

CJR Monitoring Results: Base Year Through Performance Year 4 Webinarⁱ

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Laura Maynard: Welcome, and thank you for attending this CJR All Participant Webinar, CJR Monitoring Results – Base Year through Performance Year 4. I'm Laura Maynard, and along with my colleague, Lauren Nir we will be facilitating today's session. Our agenda for today, after this welcome we will give a few logistics on how to best use the webinar platform. And then we'll have a presentation on managing complex lower extremity joint replacement patients through home discharges. The monitoring team will be sharing that based on the data that they have. Then we'll have an opportunity for you to ask some questions of that team. Then, a couple of your hospital peers will be reacting to that and responding to their approaches for managing the more complex patients. We will hear from PIH Health Hospital Whittier, and also, from UPMC East. You'll have the chance for some question and answer time with our hospital presenters, and we'll close out with announcements and reminders.

All the phone lines are currently muted. We encourage you to comment, put in questions and reactions through the Chat pod during the webinar. I do want to share with you our notification. The Centers for Medicare and Medicaid Services CMS, its employees, agents and staff, assume no responsibility for any errors or omissions in the content of this webinar. 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. CMS does not endorse any strategies, tactics or vendors referred to in the webinar. The views and opinions expressed in this webinar are those of the participants' and do not represent the official policy or position of CMS.

So, to best participate today, use this Adobe Connect platform. Below the slides, you'll find the Closed Captioning pod. If you want to make that larger, there's a rectangular box in the upper right hand corner. Click that to make this full screen. There's also the option of sizing that, zooming in and out on the Closed Captioning as you wish. If you want to see the Event Resources pod, that's just to the right of the Closed Captioning. You can click there to download those resources. On the other side at the top, dial-in information. If you need to call in by phone, if you have trouble with your computer or audio for any reason and want to call in by telephone, the information is there. Below that are the web links for some items that we're going to be talking about today, including CJR Connect, and the CJR Data Portal, some other resources.

The Chat pod is below that and that's where you can ask questions, and where right now we would like for you to introduce yourselves to each other. To enlarge the slides, you're able to hover above the slides with your cursor. In the upper right hand corner, again, a darker rectangle with some arrows on the outside of it. Click that to make the slides full screen. To return then to the normal size, click it again.

We talked about downloading the resources. There's a picture of how to go about doing that. You can also download all. In Chat pod, just type into the box at the bottom, click the little upward arrow, and you can post into Chat. Appreciate having you introduce yourselves. If you can tell us your name, your organization, your location, that's very helpful for us to know so that we can begin to chat and be interactive with one another. That's also the place where you can put in questions that you may have for our presenters. So if you want to ask a question, put that right into the Chat pod. If it's for someone in particular, use the little @ symbol, and either their name or their organization, and we'll know to ask that question of that person.

So thanks for those of you that are already beginning to chat in and introduce yourselves, we appreciate it. At this time, I'm very pleased to introduce the CJR Monitoring Team, who will be sharing the presentation today. We will be hearing from James Haven, Phil Killewald, and Dhany Tjiptarto. At this time, I'm going to turn it over to Dhany.

James Haven: Thanks, Laura. This is James Haven. I'll be managing some of the introductions here. So thanks again for inviting us. We really appreciate the invitation. We don't do this often, so it's exciting to share our findings after monitoring CJR for the past five years or more. So my role on this project, I'm a researcher in Mathematica's Advisory Services division, and I've been supporting CJR Research for a little over three years now. And I'm joined by my colleagues and co-presenters, let me just put their faces back here, and these are also Mathematica data scientists. We have Phil Killewald and Dhany Tjiptarto. Phil leads much of our work in statistical analyses, as well as generating insights from all types of data. And Dhany, she leads our work mostly on the data engineering side, creation of hospital reports, which we all receive quarterly, as well as just powering our internal analytics infrastructure.

So moving ahead here, I'll give a brief overview of what we do before looking so closely at these bullets. As the CJR Monitoring Contractor, Mathematica monitors compliance with CJR regulations. That's really a big part of what we do. And we also, again, develop the quarterly participant hospital reports. But additionally, and really this takes up a bulk of the work that we do, we conduct ongoing analyses that investigate patient health outcomes as a response to CJR, and we are very, almost hyper-focused on provider behaviors under CJR. We do this with a focus on spending, a focus on quality, as well as access to care, and we spend a lot of time thinking about unintended consequences from CJR, and how providers are responding to CJR incentives. This is really -- this last part, I can't stress enough. It really makes up the bulk of our research and our analytics work.

