

## **CJR Model Performance Year 3 (PY3) Evaluation Results<sup>i</sup>**

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Laura Maynard: Hello everyone and welcome to this CJR Learning System All Participant Webinar Performance Year 3 Evaluation Results.

Following our welcome today, we'll be going over an overview of the CJR Model Evaluation including key findings and results, and we will also close out with some announcements and reminders.

The audio for today's event is only available through your device speakers; there is no telephone line for this call. Make sure your device speakers are unmuted and turned up to a high enough volume. We encourage you to ask questions throughout the presentation and share your comments in the Q&A pod that you will find in the lower right hand corner of your screen. You will only be able to see your own questions and not the questions that are submitted by others.

Closed captioning is available below the slides and you will notice that there are web links also below the slides including the Performance Year 3 Evaluation Report. Some Event Resources are in the pod just to the right of the slides. If at any point through the presentation you want to enlarge the slides, you can hover your mouse to the upper right hand corner where you will see four outward facing arrows. Click that to make the slides full screen. To return to this view, click them again and the slides will return to this size.

I'm pleased to introduce you to Jessica McNeely. She is the CJR Evaluation Core for a CMS Innovation Center. For our presentation today, we'll turn it over to Jessica.

Jessica McNeely: Thanks everybody for attending today. I'm really excited to share with you our most recent evaluation report. The main objective of this annual report is to provide a description of hospitals, beneficiaries and markets participating in the CJR Model. The evaluation report details the impact of the CJR Model on payment, utilization and quality outcomes based on quantitative claims based analyses for performance years one through three, and presents findings from patient surveys, hospital site visits, hospital telephone interviews, and a hospital survey. So we looked at the claim-based measures to calculate cost impacts, and some of the quality impacts, like ED use and readmissions. We use patient assessments and patient surveys to assess quality impacts and perceptions from beneficiaries. Site visits and telephone interviews are used to help us understand how the model actually functions in hospitals participating in the model. Because we feel this is so vital to the evaluation, we've dedicated an entire special report, which was posted on the web. It presents the perspectives from all types of providers at different hospitals across the country. So that's a plug. If you've not checked this out, go to the website and read it. I think the team did a fantastic job. Next slide.

This slide shows a broad overview of how we approach the evaluation. The framework is based on our theory of action, and all the internal and external forces that influence the outcomes of interest. So starting at the bottom, we have our CJR Model Incentives. That's the financial risk or opportunity; so, the opportunity to earn a reconciliation payment or have to do a repayment to CMS. And then there's also the resources and market conditions that are different for each hospital. So those are all going to influence the choice of response, and changes to the care redesign pathway. These all influence the outcomes of interest: our total episode payments, savings to Medicare, our service line payments and service use, our different measures of quality of care such as pain, functional status and care experiences, and looking at some unintended consequences like change to market volume, or payments in the 30 days following the episode. Next slide.

So starting off with a punch line, I wanted to give everyone a sense of the results before we go into more detail. Mandatory CJR hospitals shifted 10% fewer total knee arthroplasties, or TKAs, to the outpatient setting than control group hospitals. Mandatory CJR hospitals achieved significant reductions in average episode payments of 4.7% due to reductions in Institutional Post Acute Care use. After accounting for reconciliation payments, the mandatory hospital reductions and payments resulted in significant net savings of 2% across the three years, and measures of quality of care either improved or were maintained. Next slide.

Mandatory CJR hospitals are a diverse group of hospitals that vary in terms of size, LEJR experience, market conditions, episode payments, and patient populations. Compared to all other IPVS hospitals, Mandatory CJR hospitals have similar annual LEJR volume, but had historically higher average episode payments and discharge a greater proportion of patients to institutional tax settings during the baseline period. These differences are generally explained by CMS as sampling strategy, which targeted Higher Payment Urban MSAs for participation in CJR. Just as a reminder, there are 67 MSAs originally that were then reduced to 34 Mandatory MSAs, and the focus of the current evaluation report focuses on those 378 hospitals that have always participated in CJR. Next slide.

