

---

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 the CASPER Data System... CASPER standing for Certification and Survey Provider Enhanced Reports. All of your submitted MDS data is collected within the CASPER system... that same data being used to calculate your publically-reported quality measure statistics that are reported on the nursing home compare website.

---

2

My primary goals for this presentation are to

- Provide you with a general overview of the CASPER system
- To recommend a step by step process to collect and analyze your facility's MDS data

and

- To establish the CASPER system as an identified source of both data and information to collect, analyze, compare and display your data to identify improvement efforts and monitor your facility's performance.

---

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... not based on assumptions

and making sure that factual data is readily available to ensure that your Performance Improvement Project Teams are targeting the right areas.

---

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 is a very user-friendly guide with 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 companion to QAPI At A Glance

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

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.

---

5

Now just to quickly touch on some basic facts about CASPER... as mentioned, the data reported through CASPER comes directly from your facility's MDS submissions.

The CASPER system allows you to either accept a default date range when you request a report, or you may define a specific date range for use in your targeted QAPI program. I will speak about the use of a specific date range shortly.

And the data you download from the CASPER system may not exactly match that posted on nursing home compare... and I will speak to some reasons for that later in this presentation.

6

Now, here is a screen print directly from the CASPER system that lists the report categories available for your review. This screen is accessed through your secure sign-in at your facility and by choosing the “reports” button in the top menu.

For this presentation, I will be focusing on the MDS 3.0 QM Reports chosen from the report categories on the left hand side.

Our recommendation is that you choose the MDS 3.0 QM package Reports in the main part of the screen. This is the easiest way, in our opinion, to access your data since it includes 3 separate reports that are listed on the screen... packaged in one request.

You will receive the facility characteristics report along with both the facility-level quality measure report and the resident-level quality measure report.

Please note that these reports are footnoted that they may contain “privacy protected data” and should be handled as such.

I will now speak to each of the 3 reports that are included in the MDS 3.0 QM Package Reports.

---

7

The first report is the “Facility Characteristic Report”. It is a one-page report listing various characteristics of your population as reported through your MDS submissions. Specifics such as Gender, age, some diagnoses and source of admission are calculated with the numerator ... indicating the number of residents with that identified characteristic... and the denominator..... indicating the number of residents in the facility.

Throughout this presentation, I will be referring to the numerators on all of the reports as the “triggers” ... those residents with a specific characteristic or condition... especially when I speak about the quality measures themselves.

**Comparison calculations are made with both the state and national averages for listed each facility characteristic.**

---

**8**

**Now on this slide, I have taken some statements directly out of the CASPER Reporting MDS Provider Users Guide where the guide speaks to the identification of potential areas for “further emphasis or review”... whether that be during the survey process or as part of the internal facility quality assurance performance improvement process.**

**Once again, it compares your facility’s resident population to both state and national averages...**

**And by comparing your statistics, you can determine whether your facility’s demographic statistics differ from the norm.**

**Some examples could be general age of your resident population, those with a psychiatric diagnosis or residents receiving hospice care.**

---

**9**

**This screen print is an example of the date range options available when you request a report through CASPER. In this example, the “Begin Date” and the “End Date” are pre-filled with the most recent 6-month period prior to month of the calculation date. You can see by this example that the data was calculated on 1/23/2013, so the pre-filled 6 month date range became July of 2012 through December of 2012.**

**You do have the ability of entering an alternate date range and I will speak to that in a moment.**

**The comparison group will pre-fill with the most recent 6 month period that is available for state and national comparison. The comparison data is usually available up to three months prior to the current month.**

---

**10**

Now, I had mentioned an alternate date range for your reporting period and I will explain that opportunity to you now.

CASPER data is updated every Monday for all MDS submissions through the prior week.

My suggestion is that you use the date of the most recent Monday as BOTH the beginning and ending date in the date range for your requested reports... an easy reference, it should be the same date as the calculation date for the data. If you attempt to enter a date after the calculation date, you will receive an error message.

Now this date “range” may appear alittle odd, but I will explain how this actually works...

This date range criteria will provide you with data from the most recent MDS submission for every resident currently on your roster. You cannot get any more “real time” data than that and you have to ask yourself what could be more valuable than “real time” data when reviewing and analyzing your statistics.

---

11

Some reasons for this date range?....

Not only is your data real time... but there will not be any “discharge triggers” included in your data.

Let me say that I am not saying that discharge triggers are not important... because they did in fact happen. What I am saying is that if you concentrate your efforts today on your current residents who are triggering for a specific quality measure today, those efforts will ultimately reduce your discharge triggers tomorrow... think of it as impacting the current to effect the future.

Again... how important is accurate ‘real time’ data going to be in your QAPI efforts?

---

12

This next slide is a partial screen print of a Facility-Level Quality Measure Report. This report reflects the data calculations for 17 quality measures... including 3 short stay measures along with 14 long stay quality measures.

I will now take you quickly through each piece of this one-page report.

---

13

Now, these next few slides may appear to be very wordy, but I extracted the detail directly from the CASPER user's manual itself. I felt it important to include this detail that can be easily referenced in "full-slide" handouts of this presentation or directly in the CASPER user's manual itself.

The header of the Facility-Level Quality Measure Report includes specific items identifying the facility, the calculation date of the data... (again, most always a Monday unless there is a Monday holiday), the reporting period... or "date range" of your data and the date range used for the comparison group.

---

14

The second section of the report contains the column header for the statistics themselves.

Important points to note... each measure description has a numerator and a denominator... again, the numerator represents the number of residents "triggering" or having that condition... the denominator indicating the number of residents who were eligible.. or could have had the condition. The simple math of numerator divided by denominator equates to a percentage... taken to the first decimal point. That number is the facility-observed percent.