And when we look across the past few years, and we think about the different sorts of studies we've done on the back end here, much of which your team, actually all the participants don't get to see really, one of the most high-priority topics that we've dug into is really just the home-based discharges instead of using skilled nursing care, especially following a lower extremity joint replacement, especially for complex patients. So here we almost always look at this in terms of readmission among patients who are sent home. And these are complex patients. And there's a few different avenues in terms of how we look at complex patients, one of these is really the CCI the Charlson Comorbidity Index. So this is really just disease burden. We do our best to look at this through social determinants of health, so we use the ADI the Area Deprivation Index.

And going back to the incentives and provider behaviors that we're hyper-focused on, we take a look at financial arrangements. That's kind of an ongoing sort of analysis that we do. Our interest in financial arrangements is really focused on how provider behaviors might change. So this is really in a nutshell the type of work that we've been doing these past few years, and kind of the key topic that we focus on. So I'm going to pass the ball to Phil Killewald now. He's going to showcase various trend analyses and kind of summarize our findings, some key findings across the model year so far.

Phil Killewald: Thank you. Thank you, James. Hi, my name is Phil Killewald, and I am a Lead Data Scientist at Mathematica. I'm located outside of the Cambridge office in Massachusetts. And like James, I have been contributing to the CJR Monitoring Analyses since very early in the model, basically since the start. And as James said, a huge part of our monitoring effort has been focused on measures of hospital care quality and access for CJR beneficiaries with different levels of clinical complexity. Two measures that give us a handle on how a hospital's behavior affects care quality and

access, are the percent of discharges to home-based care, and I'll talk a little bit about that next, and all cause 90-day inpatient readmission. So we use patient complexity as a dimension for breaking down those two measures, and illustrating hospitals' responses to the CJR model.

As James said, introduced so nicely, one of the tools that we use to help understand patient complexity at CJR hospitals is the Charlson Comorbidity Index or CCI. While other measures of patient complexity are baked into the CJR model's target price calculations, like Diagnosis Related Groups and the presence of a bone fracture, they only group beneficiaries by the courses of clinical dimensions, and they can't tell the whole story of patient complexity. The CCI helps us to monitor the CJR model in finer detail than what DRGs can tell us. Originally, it was designed to predict future mortality of patients based on clinical diagnoses, but it's well established in medical literature as a general measure of the complexity of patients, the clinical complexity of patients. It's a single value that summarizes the presence of chronic conditions in 19 diagnosis categories, each being assigned a point value of 1 through 6. A patient's CCI is the sum of the points from all of those diagnosis categories, so a patient with a low CCI, or a value close to zero has few comorbidities and therefore is less complex in terms of care needs than a patient with a high CCI. And in the pool of CJR beneficiaries, high CCI means a value of 2 or greater. We calculate a patient's CCI using diagnosis present, hospital admission for LEJR surgery, so the anchor stay admission.

Discharging LEJR patients to home is the key means of controlling post-acute care spending for hospitals in the CJR model. We have observed this through our monitoring efforts with CMMI, and we've observed that CJR hospitals have indeed been increasing the number of patients that they're discharging to home. So this figure that I'm showing on this slide, presents the proportion of all CJR episodes, where the patient was discharged home, either with or without additional home health agency post-acute care over time. The period covered during the work from which this figure comes was early in the CJR model from 2012 through 2018, Quarter two, with a gap year that you see in the plot in 2015 prior to the start of the model. In this figure patients with different CCI values at the time of anchor stay are grouped together and plotted as separate lines. We observed that the discharges to home increased throughout the CJR model performance period and that increase was not limited to lower complexity patients. So, lower complexity patients, those with a CCI of 0 or 1 are consistently discharged to home than higher complexity patients. So in this chart the red line is consistently lower than the green line. Even those patients with a CCI of two... Can anyone hear me?

Laura Maynard: I believe that those of us who are connected by telephone can still hear you, but those that may be listening through their computers are not able to hear you. Some are and some are not. We are working to troubleshoot the issue for those that are listening through the computer speakers.

Phil Killewald: Great. Should I continue? Or should I pause until that?

Laura Maynard: I believe you can continue now. Thank you. Seems to be resolved.

Phil Killewald: Okay great. Thank you. Hopefully not too much from the previous slide that was lost. But I'll just restart where I was from the beginning of the slide. So with home discharges on the rise - I'm getting a message that I should have a quick summary of the previous slide. I just want to go back and show that. Home discharges are on the rise throughout the CJR model period for CJR patients, and this is true for both low complexity patients, so those with a CCI of 0 or 1, and high complexity patients. Continuing with those home discharges on the rise, even for the high

complexity patients, we wanted to check if the reduction of post-acute care intensity was leading to inadvertent increases in other patient complications.

