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## 1

Hi. This is Dave Johnson from IPRO. I am a Senior Quality Improvement Specialist and have been with IPRO, in the upstate Albany office, since 2002. I am an Administrator by background since 1976 and am certified to teach the MDS 3.0.

I am going to talk today about something called the Composite Score... Now because your composite score is derived largely from your CASPER data, you need to have a clear understanding of how to effectively access your CASPER data. I recommend that you view our narrated PowerPoint presentation titled CASPER 101 for clear instruction on accessing that data.

All of your submitted MDS data is collected within the CASPER system... that same data being used to calculate a Composite Score for each facility as well as the quality measure statistics that are publically reported on the nursing home compare website.

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## 2

My primary goals for this presentation are to

- Provide you with a general overview and description of the Composite Score
- To recommend a step by step process to collect and analyze your facility's Composite Score Data

and

- To establish the Composite Score as a focused indicator of your quality improvement activities to assess your performance

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## 3

Now just for a quick review,,,,, within the 5 elements of QAPI, element 3 speaks to "Feedback, data systems, and monitoring".

The key points within this element talk about having a system in place to monitor care and services...

**Once collected, you need to organize it in a way that is understandable to your team...**

**It mentions the effective use of clear data that is factual... and not based on assumptions**

**and that factual data has to be readily available to ensure that your Performance Improvement Project Teams are targeting the right areas.**

**I will show you how to drill down into your Composite Score and look for improvement opportunities as well as monitor your progress.**

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**4**

**The resources I have used for this presentation are listed on this slide and I will speak to them individually...**

**The CASPER Reporting MDS Provider User's Guide... This guide contains step by step instructions and illustrations to explain the many different reports that are available within the CASPER system.**

**The CMS QAPI Guide: What you need to know... this is a resource companion to QAPI At A Glance document**

**and the MDS 3.0 Quality Measures User's Manual... The manual explains all of the details for the calculation of each quality measure.**

**Now All of these resources are available on our website at [www.nursinghomes.ipro.org](http://www.nursinghomes.ipro.org). They are also available on the internet by simply "searching" by the document name. They are all in PDF format that may be downloaded and printed for easy and quick reference.**

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**5**

To quickly touch on some basic facts about the Composite Score... the data used to calculate each facility's Composite Score comes directly from the MDS submissions from each facility.

The elements of the Composite Score come from 13 of the NQF-endorsed quality measures.

Even though not all 13 measures used to calculate the Composite Score are currently available in the CASPER system... 11 of those clinical measures are available in real time to review, analyze and continuously monitor.

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## 6

You may wonder where the Composite Score came from...

In our last quality initiative with CMS, the National Nursing Home Quality Care Collaborative started in early 2013 and ran for 18 months... approximately 5000 nursing homes participated across the country.

The National Nursing Home Quality Care Collaborative was a successful initiative... and during that effort, the Composite Score was developed to represent the top 10% of the nursing homes in the country. That top 10% of facilities had achieved a rate of 6% or better as a composite score.

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## 7

The calculation of the Composite Score is very simple...

You add the total numerators from the 13 NQF-endorsed quality measures

And divide that number by the total denominators for the same 13 measures...

Multiply by 100 and that is the "Composite Score".

Just as it is with most all of the quality measures... the lower statistic, the better

## 8

As mentioned, there are 13 quality measures included in the Composite Score...

11 of those 13 measures are what I will call “clinical” while the remaining 2 are the vaccination measures... both flu and pneumococcal.

Now those of you who are familiar with nursing home compare know that the 2 vaccination measures are “directionally opposite” from the rest of the measures. While most of the measures reported on nursing home compare follow “the lower percentage, the better” rule, the vaccination measures follow more of a “compliance” model with rates upwards of 90% or more.

Because of that difference, to be included in the composite score calculation, the vaccination measures have to be “reversed” to be consistent with the 11 clinical measures. This is done by subtracting the actual numerator from the denominator for each of those vaccination measures... in effect, to arrive at a numerator representing those residents that, for whatever reason, did not receive the particular vaccination.

This process “equalizes” the vaccination measures... keeping them consistent for the calculation of the Composite Score.

I will speak to the impact of this process shortly in the presentation.

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## 9

This slide lists the 11 “clinical” quality measures that are included as part of the calculation for the Composite Score.