The facility adjusted percent only applies to a subset of the quality measures where the report takes into account various resident characteristics along with the national percentage for the measure itself... and adjusts the percentage based on those variables.

---

15

The final right hand columns in the report list the state and national averages for each quality measure along with a comparison group national percentile.

While I believe that the state and national averages are self-explanatory, I will speak specifically to the national percentile on the next slide.

---

16

This last column containing the Comparison Group National Percentile contains vital information as to whether a facility exceeds a threshold on a particular measure or set of measures. Any value at or above the 75<sup>th</sup> percentile will cause an \*... also commonly known as a flag.

The user's manual speaks directly to the fact that just because a particular quality measure is flagged does not mean a problem with quality of care in that area... However, the statistic is high enough to warrant further investigation... whether that be during a survey or as part of a facility's internal quality improvement process.

The information suggests that there is a concern that should be reviewed to see whether a problem exists and more importantly... how it is being addressed.

The quality measure statistical information is a tool... both for surveyors and facility staff.

---

17

Now this next slide is a screen print of the third report in the package.... The Resident-Level Quality Measure Report.

The header, again, indicates both the facility identifying information and the "report period"... or date range. Remember how I spoke about using the same date as the "calculation" date for both "ends" of the date range. This is an example of just that

with the calculation date of April 27<sup>th</sup>, 2015... and the report period of April 27<sup>th</sup> thru April 27<sup>th</sup> of 2015.

---

18

The information is listed with resident names and the 17 quality measures displayed across in columns. An “X” in any column indicates a “trigger” for that specific quality measure as reported on the latest MDS for that resident. There is also a final column that totals the number of quality measure “triggers” for each resident.

---

19

Now this report may be useful in many ways....

Obviously, it identifies the residents who are “triggering” for each quality measure. During your analysis, think about the possible connections between triggers for a particular resident.

Some useful examples may be UTIs and falls... or restraints and falls... or antipsychotic medications and behaviors.

Also make note of those residents with a high number of total triggers in the last column. The user’s manual speaks to that with statements such as “Those residents should merit special consideration or more intensive review”.

---

20

Now another important piece of information to assist you with your investigation or drill down into your data is also available on this Resident-Level Quality Measure Report... that being the column right after Resident ID, headed with A0310A/B/F. The column ties directly to the coding in section A0310... type of assessment. By looking at this column, you will clearly see which assessment held the coding the “caused” the trigger being for the quality measure being investigated. The first 2 digits refer to an OBRA assessment, the second 2 digits refer to a PPS assessment... and the third 2 digits represent entry/discharge reporting. In all cases, a code of 99 represents “none of the above”.

In the example shown, the first resident was an 02, or a quarterly assessment. The second listed resident had a combined quarterly and a PPS 90 day assessment... while the third resident was an admission assessment. The last in the sample indicates a discharge assessment- return anticipated.

This information can prove to be very valuable as you drill down into the facts. Combine that information with your MDS scheduling process and you can anticipate when the next MDS may be due, coordinate any look-back period and align your QAPI investigation and process to effect change and impact your quality measure statistics.

---

21

Now, I mentioned at the start of this presentation that I was going to explain why data reports pulled from the CASPER data base may not match the data reported on Nursing Home Compare.

Even though the data source is the same along with the sample selection and calculation logic, there are several reasons for the possible differences...

Though both CASPER and Nursing Home Compare contain many of the same measures, NHC contains some QMs that are not included in the CASPER QM reports currently. Examples include the vaccination measures.

NHC is run once a quarter and CASPER is updated weekly... It is therefore both difficult and unlikely that the calculations could be collected at the exact same moment.

---

22

to continue... the reporting periods for the 2 systems are different.... NHC speaks to 9 months of data while CASPER allows for customization of the reporting period.

NHC averages across several calendar quarters..... with CASPER reports only for a single reporting period.

---

23

Finally, the risk adjustment calculation for the two systems are performed at different times... national means may differ and the risk adjustment calculation may result in a different value.

---

24

Now to the detail, or the meat of the quality measures... Again, my source for this information is the actual MDS 3.0 Quality Measures User's Manual that is available on the internet.

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

- Measure Description
- Measure Specifications
- Covariates.

This first slide indicates the measure description column with the CMS and NQF identifiers and the measure description itself.

---

25

This next slide focuses on the measure specifications that details 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 (also known as a "trigger"), as well as what MDS coding responses will exclude them from the calculation.

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

---

26

This slide identifies the "covariates" column. As mentioned previously, 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, the covariates are detailed down to individual MDS item coding.

---

27

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

If you investigate the actual coding guidance available in the RAI Manual...

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

---

28

In summary, you should identify the CASPER data as one of your primary data sources for your QAPI program..

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

And you should set an expectation of competency with your CASPER data

---

29

To take it a few steps further... ensure that key team members are educated on the CASPER data system to tie together all sources and any calculations...

Based on a review of your current CASPER data, determine areas of focus for analysis and monitoring

When appropriate..... charter individual performance improvement projects set out to further investigate, analyze, recommend, trial and evaluate results.... with opportunities to spread successes.... or respond to lessons learned.

---

30

**Some questions as you continue your team discussion around QAPI....**

**What data does your facility monitor now?**

**What benchmarks will you use to assess your performance as you move ahead?**

**Can you make better use of other data sources currently available to you?**

**Do you, in fact, track and trend your progress over time?**

**How is your data shared with others in your organization... be that staff, residents, families, Board Members.... along with ideas to change it up alittle.... for the communication of your progress?**

---

**31**

**I know that I have presented a lot of information regarding the use of CASPER data 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 the CASPER data since we have been actively using CASPER as our data source to monitor our own progress during our quality initiatives and assist facilities who reach out to us for assistance.**

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

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