So the figure on this slide shows the proportion of CJR episodes with discharges to home, that resulted in an all-cause readmission during the 90-day episode window. Episodes here are grouped by the patient CCI at the anchor stay, and by when the episode occurred. So, CCI is along the vertical axis, going from zero at the bottom to three at the top, and episodes that occurred before the model was implemented, are pictured in a lighter bar, while episodes that occurred during the model performance period are a darker bar. We observed a decrease in readmissions for home discharge patients for all levels of patient complexity during the CJR model period, compared to the pre-implementation period. Combined with the increase in home discharges from the previous slide, this suggests successful home discharge care planning and coordination by hospital participants in the CJR model.

I'm going to shift gears a little bit and talk about social determinants of health. CMS has emphasized an interest in understanding how Medicare beneficiaries with different social determinants of health experience health care differently through treatment, access and outcomes. In our monitoring effort, we work to capture the differences between beneficiaries that are not directly measured in claims data. Social and economic factors experienced by CJR beneficiaries can influence health outcomes of LEJR surgeries, and hospitals really have little direct control over those factors. They do, however, have some ability to control which patients are scheduled to receive services at the hospital. So we use measures of the social determinants of health to monitor how the CJR model affects patient access to Medicare services. And to do that, we use the Area Deprivation Index. So the ADI is one of the tools in our tool belt that helps us understand providers' behavior toward beneficiaries from specifically disadvantaged geographic areas.

So created and maintained by the University of Wisconsin's School of Medicine and Public Health, the ADI is a geographic ranking of relative aggregate socioeconomic deprivation. It relies on data from public sources such as the U.S. Census American Community Survey, and it assigns a score of 1 to 100, where 100 is the most disadvantaged, to each 9-digit zip code block in the United States. The measure uses multiple factors to calculate this score, including things like economic stability indicators, education levels, income disparities, the percentage of the population living below the Federal poverty level, and so on.

This table lists some of the monitoring metrics of CJR episodes, broken down by time period. Those are in the columns. So left to right is pre-CJR period, or the CJR performance period, and whether or not a CJR hospital was a typical hospital in terms of serving disadvantaged zip codes by ADI. So that's the top row here that's labeled average. Or, if it was an outlier in terms of serving an increasing share of the more disadvantaged zip codes by ADI. The metrics here are calculated only for DRG 470 non-fracture episodes, the majority of which are simple elective procedures, and what these numbers tell us is that during the CJR model, hospitals lowered the cost of their episodes, used home health discharge more, we saw that earlier, discharged to skilled nursing facilities less often, and kept readmission rates low. What caught our attention was the extreme increase in home health agency discharges for beneficiaries served by the outlier hospitals. So this increased, as you can see from the plot from about 45% to about 66%. But, there was only a small corresponding increase in readmissions from those patients, 10.2% to 10.6%. The fact these outlier hospitals increased their share of CJR beneficiaries from disadvantaged areas while still keeping readmissions low, is another potential indicator of success for the CJR model in terms of access to Medicare services.

We also investigated hospitals with readmission patterns that ran contrary to those presented on the previous slide. We used statistical risk adjustment models to find the 10 CJR hospitals that had much higher readmissions during the CJR period than expected by the statistical model, to try to understand how those hospitals differ from others. This figure presents a comparison of CJR DRG 470 no fracture readmission rates from these outlier hospitals. The left set of bars are the outliers here, so the ones that are labeled high ADI in this plot, to other hospitals in the model. When readmission rates were disaggregated by place of discharge, so either home with HHA support, or home without HHA support, and we looked at pre model versus performance period episodes, a pattern of high readmission rates for high ADI beneficiaries sent home with HHA care emerged, as you can see with this one strikingly large bar on this bar plot.

So this pattern, taken alongside the results from the table on the previous slide, suggests that while on mass, hospitals in the CJR program might be improving access for beneficiaries from disadvantaged areas, some outlying CJR hospitals may be adversely affecting those patients' outcomes by discharging them to lower intensity, cheaper post-acute care, when perhaps higher intensity care might be necessary for proper recovery. And identifying these outlier hospitals gives CMMI some insight into how the CJR model might be improved, and it offers opportunities to open dialogues with these hospitals, to understand the observed behavior, and any challenges that might need to be overcome to achieve better outcomes for Medicare beneficiaries.

So that covers the results that I was going to tell you about. And I think now I'm passing it off to James for impacts from financial arrangements.

James Haven: Yeah, that's right. So thank you, thank you for that. And that was a great set of slides there. So now I'm going to just share a couple of slides and some commentary on CJR financial arrangements. So in line with everything discussed so far, looking at quality of care totally through the lens of readmissions, thinking about incentives and what we're seeing in the evidence in terms of reducing episode spending, and then always we're keeping, protecting access to care for beneficiaries. That's really in the front of our minds. So with those things in mind, we're very interested in the impacts of financial arrangements between CJR hospitals, the surgeons and different types of providers. And really, you know, it's just another play on the incentives. We're really interested in seeing provider changes, if provider behaviors changed, either in the past, and especially now that the rule was changed.