They are all long-stay quality measures... but not all of the long stay measures reported within the CASPER system.

You will see that while the Composite Score includes most of the long-stay measures, it does not include the measure for falls, anti-anxiety/hypnotic medication or behavior affecting others.

All of the other long stay measures are included in the composite score calculation.

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## 10

While your CASPER data needs to play a major role in your quality improvement processes... it is important to note again that, at this point, even though the vaccination measures are reported on nursing home compare, the statistical detail of those measures is not available within the CASPER system.

However, the 11 remaining clinical measures are available in real-time within the CASPER system and it is our recommendation that you monitor, analyze and track those 11 measures since they comprise a major piece of the composite score.

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## 11

Now this is a screen print of a section of the facility-level quality measure report that is available in the CASPER system. I have hi-lighted the 11 clinical measures included in the composite score along with the numerator and denominator columns for those measures.

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## 12

In this simple example of what we will call the “Clinical Composite Score”, the numerators and denominators for the same 11 clinical measures are totaled... and divided.... Multiplied by 100... resulting in a 12.96 “Clinical Composite Score”.

Just as a reminder, the composite score is calculated using the “opportunity model” methodology.... where the numerators represent “missed opportunities”.

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## 13

Now, because the vaccination measures are “directionally opposite” from the other quality measures, those 2 vaccination measures are reversed before being included in the composite score calculation.

For a simple example of this process, consider a facility with 100 long-stay MDS submissions. If 98 of those residents were included in the numerator for that

vaccination measure, that would calculate as a 98% compliance rate with the measure... leaving 2 missed opportunities.

For purposes of the Composite Score calculation, the “reversal” process would be 2 out of 100... or 2%.... that were “missed”.

This “reversal” is done for BOTH vaccination measures BEFORE inclusion in the Composite Score calculation.

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## 14

To illustrate the “impact” of the vaccination measures on the Composite Score, I took the same set of statistics that you saw previously... and included examples for the 2 vaccination measures since they are not part of any CASPER report.

Just for illustration purposes, say that the sample facility with 129 long-stay residents had achieved a 96% compliance rating with both vaccination quality measures... That would equate to 5 out of 129 NOT triggering for the vaccination measures.

For purposes of this illustration, that would add 5 numerators for EACH of the vaccination measures along with 129 denominators... again, once for EACH of the 2 measures.

The math then becomes 168 divided by 1477... for a composite score of 11.37.

You can clearly see that because the vaccination measures are directionally opposite from the “clinical” measures, the reversal of those vaccination measures actually “lowers” the composite score in this case... with the impact being a “softening” of 1.59 percentage points.

However, let’s return to what we know and what you have immediate access to... those 11 “clinical” quality measures that ARE available in your CASPER reports.

## 15

To help you with your collection, analysis and monitoring of those 11 clinical measures, we have developed a “clinical composite score calculator” to help with this process

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## 16

Now you will see in this example that I have entered the statistics from a sample facility into the ACTUAL statistics area of the calculator.

You may also note that I entered the date range along with the calculation date for the statistics. You will see that the dates are the same and to get a clearer understanding of that strategy, please take the time to view our separate narrated PowerPoint presentation entitled “CASPER 101”. That presentation speaks specifically to accessing your CASPER data in “REAL TIME”. In our view, there is no better strategy than working with a date range offering REAL TIME data.

You will also note that the tool already “self-calculated” a clinical composite score of 10.9%

The benefit of this tool allows you to not only see your actual clinical composite result, but also see the impact of changes in those statistics in the TEST area of the calculator.

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## 17

In the lower right hand corner of the tool, by clicking on that button, the ACTUAL statistics will be copied into the test area.