Starting in Year 3 of CJR, there's a policy change that removed needs from the inpatient only list. So we wanted to better understand how this impacted the evaluation, and also how hospitals were responding to this policy change. The evaluation discovered that Mandatory CJR hospitals shifted a smaller portion of total TKAs to the outpatient setting than control group hospitals. So it was 19% for CJR hospitals versus 29% for control hospitals. Because the costs associated with outpatient procedures are less than the inpatient procedure, we had a concern that only looking at cases that began in the inpatient setting could possibly overestimate the impact of the CJR Model due to the 10% difference between Mandatory CJR hospitals and controlled hospitals. In order to address this concern, the evaluation investigated the differential response to this policy on CJR Model outcomes by examining the financial impacts observed when examining only those episodes initiated in the inpatient setting, and when examining all LEJR episodes of care (that is including and excluding outpatient TKAs). Both modeling approaches generally showed consistent findings for cost, utilization and quality outcomes during the time period examined in this report. So for simplicity, in the presentation today, we're only going to focus on the more conservative estimate. That is the all LEJR, or the combination of inpatient and outpatient episodes.

We talked to a lot of hospitals about how they interpreted the policy, and what changes they made. Hospital representatives reported confusion about how to interpret the OPSS policy change to remove TKA from the inpatient only list, and described a whole variety of strategies for responding to it. For instance, some Mandatory CJR hospitals reported establishing a default inpatient or outpatient status for all TKA patients by modifying or creating new algorithms, intake forms, or other tools to determine the appropriate setting for the patient. It also talked about enhancing internal documentation, specifically for auditing processes. Next slide.

This figure shows the trend and episode payments across the model. So first we have the baseline period in white. This is before the model was proposed the interim period which is in this light blue shading, which starts with the announcement of the CJR Model. We separated this period from the baseline because we heard from hospitals that some had already started forming committees and implementing changes prior to the model officially starting. Then we have the intervention period in a darker blue shading, and this is the first three years of the model. You can see on the figure that the impact of the policy change for knees being removed from the inpatient only list is pretty drastic, particularly for the control group, shown here in a dashed line. So right after the start of the OP TKA

policy, we see a sharp reduction in episode payments for the control group. Again, this is why we had to account for outpatient knees in our estimates. After we did that, we found that Mandatory CJR hospitals average payments for all LEJR episodes decreased by \$1,378 more than for control group episodes during the first three performance years of the CJR Model. This relative reduction in payments equates to a 4.7% decrease in average episode payments from baseline. Next slide.

The net savings is calculated by taking the gross payment reductions and subtracting all of the reconciliation payments. After we accounted for the reconciliation payments, the reduction in average episode payments led to a statistically significant net savings. Net savings for mandatory hospitals totaled \$61.6 million or 2% savings from baseline. Next slide.

Here we see a breakdown of net savings by year. The red dots indicate gross reductions per episode, and the purple dots represent net savings after we take into account those reconciliation payments. The confidence interval is represented here by the bar. If the bar does not cross zero, then the estimated savings is statistically significant. You can see this varies from year to year. While the three-year cumulative net savings estimate is similar between the two different approaches that I mentioned, the difference is more apparent in the third year. So you can see here that we saw net savings in the second year. But then, once that policy change happened, we no longer see statistically significant net savings. We expect the impact on net savings will grow as the model progresses, and as more and more cases shift to outpatient. Next slide.

The reductions in total episode payments were driven by reductions in the use of more intensive post acute care settings and shorter length of stay. If you've been following the evaluation, these changes in utilization will sound very familiar. We've been seeing this pattern since the very beginning of the model. Discharges to inpatient rehabilitation facilities went down, while the proportion of patients discharged home with home health rose. The proportion of LEJR patients first discharged to skilled nursing facilities also decreased, and the average length of stay decreased on average by 2.5 days. These changes resulted in lower payments that drove that overall gross reductions in payments.

In speaking with hospital representatives, we learned that financial arrangements between hospitals and surgeons, as well as the availability of surgeons and quality PAC providers in the market, affected the amount of control CJR participant hospitals had over care redesign across the LEJR episode. Hospitals that employed surgeons reported more success implementing new care redesign initiatives. Interviewees indicated that hospitals had less control over care redesign and thus episode payments and quality when surgeons performed LEJR at multiple hospitals.

Another interesting finding that we learned from hospital interviewees is that improvements to care pathways were diffused across patients with different insurance types within the hospital, and also to other hospitals that were in the hospital system that were not participating in CJR. Next slide.