So as we have per the CJR rules, participant hospitals can enter into these risk sharing arrangements. Sometimes they're called collaborator agreements with different providers, and they can be one or two-sided arrangements. So these non-hospital providers can essentially have an opportunity to share in some level of earned shared savings, if there is any. And then on the flip side, they may actually be on the hook to absorb part of a financial penalty, if that occurs, that's the other side. Or, they can operate under an agreement that includes both. And as per the latest CJR rule, there's no cap on gainsharing. There used to be a 50% limit on gainsharing, but that's been removed going forward. So hospitals and different providers have full discretion to craft these agreements and craft risk sharing as they see fit, giving us more impetus to look deeply and to monitor this new feature of the CJR model.

All right. And so what we're seeing here, it's a summary of our finding on CJR episodes that occurred under a risk sharing agreement. So, on the X-axis for this graph here, we have three levels. And these levels describe a CJR hospital's share, a percentage share of episodes that were performed by collaborators. These are really collaborating surgeons that operate in a risk sharing agreement with

the key CJR hospital. And as you can see, the average spending among these hospitals declines as the percentage of episodes under collaborations goes up. So having more episodes under gainsharing, tend to lead to lower total episode spending. That's why we see this declining curve. And there are other analyses where we looked at readmissions and discharge destination among these episodes that occur under collaboration, and what we found is that gainsharing collaborators, they tend to discharge more patients to home without HHA or Home Health Agency support and that there is no real increase observable, or statistically significant increase so far, in the number of readmissions among these patients. So, so far so good. We've got some pretty good news by looking at that data. But of course, there's a new rule in place. It's a 100% flexibility there with gainsharing. We're going to continue looking at this as more data accumulates.

And so now I'm going to raise the first poll question here. So the question is, does your hospital have sufficient access to high quality SNFs, given current and future episode volume? So for context, this is a little bit distinct from what we've discussed so far, but let me just kind of sew it back together. We've done some analyses looking at access to skilled nursing care across CJR hospitals, and what we've seen is that smaller CJR hospitals, and by small I mean lower total CJR episode volume. These smaller hospitals tend to discharge more patients to lower star SNFs, like two or three star SNFs. And that's really just compared with higher volume CJR hospitals. And also looking at other reports and other CMMI models, we understand that high volume hospitals are aggressively pursuing post-acute care networks, building post-acute care networks that include in as much as possible, only four or five star SNFs, so really high quality SNFs.

So we're wondering if there's an access issue among smaller CJR hospitals, and as the model progresses, are certain small sized low volume CJR hospitals, are they getting squeezed out in terms of access to post-acute care? So that's really the motivation behind this question.

So with that said, I'd like to have us launch the poll. So you should be seeing a poll. And I'm looking at the questions. The answer is actually coming through. And as this starts to slow down, we'll report out the results. Just maybe another 10 seconds. Okay -- well no, it's still moving. All right. I think we're at the final results, and if we could broadcast these results to everybody. And I hope everyone can see this. We're looking at 86% of folks on this call believe that they do have sufficient access to high quality SNFs given their current and future episode volume. So that's interesting results. We might follow up and try to take a look at the 14% who did not agree with that statement.

And so at this point, we can go back to the slides. Right. And I will just advance one slide, and pass the ball to Dhany Tjiptarto for this section.

Dhany Tjiptarto: Great. Thanks James. Hi, this is Dhany Tjiptarto. I'm a data scientist, data engineer hybrid here at Mathematica, and I'm responsible for delivering and updating the hospital reports that you all receive every quarter. I'm actually going to shift gears here now that we've wrapped up the analysis portion of the presentation, and speak about future developments in our hospital reports by integrating outpatient episodes. We hope that the hospital reports you've been receiving these past five years have been helpful in understanding how your facility is performing within the CJR model. In the next coming years, the reports will continue to provide you with the same salient monitoring metrics you're already used to for the inpatient episodes, but now extending these same metrics to outpatient episodes, since they're included in the CJR model.

The metrics we see on the screen here are the same ones we're currently using to monitor the inpatient episodes, and like I've iterated before we will extend these same metrics to monitor

outpatient episodes as well. In addition to providing you with these views, you'll continue to receive comparisons to hospitals that are similar to yours, based on peer grouping. You will see relevant peer group comparisons in understanding average outpatient length of stay, trend of 470 no fracture discharge destination, and the spending metrics we see on the screen. We have thought about the fact that these hospitals are calculated using inpatient information and are currently considering if an alternative peer group for outpatient episodes would be more relevant. But of course, we'd love to hear what you think and what your feedback is.