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## 18

With this TEST area, you may test changes in both numerators and denominators to see the test “RESULT” of those changes

**By clicking the button in the lower right hand corner, the actual statistics will be restored for further trial.**

**I will now speak to the value of this calculator as you drill down into your statistics and expand your knowledge of the quality measures....**

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## **19**

**In your data analysis, you must consider BOTH sides of each quality measure equation...**

**Your analysis must go beyond simply looking at the “triggers” for each measure because any change to either side of the equation will impact the result.**

**Your team’s knowledge base must grow to include not only the conditions for “inclusion” in a measure... but also what “excludes” a resident from the entire calculation.**

**By looking at all of the components of each clinical measure and pairing that with the quality measure specifications and guidance offered by the RAI Manual, you will begin to understand how coding accuracy impacts the results that are both publically reported on nursing home compare... and the impact of that coding on your composite score.**

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## **20**

**In this same example, I entered some changes in the TEST area. Now these sample changes are based on the knowledge we have gained of the quality measures over our many years of assisting facilities in their quality improvement efforts...**

**Consider the following facts or scenarios...**

**If your facility defaults to a staff assessment for pain rather than conducting a pain interview, those residents will be totally left out of the calculation for the long-stay pain quality measure. This example shows the impact of an increased denominator.**



**Another fact.... If your facility is not accurately capturing the self-performance coding for bed mobility or transfer, that will leave some residents out of the denominator for hi-risk pressure ulcers.**

**In the example, I reduced the numerator for antipsychotic medications in line with the nationwide effort focusing on the off-label use of those medications on residents with dementia.**

**I also reduced the numerator for Lo-Risk bowel and bladder with a focus on applying the actual RAI definition of incontinence.**

**And finally, just for illustration, I reduced the residents triggering for increased ADL help because we have seen an issue with this quality measure in facilities with both a poor system of ADL coding and a mis-understanding of the ADL coding definitions.**

**By looking at the particular QM results in the test section, you can instantly see that changes in either side of the equation had a clear impact.**

**The power of this calculator is to spur investigation and growth of your knowledge into the quality measures... to understand both the inclusions and exclusions of each measure.... NOT to simply change a measure... but to validate that your statistics are a clear and honest representation of your facility's population.**

**There really is nothing worse than investing the time and effort of a performance improvement team chasing after a quality measure statistic that is not valid.**

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**21**

**At the beginning of my presentation, I mentioned one of my sources being the actual MDS 3.0 Quality Measures User's Manual that is available both on our website and on the internet.**

**I will quickly show a sample of one of the quality measure specification pages, in this case... specific to long stay pain.**

**For each of the quality measure specifications, there are 3 components...**

- Measure Description
- Measure Specifications
- Covariates.

The first column is the measure description column with the CMS and NQF identifiers and the detailed description of the measure itself.

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## 22

The second column focuses on the measure specifications that detail both the numerator and denominator of the measure calculation...

By using this resource, you will clearly see what item or items on the MDS place a resident in the numerator (again, also known as a “trigger”), as well as what MDS coding responses will exclude a resident from the overall calculation.

The specification explanations are very detailed to the individual MDS items... including any exclusions.

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## 23

This slide identifies the “covariates” column. There is only a subset of measures that are “risk adjusted”... those include long stay pain, long stay catheter left in bladder and short stay pressure ulcers. If applicable, any covariates are also detailed right down to the individual MDS items.

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## 24

The quality measure specifications offer item-specific detail tied directly to identified item entries on the MDS.

If you investigate the actual coding guidance available in the RAI Manual for each specific item...

That drill-down process will provide specific direction to the coding requirements, with the necessary guidance and strategy to impact your specifically targeted quality measures.

Again, I want to recommend that you view our narrated PowerPoint presentation entitled CASPER 101 that is also available on our website. It is short, concise and topic-focused.

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## 25

In summary, you should make sure that your key team members fully understand the background, adjustments and calculations for each quality measure and how , or if, they impact your Composite Score.

You should develop a standard of practice to access your CASPER data in real time... including who will collect it, who will review it and at what frequency.

You should determine areas for further focus based on your investigation using both your CASPER data and your calculated clinical composite score.

And you should set an expectation of competency for both your CASPER data and your facility's Composite Score by chartering appropriate team members to help foster this growth and understanding.

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## 26

I know that I have presented a lot of information regarding the Composite Score and its important role in your QAPI process.

I leave you with this slide that contains the contact information for everyone on the IPRO Nursing Home Team.

All of us are well-versed in both CASPER and the Composite Score. Our website at [www.nursinghomes.ipro.org](http://www.nursinghomes.ipro.org) offers a growing reference library of pertinent resources and tools to assist you in your QAPI efforts.

**If you have any questions about the content of this presentation, please feel free to contact any of us directly.**

**I thank you for your time and have a great day!**