Even with lower service use under the CJR model, quality of care was maintained or improved as evidenced by a decrease in readmission rates and complication rates for elective surgeries, and no change in emergency department visits or mortality. A survey of beneficiaries showed that CJR in comparison group beneficiaries reported similar functional outcomes and care experiences. CJR in comparison group beneficiaries reported making similar gains in functional status from before their hospitalization to after the end of the episode. CJR and control respondents reported similar satisfaction with their overall recovery and care management and had similar care transition experiences. However, CJR survey respondents, particularly those first discharged to an IRF or SNF,

reported less satisfactory care transition experiences and reported more caregiver help than control respondents. Next slide.

We have not observed any concerning unintended consequences from the CJR model to-date. There was no change in the volume of elective joint replacements in the CJR model MSAs compared to the control group MSAs, and hospitals are not deferring services beyond 90 days. So there was no significant difference in spending within the 30 days after the episode for CJR cases compared to the control group cases. There's also no indication of upcoding so that hospitals receive higher target prices. So we did not observe any significant changes in the proportion of DRG 469 and DRG 470 in the CJR MSAs compared to the Control Group MSAs.

We do see a reduction in the prevalence of some patient characteristics in the CJR patient population for those elective LEJRs an MS-DRG 470 compared to the control group patient population. However, we cannot conclude that patient selection is actually occurring because we're not seeing case volume in elective surgeries change. So we are closely monitoring patient selection in this evaluation, and will continue to look further into this finding. Next slide.

During the first three years, the comprehensive care for joint replacement model achieved reduction in total episode payments due to reductions in institutional PAC use while improving or maintaining measures of quality of care. For the mandatory CJR hospitals, payment reductions resulted in net savings to Medicare. Most hospital interviewees discussed the importance of taking interdisciplinary approach to care coordination, indicating different members of care coordination teams collaborated throughout the care pathway. Although care coordination activities were not consistently attributed to the CJR model, interviewers noted that key coordination activities included patient education, discharge planning, risk stratification, data sharing, collaboration with PAC providers, and patient tracking and follow up. Thank you so much.

Laura Maynard: Thank you, Jessica, really appreciate that. We want to encourage folks to continue to bring in your questions. Now is the time we're going to field a few questions. So if you have some, put them in the Q&A box. And we'll see if we have the opportunity to get to them. You just put them in that Q&A pod, click the little bubble. Your question will only be visible to you. But it's also visible to us so that we'll be able to get some responses.

So Jessica, one question, how was functional status measured in the evaluation?

Jessica McNeely: So functional status is not something that we can get from Medicare claims data. We actually relied on two alternate data sources that we collect ourselves as part of the evaluation. The first thing we did was field a patient survey, and this measure changes in functional status, pain and care experiences. Patients were asked to recall levels before their surgery and then present day. So they received the survey after that 90-day episode, and we were then able to look at the change in both and functional status, pain, and then get a sense of their care experiences from that. We administered it both to patients that were in CJR hospitals as well as patients who received their care from a control hospital. So we could really understand if there were differences in these metrics, and seeing if CJR had an effect on our outcomes of interest.

And second, we measured the shorter term changes in functional status for patients who were discharged to a PAC, an IRF or SNF, or home health. We captured the shorter term changes by using the patient assessments that require to be completed at the start of the end of each PACs day. The assessment based data provide information about changes in functional status and pain, made between the beginning and end of a patient's first PAC stay. We compare the assessment data

outcomes for CJR patients the outcomes for control group patients to isolate the impact of the CJR model. And so for longer term measures of functional status, we measured those through our patient survey, and the shorter term measures were measured using the PAC assessment data.

Laura Maynard: Thank you. And another question that we have, did you select hospitals for participation in those site visits? How did you do that? And who did you interview?

Jessica McNeely: It really varies from year to year. So for this evaluation report, we wanted to really understand the market dynamics, and particularly the impact of the policy change for knees, and possible spillover effects (like changes that are happening within CJR hospitals and how that might affect other hospitals that are in the area). We focused on three mandatory markets that were very different on a number of key factors, like outpatient volume and the population of the region. We interviewed all hospitals that are in CJR, within a given MSA, as well as some non-participant hospitals in three areas (three MSAs). The non-participant hospitals could have been hospitals that were previously in the model (those that were low volume or rural who are no longer required to participate, and starting at the third year) or hospitals that were just outside of the MSA but would have still been within the hospital referral region. In terms of who we talked with, we took a very comprehensive strategy, so that we could get multiple, multiple perspectives. We interviewed executive leadership, as well as frontline hospital staff, and the hospital staff that care directly for joint patients. We also interviewed surgeons and PAC providers associated with these hospitals. I'm not usually able to join, but I have been able to go to a handful of site visits, and I can't tell you how much I've learned from talking to folks actually working on the ground. So I cannot thank you enough for all those who participated, hopefully some of you are on the phone today. There's such a wealth of information that we cannot extract from claims data that we really need to hear directly from participants. We know that it takes a lot of time to prepare for us to come out for a site visit, or even some of the interviews that we did. But again, thank you so much for all who participated.