In addition to brainstorming an alternative peer group for outpatient episodes, we'd also love to hear if there are any other features you'd like to see in the report, which actually leads me to a second poll question here, which is, which, if any, of the following elements in your CJR quarterly hospital report do you value the most? Can we launch the poll please?

Seems to be loading here. Some results are coming in. Okay I think we're right at the end there. Can we publish the results here? Awesome. There seems to be majority physician performance metrics here. Okay, we'll definitely take a note of that. That's really interesting. Second in place here, peer group analysis. And again, if you have an idea of what alternative outpatient peer group analysis you would like us to do, please feel free to reach out. And then third in place is SNF performance metrics. Awesome. Great. If we could close the poll and go back to the slides. So that actually wraps up our portion of the presentation, and we will bring it back to Laura for any Q&A.

Laura Maynard: Thank you very much for that informative presentation, all of you. And we are still open to questions. So if any of you have a question for any of the participants, any of the presenters that have shared, please type that into the chat pod, and we will ask that out. The only question we've got at this point so far, is just how frequently the analyses are updated. How often do you update the analyses on the items that you were showing in the analytics portion of the presentation?

Phil Killewald: This is Phil Killewald. I can answer that. Some of the reports, we have scheduled deliverables that occur roughly on quarterly intervals. However, the data that we have access to through the CJR program can be updated whenever necessary. So if, for instance, we are looking at certain results, we're monitoring certain results for other purposes, at a monthly cadence, but because we have a close partnership with the implementation team on CJR if necessary, those results can be updated as quickly as they can run the code basically through the claims. So simple answer to your question, roughly quarterly, but some results come at a faster cadence.

Lauren: Great, thank you. And another question came through into the chat pod. Will data formats be changed when the outpatient data is included? And how much lead time will participants have on any changes?

Dhany Tjiptarto: This is Dhany. I think I can take that. I'm not sure what data formats, and I think you're referring to the actual outpatient files you will eventually receive, but as it pertains to the hospital report, they'll remain -- the display of the outpatient information will remain in the HTML report format that you're used to seeing.

Laura Maynard: Thank you. And I want to acknowledge we got a question in chat. Brandon, I'm going to hold your question because we have a couple of hospitals from among your CJR peers who are going to be sharing their responses to that very question. So we're going to hold until that point, and then we'll talk a little bit more about how you're managing high risk patients that are going home

post discharge. So we'll get back to that one. But we want to hear from our hospitals first. Let's see. Let me just see if any other questions are coming in.

I am not sure about whether this one is one we want to answer now or whether we want to follow up on after, but a question about where to find patient level data for the composite quality scores. Helen is only finding aggregate data. If you can respond to that in some way now, that's fine. If not, we can encourage Helen to reach out about that.

Dhany Tjiptarto: Yeah, so I think we can answer this at an alternative time. And we'll ask Helen to reach out to us.

Laura Maynard: Perfect, that sounds appropriate. Thank you so much. At this point, I'm going to move on along so that we have plenty of time to hear from our hospital presenters. And I'm very happy to be able to introduce Aimee Lee. She's the Joint Replacement Program Coordinator and Quality Management with PIH Health Hospital, Whittier. She's going to share with us some of their approaches to managing these complex patients. Aimee.

Aimee Lee: Hi everyone. This is Aimee Lee. As I was introduced, I'm the Joint Replacement Program Coordinator at PIH Health Hospital, Whittier. We are a -- we actually, PIH Health is a group that is located within the Los Angeles County. Our hospital is the largest of three that we have, currently located in Whittier, California. We have, like you can see there, about 500 licensed hospital beds. And then as far as our CJR patients, our current joint program here has about 100 every performance year.

So I am going to be talking a little bit about just kind of some of the strategies that we've used over the years and have kind of fine tuned to be able to help improve our patient outcomes, specifically in our CJR patients. So one of the kind of first things I'm going to address is how our hospital identifies and manages complex patients for discharge to home. One of the major things that we've implemented a few years ago was; we require every one of our joint replacement patients to see our pre-surgical nurse practitioner for surgical optimization. This involves, you know, assessing basic labs, hemoglobin A1c, albumin, CBC, and a complete metabolic panel. They also assess BMI, smoking status, any medical comorbidities that need to be addressed, as well as social support. And this has been very, very crucial. We actually have gotten to the point where we're able to get to this point before we can do any scheduling. So this has helped us decrease our cancellations, any last minute cancellations where the patient, you know, something comes up where one of their labs is. You know, they're anemic, or something like that. We've kind of been able to prevent that from happening, and so that's been very, very helpful. It has been a lot of work to create that system, but our surgeons have been able to see the benefits of that. So we have continued to do that and had great success with that.

