Jonas Varnum: Very excited to be here today to talk about bundled payments. There's a lot going on in it, so thank you all who have taken out your time this afternoon on the East Coast, that'd be, hope it's a good afternoon on Salt Lake area and West Coast, good morning. We do have a lot to cover today.

Jonas Varnum: I think today's conversation's going to be both high level and get into the weeds a little bit, and we're going to start with understanding a little bit about what's new and really just what is a bundled payment and what is that as a concept? Where does it fit? We will talk about the ramifications that bundles can have across organizations and within specific areas, hospitals, et cetera, ACO's. We do want to think through a good ability to have a diligent process and have structure that allows us to identify not only opportunities to succeed in bundled payments, but then what do you do, how do you track that or how do you get ready for success?

Jonas Varnum: Once you're ready for success, how do you operationalize tactics to make sure that that success actually occurs over time? Lots of different topics today. I think we're going to have relevant portions for a handful of domain areas, so if you're a clinician, if you're a data analyst, you're a finance analyst, I think especially about leveraging data, look forward to that conversation with you, but want to cover a lot, so I'm going to just dive right on in here. First, we're going to start with what is a bundled payment?

Jonas Varnum: Coming out from bundled payments, it's a type of payment model really, and the reason why we've been talking about payment models in healthcare over the last few years is that we've realized that our expenditures are just growing at a really rapid pace. I think everybody's been introduced to this concept across our nation of well from a handful of different areas of conversations, but at the end of the day, one in about every $6.00 right now is spent on healthcare, so you think about the money in your wallet and the $20 bill, and really, three to four of those dollars are being spent on your health. That's a big challenge that, if we solve it, it's going to be extremely impactful to our overall populations, which that kind of idea has really driven this conversation into how do we make populations healthier? I think we've seen a lot of different definitions of population health management come into the marketplace over the last few years. I think they're all pretty much true. They're all accurate.

Jonas Varnum: I think that you'll see pragmatic and aspirational goals that are really focused on one area, population health management, and I think they're absolutely accurate. Today's focus is probably closest to this contract-based focus, where bundled payments is truly a type of payment model that provides incentives to rethink how we are going to deliver our healthcare system and our healthcare operations, so it's a much more of in that middle partners healthcare definition of a contract-based focus of population health management. The reason why it's important, though, is because it's another tool. Essentially, it's another model that really incentivizes us to get beyond a fee-for-service type architecture.

Jonas Varnum: This is a slide that I think, if you all are familiar with the Healthcare Payment Learning Action network, it's a group of both public and private stakeholders who have come together and really identified different categories. I think a lot of people have adapted that and built off of that, like Partner's Center for Population Health here to create a goal for them and themselves internally as Partners has, but also to listen to the Healthcare Payment Learning Action Network's goal of trying to hit alternative payment models as a large percentage of their overall contracting type quickly. The first goal that we've really seen was, by 2018, can, nationally, we have about 50% of these alternative payment models, and we're getting there. It'll be interesting to see the data.

Jonas Varnum: By 2016, when the last time we saw a good snapshot of how many bundled payments and other category three, or alternative payment model, contracts there, we were right at that goal, that 30% goal, so this is something that we're seeing people change to adapt to. Bundled payments fits inside that conversation. The question becomes, well, how do you manage population health in terms of an operational structure and what do we do to really start attacking all of those different payment models? How do we change? What do we do to transform?

Jonas Varnum: At Catalyst, we've sat back. There's a lot of different areas that you need to focus in on, but these three are the core, and it starts with data transformation. Before I dive in a little bit here, just keep this slide in mind as we go through our conversation today, that data transformation, analytic transformation and then both payment and care transformation that are symbiotic of one another, those three areas are extremely important for us across all of these payment models. We'll have a lot of conversation, and this framework will come up a lot today. With data transformation, you're prioritizing different data sources, you're using different data sources, and you're storing them in a very specific location, you claim them so that when you need them and want to use them, you can.

Jonas Varnum: When you do use them, you're, generally, using them to identify opportunities in the analytic transformation space, and then as you surface your opportunities, you're building care redesign models and you're leveraging different incentives to really say, "Well, here's a good carrot to make myself change, and I'm going to." That's what bundled payments really is, it's inside that payment transformation area, but it requires all these data transformation and analytic transformation and care transformation components to be successful. Here's, probably, a more simplified definition of both bundled payments, sometimes you'll hear it be called a Clinical Episode Payment Model, or just a Clinical Episode, and it's a system that allows you to pay providers to model, that pays providers across the continuum of care for a tightly-defined set of clinical services over a set period of time, and that payment is in a general, single sum of money across all of those services across the care continuum. If you break that down, those are the categories, and I think we've seen a 90-day bundled payment as a set period of time.

Jonas Varnum: You've seen that we've created accountable care organizations where we're paying providers that are in the post-acute realm and the hospital realm, so the care continuum continues to align with other models. Your periods of time for clinical episodes are very consistent, generally about 90 days, sometimes less than that. CMS has really been the biggest payer that's led some of these adoptions. This is the newest iteration of bundled payments from them, it's called the BPCI Advanced Program, and we'll be talking about that today.