Laura Maynard: Thanks for sharing that. And another question we've got has to do with seasonal differences in the data. Are you seeing any seasonal differences?

Jessica McNeely: Yes, there are some small seasonal differences in the prevalence of joint replacement. So fractures are more prevalent in the winter months. Although this was really true for both the CJR and Control Groups, so we can't say that seasonal differences explain any of our results.

Laura Maynard: Thank you. Will future reports include what happened in voluntary hospitals?

Jessica McNeely: Yes, so we are currently analyzing data for our next report. We have included voluntary hospitals so that we can understand whether the impact on Medicare Savings differed between the hospitals that were mandatory, and those who opted in starting in the third year.

Laura Maynard: Great, thank you. You mentioned that the impact of outpatient is going to grow in the future. Can you talk a little more about that?

Jessica McNeely: We see a steady, increasing trend both nationally and for the CJR group and control group populations. So more and more hospitals are shifting patients to outpatient. This means that the average cost of episodes is changing. For the third performance year, we see a quarter of patients going to outpatient, but this is expected to increase for performance years four and five. So we saw that CJR hospitals are sending about 10% fewer cases to outpatient. When we account for this difference in our analysis, then the average impact is lower and becomes not statistically

significant for the third performance year. So as more and more cases go to outpatient, this means that the impact estimate is likely to get smaller over time.

Laura Maynard: Great, thank you. Question about earning reconciliation payments: Do you see any difference in the types of hospitals that earn reconciliation payments?

Jessica McNeely: We've been looking at this over the years and really, the pattern has been pretty consistent. Hospitals that are more likely to receive reconciliation payments tend to have higher quality, higher volume of joint replacements, not for profit and served a less complex patient mix.

Laura Maynard: Great, thanks. Question in regard to the TKH shift: Was that really variable between regions?

Jessica McNeely: Yes, the difference was highly variable across the different MSAs. We had some MSAs in CJR that almost no outpatient shift and some MSAs nearly all their patient population was outpatient. So huge variability there.

Laura Maynard: Okay. Another question that came in had to do with one of the slides where they thought it appeared that there were more CJR MSAs in the south of the United States. Is there any reason for that?

Jessica McNeely: Yeah, so there is a slight difference in terms of the regionality. Even though we're selecting these MSAs randomly CMS did set up the sampling criteria to favor higher cost MSAs. So we know particularly in the south, there's higher PACU, particularly for URS. This led to these MSAs having a higher average cost. So they were more likely to be selected to participate in the model.

Laura Maynard: Thank you, thanks for clearing that up. We've had several other questions come in here, they're rolling in quickly. So I'll give you a chance to look at those and see if we're going to have time to address any of those. I want to ask our participants on the webinar some questions to shift gears a little bit. We're going to launch a few polls to get some info from you, as we sort through the other questions that have come in. So first, we want to see what data you find most useful in implementing your CJR program. So take a minute, think through which data is most useful for you, and select all that apply.

All right, still seeing responses come in. Okay, thank you all very much for responding to that. We're going to move to another poll. This one is an open text. So you will need to type that into the poll box right under the question. How do you use the data that you find in the monitoring report?

Right, thank you all. I'm seeing some answers begin to come in. This is really helpful feedback for us. I'll give you just another moment. Alright, we'll move on then to the next poll question. This one is about, what data you use to build or to strengthen your partnerships with your post acute care providers. Again, select all that apply, so any of these that you use. Still seeing some responses come through. Thank you. Alright, we can move on to the next question.

Hang in there, there's just a couple more. This is another open-ended one. Type it right there in the box under the question. What data challenges do you have when you're developing partnerships with your post acute care providers? So are there issues with sharing data with them, with obtaining data from them? What are the types of data issues that you have when you're working with your PAC providers? I appreciate your responses to that. I'll give it just a minute more, we're getting some really good responses. Thank you all for sharing this.