Any issues that are assessed during that appointment, are either addressed by the pre-surgical NP, so you know whether that's social issues, or the patient needs more education, weight loss type of education, things like that. Or if it's a more serious issue or something like chronic anemia, our pre-surgical NP will send them back to their primary care provider to help ensure that the patient is medically optimized. This is also how we obtain things like medical clearances, so that we don't have any of those things come up where we're waiting for a clearance to come through. We know that the patient is medically optimized before surgery, and we can go ahead and move forward knowing that they have the highest chance for the best possible outcomes.

The patients are also provided with extensive education at this nurse practitioner appointment. We have a specific joint replacement binder with specific education for each surgery. So each patient that has, whether it's a total hip or a total knee, they each get their own binder that includes basically information from the preoperative phase, what kind of appointments they need to go to, what the surgery is going to be like, what the expectations are while they're in the hospital, and then also what the expectations are when they're going home and recovering at home.

One of the biggest things that we try to explain to our patients is that really our goal for them is always to have them go home. We do tell them that you know, about 95% of our patients go home the next day. We have recently launched our outpatient program where we specifically select patients that are what we call rapid recovery patients that can be discharged the same day, but the majority of our patients right now are going home post-op day one. So we are really able to explain to the patient the only reason that you'll be staying longer is if there's something that happens that's kind of unforeseeable, like you need more physical therapy, training, you know, there's a medical condition that we need to make sure is under control before you can go, things like that. So we kind of have these certain criteria that we establish for patients that they're medically stable, physical therapy goals are met, their pain is controlled with PO pain medications, and that they're able to eat, drink, go to the bathroom, things like that. So the patients really understand what the expectations are of them. They understand that that's the plan, and I think that that's been very, very successful in allowing to decrease our overall length of stay.

Other education that's given to our patients, we do offer, currently it's online due to COVID, a joint replacement class that all patients are required to attend with what we call their recovery coach, which is the person that's going to be attending all their appointments with them, and the person that's going to be trained when they are in the hospital on how to assist them at home with physical therapy, with their precautions, with things like that. So we do put a large emphasis on ensuring that their recovery coach comes with them to these appointments, attends a class, and then we also have our prehab which is a pre-surgical physical therapy appointment that our patients are required to go to basically to ensure that their home environment is set up, that they understand what kind of equipment they might need, and that we can kind of do an initial assessment on any issues that we might see, whether the recovery coach is somebody that maybe has trouble getting around themselves. Those are all things that we can assess and educate the patient beforehand. So we really try to do basically as much as we possibly can, especially for those complex patients so that we can ensure that we can get them discharged home.

Some of the other things that we do specifically to prevent readmissions, while supporting that early discharge to home, we do try to call our high risk patients the day after surgery to ensure that everything has been okay during that first 24 hours at home. We also do usually send patients home with home health, and kind of set that communication with the home health company to make sure that they know kind of what is going on with the patient, what our expectations are. And then if any other issues arise, we explain that they should be able to follow up with us. If they need anything, they can always reach out to myself or our team. And then really, it's just through that repetitive education that we're providing the patient about what to do if they have some kind of issue.

So we do give the patients basically what we call a post op tree which basically explains if the patient's having this issue what should they do. So should they go to the ER if they're obviously having shortness of breath, chest pain, things like that. If they're having pain that is not getting controlled by the pain medication, we encourage them to call the surgeon's office. And then if it's something like they're having constipation, we encourage them to call their primary care. So that

really allows the patients to be able to see what they need to do, who they can contact when they're having any issues. And then of course, I am always available to them by telephone, if they need anything as well kind of Monday through Friday work hours. But really just ensuring that our entire team from pre-op to surgery day, the post-op, home health, that we're all giving the patients the same education, the same message, so that the patients can feel comfortable and confident in their care. And then again, to ensure that that recovery coach that they've selected, has a thorough education and training so that when the patient gets home, they may feel slightly overwhelmed right away, that recovery coach is there to really help them make that transition to going home, remind them what they need to do, help them with anything that they need, and so on.

The last portion is working with our post-acute care providers to manage that skilled nursing facility length of stay for those more complex patients. Like I had explained earlier, we really are pretty aware if a patient is going to be needing a skilled nursing facility through that pre-surgical assessment. Usually its patients that either are currently residing at maybe a skilled nursing facility on a custodial measure. Maybe they live in assisted living. Maybe they don't really have any home support. Those are things that we usually really have clear expectations and we will kind of reach out when we determine which skilled nursing facility the patient wants to go to, and we'll kind of explain what our expectations are. We already have a lot of great relationships with local skilled nursing facilities that have great Medicare ratings, things like that, that we utilize, and so that really has helped a lot.

