This is from Relo

Koothmapala. Vivek, this may be for you. Do we need to recreate auto scripts for 2022? Or can we use the existing 2021 autoscript? Vivek, do you want to take this one on?

Vivek: Yeah. No, that's a good question. And yes, you should be using a new script. And the reason being that this, in version 2022, there is new functionality being added, specifically around MDC exclusions and that info is not captured in your prior automation script. So, the software will not understand what to do for those options that are newly added. So, we certainly recommend you to recreate your automation script for this version, and, you know, that that should work very well for you.

Jayshree: Allright, Thank you, Vivek. The next question is from Maureen. This may be for you, Alex. For PSI 14, you explain the change well, related to the exclusion. Based on your analysis, I wanted to know if we should anticipate a significant change in our rates at the facility level. It seemed from your analysis we should not see a major shift. Alex, would you like to take this one on?

Alex: Yes, sorry. Just to be clear, for PSI 14, we would expect a large change in observed rates. So, observed rates, on average across the nation, because of this change, go up 78%. So, every facility has a different case mix, but we would see large changes that go up. Now, on the other hand, when you're looking at risk-adjusted rates, so if you're just looking at the observed to expected ratio, your observed to expected ratio might be similar to what it was in the past. It all depends on your case mix. But again, if observed rates go up, the risk-adjusted rates are adjusted. However, a reminder that risk-adjusted rates as calculated by the quality indicators are indirectly standardized, which means we take your observed events and let's say that they go up 78%. And then we take your expected events and let's say they also go up by 78%. Your observed to expected may go up proportionately and it would look like a wash, but the population rate went up 78%. So, in the end, everyone in the nation, their risk-adjusted rate, on average, is going to go up 78%. Now, counterintuitively, while those rates are going to go up in the composite, PSI 14 is using a composite. It's a fairly rare event. And because we reduced the denominator, actually the importance of PSI 14 should decline. But sorry. Yes. Just to be clear, PSI 14 for most, if for facilities looking at the PSIs, this change will lead to a large increase. And so, if you can, if you're looking at historical data and you want to make a comparison over time, we recommend that you rerun your older historical results using version 2022.

Jayshree: Okay. Thank you, Alex. There are two related questions from Vincent Mina. Vivek, this may be for you. The first one was--We are also interested in knowing if an existing 2021 autoscript can be repurposed for version 2022. I believe you addressed that already. This question is, “will the same automation process options available in Version 2021, also be available in 2022?”

Vivek: Yes, that's absolutely correct. Everything what's available in 2021 is also available in 2022 with additional features that we have added now, which makes your script a bit more dynamic. So yes, that answer is yes.

Jayshree: Okay. Thank you, Vivek. The next question. This may be for you, Vivek, also. So, will the new specs include adjustment to the national benchmarks for these indicators?

Vivek: I'm trying to understand this question. With the new specifications, there is a new benchmark, a document that's now published. So certainly there will be adjustment to the national benchmark for version 2022 and that document is available online for you to review. I hope that's that was the question.

Jayshree: Okay. I guess the user just submitted another one. This may be the lady with the update that must be manually done because it was in 2022 when an update to this version or new version is publicly available.

Vivek: The update prompt will automatically show up. And if you have already if you have a version, a prior version, installed on your desktop or on your machine, you would see a prompt. But if you don't want to see those prompts, you can certainly turn it off and it will not show up again. But you should be able to then go back and look at the updates and you will see an icon on the top right where it will show you the updates available and you can click on that to see the updates and download it. Yeah. It must be manually turned off if you don't want to receive those updates. But it does not automatically install updates until you choose to do so. So, it’s just a reminder for you to upgrade your software to the latest version.

Jayshree: Okay. Vivek, I'm not sure if you addressed this one already, from Maureen Driscoll. Do the new specs include adjustments to the national benchmark for these indicators?

Vivek: That that was addressed. Yes.

Jayshree: Okay. Thank you. This next question is from Lin Yang. Should hospital-level PSIs include hospice/long-term care hospitals? Veronica or Alex, would one of you like to take this one, please?

Veronica: Yeah. I can take this one. So. No, the hospital-level measures are developed and tested using the reference population, which excludes long-term care and hospice. And the risk-adjustment is also developed with the reference population. So, to align with the reference population and the risk-adjustment models, long-term facilities and hospice should not be included. Alex, would you like to add anything?

Alex: Yeah, I agree. The only thing to note is that there are some transfer-based exclusions in the software, but we don't exclude if beneficiaries are coming from those other facilities into the hospital. So, in those cases, you could have someone in hospice transferred in and included in some of the measured denominators. But I totally agree with Veronica. I mean, if you had, for example, hospice claims, it would not be appropriate to apply the hospital QIs to the hospice claims.

Jayshree: Okay. Thank you, Veronica and Alex. This next question is from Julie Round. Once upgraded, should data be rerun for all of 2022 for PSIs? Vivek, would you like to take this one?

Vivek: Sure. Yes, we’d certainly recommend using the most recent version for all of 2022, you know, and especially when analyzing the trend over time, you should definitely run it and there are changes to the logic and of course the annual updates to the code. So, we definitely recommend you to rerun it.

Jayshree: Okay. Thank you, Vivek. There was a message submitted to me directly: “I have never used this app. Is there opportunity for learners? I'm interested in QI, in healthcare in general.”

Vivek: Yeah. I mean, there are some educational information available online. If you can, reach out to us via the support email that was on the slide. It's also on the website. You can get the email address from there. We will be able to send you some links for your education on how to start it. And also, we are available to help you out on that. And if you want, we can also schedule a call to go over it and get you started on that.

Jayshree: Okay. Thank you, everyone. Those are all the questions that we have today. If you have any additional questions, we encourage you to submit to AHRQ QI support team via the email you see you on the slide here. We address all submitted queries and they also help us plan future communications such as Frequently Asked Questions. Thank you so much for joining us. This concludes our webinar for today.

Karen: Thanks so much. Bye, everyone.

Vivek: Thank you.