Okay, we'll close this one out and go to the next one. How do you use the data that's in the monitoring report to engage your physicians? Again, type it in that box right under the question. Do you use your CJR monitoring data to engage your physicians, and if so how do you do that? Great, thank you for responding. We really appreciate it.

Alright, we'll go ahead and close out that poll. Thank you all very much for sharing. We really appreciate your participation in our polling. Before we go to closing out and making some announcements, we have time for a couple more questions. So we are going to go back and ask Jessica a couple more. One question came in about multi APM participation: Was this taken into account for the calculations? Can you share a little bit about that?

Jessica McNeely: Yeah, that's a really important question. Yes, we do account for episodes that are essentially attributed to multiple APMs like ACOs. We do this through multiple regression method to account for participation in multiple models.

Laura Maynard: Great, thank you. And another question: Will you be analyzing the potential transfer or movement of patients to the ASC setting in the next evaluation report?

Jessica McNeely: In the next evaluation report, no. There's no plan to look at ASCs. However, we have had that conversation about the possibility in future reports.

Laura Maynard: Great, thank you. Thanks so much, Jessica and thanks for sharing all this great information with everyone. I am going to make a few announcements now to clarify a few things. One is CJR news. So the CJR news is your place to get all the relevant information about CJR, model updates, webinar news, hospital highlights, and all kinds of great information is in there. If you are not receiving the newsletter, reach out to us. The email is there on that slide, [ls-cjr@lewin.com](mailto:ls-cjr@lewin.com). We'll get you on the list. If you think you are on the list, but you are not receiving the CJR news, you might want to check and make sure that we are on your safe sender list that we are not going to your spam folder. Add [cmslists@subscriptions.cms.hhs.gov](mailto:cmslists@subscriptions.cms.hhs.gov) to your safe sender list if you haven't already done that, just to ensure that you will get the newsletter.

I also want to encourage you to log on to CJR Connect. A lot of great resources are there, including resources about the evaluation report. If you want to find the materials about the report, it's there on CJR Connect. In the CJR libraries there's a folder called CJR performance year evaluation reports, and you can find the report right there. The full report also is available for download during this event. If you don't have a Connect account, and you want to be able to go on to Connect to ask one another questions, have conversations and access all these great resources, then go to the link that's on that slide. It is <https://app.innovation.cms.gov/CMMIConnect/IDMLogin>. You pick new user registration, and they will hook you up with a CJR Connect account.

I want to announce our upcoming event on February 10<sup>th</sup> on Wednesday from 2:00 to 3:00. We'll be having a webinar on pain management and CJR model. We'll be talking about multimodal pain management, and we have some of your CJR hospital peers who will be sharing on that webinar. A reminder to send any of your technical or programmatic questions to [cjrsupport@cms.hhs.gov](mailto:cjrsupport@cms.hhs.gov). Any of the questions that have to do with CJR model itself go to that mailbox. If you have questions about this event or about any other learning events or activities, you can send them to us here at [lscjr@lewin.com](mailto:lscjr@lewin.com). Again if you don't have a Connect account, here's the link to get there.

We're going to be having a post event survey pop up for you. That will be coming here very shortly. We'd like for you to take a few minutes to respond. You will notice that this webinar has ended a

little shorter than was advertised. That means you have plenty of time to complete the survey for us and give us your feedback. We really appreciate that; it helps us plan for future events. So take a moment to respond to the post event survey. And we really appreciate your participation. Thank you for filling in those polls and thank you so much for asking questions and participating today. Also, thanks to Jessica for sharing this great information about the evaluation report and for answering your questions. And at this time, we'll conclude today's webinar. Thank you.

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*<sup>i</sup> Please note that this transcript is designed to help organizations implement the CJR model. The Center for Medicare & Medicaid Services (CMS), its employees, agents, and staff assume no responsibility for any errors or omissions in the content of this transcript. CMS makes no guarantees of completeness, accuracy, or reliability for any data contained or not contained herein. CMS shall not be held liable for any use of the information described and/or contained herein and assumes no responsibility for anyone's use of the information. This transcript does not serve as advice provided by CMS. CMS and the Department of Health and Human Services Office of the Inspector General have not verified this transcript as compliant with Title 42 CFR Part 510. Although every reasonable effort has been made to assure the accuracy of the information, the ultimate responsibility for compliance with the regulations associated with the CJR model lies with the provider of services.*