To be honest with you, again, the majority of our patients do go home, so it's becoming less and less of an issue having to connect with these skilled nursing facilities. But again, kind of explaining what our expectations are for these patients checking in with them every few days or so, seeing what's the patient's progress, is there anything that we can do to help, things like that. And then obviously utilizing those preferred skilled nursing facilities, the Medicare star-rated skilled nursing facilities. Luckily, being in Los Angeles, we have a great many of those that we have access to, that our patients have access to, and so we are very fortunate in that. Those are kind of the main questions that I wanted to answer. If anybody has any questions, I know we will have time for that. But I'm going to hand it back to the CJR team.

Lauren Nir: Great. Thank you so much, Aimee. And if you have any questions for Aimee, please continue to enter those into the chat. But for now, I'm actually going to turn it over to our next hospital speaker, Beverly Fratangelo from UPMC East. So welcome, Beverly.

Beverly Fratangelo: Thank you. Can you hear me?

Laura: Yes, we can.

Beverly Fratangelo: Perfect. Okay. I am so excited to share the successes of our CJR Program here at UPMC East. We are a community facility, but we do belong to a large system, a UPMC system, so our questions and the way that we do things here are a little bit different just because we're a little bit outside of the city. But as far as identifying and managing our complex patients for discharge home, UPMC East also begins with pre-optimization of their patients. We start in the office. The doctors are very engaged, do a sit down with the patients and then before surgery they have an office visit with the nurse. They coordinate with myself who teaches the pre-op classes. We do have hardline BMI criteria. We do try to modify that BMI to less than 40. We do offer nutritional and dietary consultation to assist the patients to achieve that goal. But also, the second focus of our modifiable risks, we do look at smoking cessation because we know the outcomes are much better when

they're not smoking before, during, and after surgery. So our surgeons offer smoking cessation consultation. We do exhaled carbon monoxide test in the office. We get a baseline, and then a week before surgery and then again day of surgery, the patients are again tested. If they blow higher than a seven parts per million, their surgery is canceled until they can prove to their surgical team that they are serious about good outcomes after surgery.

So our surgeons are so committed to this that they spent two years doing research and just published their findings earlier this year. So I'm very proud of the surgical team that's been working hard, and the patients that have worked with them in this research. The pre-testing of our patients, most if not all of our patients, pre-testing is done here at our pre-testing center at UPMC East. And those providers do the history and physical. They do the lab work. They do a chart review, reaching out to any specialist, be it cardiac or endocrinology, that's the providers that are going to do that. They also inform our surgeons and our surgical team, so that everybody is on board, everybody is on the same page with each patient. If they do find any abnormalities like nutrition, or if their A1C is above seven, again, they reach out to their PCPs. They reach out to dietary and try to coordinate care so that the patient can have their surgery in a timely manner and hopefully we're not postponing or cancelling.

The patients also are required to attend the Total Joint class and to do a pre-physical therapy. During the attendance of these classes, and the therapy assessment, they learn how to do low impact exercises to help with conditioning of those muscles that we're going to be asking them to use after surgery and start some muscle memory. When we see them after surgery, their muscles, and they can be still with anesthesia and still when we say can you do a leg lift, can you do this, they are really able to do that, because they've been doing the exercises for at least four to six weeks before. We prepare them to have a safe home, lighting, tripping hazards. We also tell them what the expectations are while they're in the hospital, what to expect what our teams will do once they get here, and what their expectation is once they go home. We give them printed materials as well as online education. So everything is the same, they just have different avenues that they can access it. And everybody learns a little bit different, so if you need a hard copy as opposed to a computer in front of you, we offer multiple different ways of getting that education out.

I do teach in-person classes as well as virtual classes. So I try to capture everybody in whatever way they can attend a class. We do also ask for a support person, and we do make that the patient's responsibility. We do tell them early on that this is a team approach and you are a part of the team. Everybody has roles and responsibilities that they need to follow. And one of the roles and responsibilities of our patient is that they need a support person, someone to bring them to the hospital, someone to drive them home from the hospital, and someone to support them once they get home from the hospital. Prior to discharge, our home care liaison sets up home therapy, and those home therapists will see the patients two to three times a week up until their first post-op visit.

To prevent readmissions here at UPMC East, while supporting an early discharge, I will tell you in 2020, at UPMC East, 87% of our patients were discharged home with less than 2% readmitting within the 30 and 90 days post-op. So we're very proud of that. UPMC has a same day discharge that we've been working on for several years. And I hate to say that COVID has helped us, but when we did come back to do surgery back in April and May of 2020, patients were requesting to go home the same day, which really helped us with our same day discharge here at the hospital. Now it's in the community that we do and are very successful with same day discharge, and patients are actually seeking out our care just so that they can go home the same day. So we do start that discussion of

discharge, in the office. We reinforce it and answer all their questions in our classes, and then we continue day of surgery. Our anesthesia uses short-acting spinals so that patients can get therapy within a few hours of their surgery. They usually get at least two therapy sessions before they go home. And if they stay overnight, they will get two therapy sessions before they're discharged.

Our surgeons' answering service and office numbers are provided during class. They're also given in the discharge papers, and they say that the patient can call them 24 hours a day seven days a week with any post-op questions or concerns. The providers usually will call them back within 30 minutes, answer any other inquiries, and if need be, they will make them an appointment in the office the next day. If it is on a more urgent need, they will absolutely send the patient to the ER. But normally it is not of an urgent message that they're leaving and making a phone call at 2 or 3 in the morning. All of our patients, whether they are same day discharge, or stay overnight, one or two nights, get contacted within 24 hours of their discharge from one of the nurses at the hospital to check on them to make sure they're okay. So our ED avoidance strategies, UPMC as a system has a notification via email when a patient goes to the emergency room. So if they're in the ER, the surgeon, the surgical team, and the nurse navigators within the hospital, get an email notification that tells us that we can go down, work with our emergency room staff, help with coordination of care, and then I usually try to do a follow up phone call once they're discharged just to make sure everything is okay.

So, to work with our post-acute providers, to manage our SNFs and length of stay, like I said, the goal is to go home. So that discussion begins in the hospital. So every patient plays a role in ensuring that they're healthy as they can be, getting their house ready, making meals and freezing meals so that they're not standing for long periods of time in the kitchen. All goes to helping them get home safely. So normally, skilled nursing facilities are reserved for our more complex patients who are revision and bilateral joint patients, although we know each patient has an episode of care that is definitely individualized. And I will say most of our revision and bilateral joint patients also go home within one to two days from the hospital. So because this is elective surgery, we ensure that our patients are as healthy as they can be, and this gives them the best opportunity to go home. But if they do go to a skilled nursing facility, they obviously have freedom of choice. Our care management team offers the three star ratings, three star or above facilities to choose from when the patient has no specific choice.

So UPMC as a system, has post-acute preferred providers who we partner with to deliver skilled nursing care to bridge our patients from hospital to home. So these facilities need to provide monthly report to our UPMC leadership with their quality metrics, their infection rate, their patient experience, as well as their average length of stay. So we are trying to do everything we can to make sure we stay on top of our patients, and make sure that they have the best outcomes possible. And I'm going to return this back to Laura and the team.

Lauren Nir: Thank you so much, Beverly. And in the interest of time, we do know we are over. Thank you all for your understanding and participation with the audio issues earlier. We did go a couple of minutes longer. We just wanted to say thank you so much to all of our presenters. We are going to wrap things up here. And this is a photo of Beverly's wonderful hospital.

We have been collecting all of your questions here in the chat. We probably will not be able to answer them today, given the time constraint. But we are going to collect them and we will connect with our presenters to get them answered, as many of them as possible, and we will share them on to the CJR Connect site. So if you do have any other questions, please continue entering them into chat, we are collecting them, like I said.

Also, we did have a couple of discussion questions here that we would like for you to consider. And if you would like, feel free to share your experience in the chat or on Connect as well. The first is how does your hospital manage complex patients for discharge to home? The second is how do you work with your post-acute care providers to manage SNF, length of stay, for more complex patients? And finally, our leaving in action question, what have you learned today that you think you can use at your hospital moving forward?

So, on this slide here is the notice that Laura read to you at the beginning. I'm not going to read it again here, but it is here for your awareness. And just log in today to Connect if you want information on how to do that. It's here on this slide which is available for download in the Event Resources pod underneath. We do have an upcoming event in July on Performance Year Six, Reconciliation Methodology, so if you are interested, that webinar will be on July 21, 2021, from 02:00 to 03:00 p.m. Eastern. Registration information for this is available on the slide here and will also be sent out via email.

If you have any follow up questions that we did not get to, and you have not entered them into chat, you can also email them to us at LS-CJR@lewin.com. You can also contact CJRSupport@cms.hhs.gov for any technical or programmatic questions related to the CJR model. You can also email CJRSupport@cms.hhs.gov to request data, request an attestation form, or make any changes to your points of contact on that form. And then finally, the link here again, gives you access to request a CJR Connect account. And finally, we are going to put out a post-event survey to you all now. If you could, please take a minute or so to complete that. We do use that information in planning future events. Thank you all so much. And thank you for bearing with us for a couple of extra minutes today. Have a great rest of your afternoon.

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