Jonas Varnum: In 2015, CMS came out with a proposed rule for very specific mandatory models. What actually happened was by 2017, they said we're only going to adopt a few. We're only going to adopt them in certain markets, and that became the Comprehensive Care for Joint Replacement Initiative with CJR. There are still some mandatory bundles, as long as you're in the right market. Oncology Care Model is another example where we're caring for a tightly-defined set of clinical services related to oncology that has its own definitions and own set of specific model construction that is an episode of care, it's a bundled payment type model.

Jonas Varnum: We definitely have seen employers attack this space. Commercial bundles are becoming more and more of interest as organizations are seeking to scale some successes, so there's definitely more than just the CMS world. I think, as we look at what you need to do to be successful and how do you create an infrastructure that can then be scalable, you need to think about those components of what's included in an episode of care and then think about how you want to scale whatever successes you already have across your organization. At the end of the day, when you look across these components, again, this is a diagram from that Healthcare Payment Learning and Action Network, you see that there's patient population information where you're defining a specific group of patients, you're in a payment price or an episode price model that's very similar to a total cost of care model, and I'm just calling out some similarities to what the goal of the ACO movement has been, which is just to reduce annual total cost of care across the care continuum.

Jonas Varnum: At the end of the day, I think bundles have a lot more impact, sometimes directly in the hospital area is just a way to start some clinical variation. We'll touch on that. You want to scale your infrastructure, and whether that's inside a system area with a health system that has current population health management team well established, that has that data transformation, the framework ability, or if you're in an ACO, you really want to scale your successes to maximize your ability to deliver on bundles. Actually, this is my teaser slide for you all of how do you actually succeed? Which the two biggest areas are clinical variation reduction and then care transformation redesign.

Jonas Varnum: If you're on the left here with clinical variation reduction, you're going to see that across the continuum of care. You're definitely going to see great opportunities inside the inpatient hospital depend upon the type of bundle, and depending on your internal hospital or health system, and then, on the care transformation, again, it's across the continuum, what we normally see people

being very interested in as opposed to acute environment. We'll talk about all of the areas that you need to touch on later. Let's focus in a little bit more on bundled payment for Care Improvement Advanced, CMS's newest initiative.

Jonas Varnum: I'll go over that at a high level here. I think CMS has done a great job of making everybody educated on this topic, but a couple call outs is it's an Advanced Alternative Payment Model, which means that there are quality metrics that you are held accountable to and that you have a maximum risk or gain percentage that's pretty high, and for BPCI Advanced, it's 20%. You have a historical episode price that then gets created into a target price with a 3% adjustment, so you have to save 3% to meet your area where you can receive gain share, essentially. There's up to 29 Inpatient Clinical Episodes and they've added three Outpatient Clinical Episodes, and there's some waivers, as well, on this BPCI Advanced program where you have the ability to just have options for our post-acute care space, especially with Telemedicine, your three-day sniff waiver, there's a whole health waiver.

Jonas Varnum: You know what's interesting is we've haven't seen a lot of waiver adoption. If you look at Lewin report, I'll touch on Lewin a little bit more, but I think, in reality, we just want to see more waiver adoption, if it makes sense. The biggest thing about BPCI Advanced that I find valuable, I hear a lot that it is valuable, is that it's just another tightly defined program that gives a construct for us to look at how we can continue to transform our operations, so that framework for transformation slide that I mentioned, I'll bring up a few times. When you scale that, you have the ability to really drive down costs across populations, and this CMS model, it's tightly wound together. It allows for national change, I think that's important to call out.

Jonas Varnum: We're getting ready for our first poll question. Sarah, I'm going to pass it back over to you, but these are just a recap of what those bundles are. I think the next poll question, we're in the BPCI Advanced specific realm, but if you're not interested in BPCI Advanced and you're just interested in episodes of care, answer it as holistically as you want. I'll pass it over to you Sarah.

Sarah Stokes: Yeah. Based off of that last slide and everyone taking a look at those different categories that were presented, we're interested in knowing, how many Episodes of Care does your organization anticipate participating in during 2019? Your options here are one to three, four to six, seven to 10, 10 or more, or not applicable. You're just kind of exploring things, so we'll just leave this poll open for just another second here. We're getting some good responses in.

Sarah Stokes: All right, we'll go ahead and close that and share the results with you. Looks like 16% said that they were going to be exploring one to three, 12% said four to six, 2% said seven to 10, 11% said 10+ and 58%, so the vast majority here, said not applicable at this point.

Jonas Varnum: Okay. Thank you.

Sarah Stokes: Back to you.

Jonas Varnum: Great. Thanks for that. Not sure if we have those results, but I think I heard you say 16 and 13 for items one and three, and about 30% in the six or fewer area, that makes some sense. I think that the more that you can focus in on specific episodes of care and scale them over time, this is the second iteration, so maybe you've had some success in one or two episodes and you're wanting to continue to build upon that, I think that's still very much what we're seeing and what I definitely have heard as people are evaluating BPCI Advanced right now. What does a patient perspective look like inside an episode of care and in particular, in BPCI Advanced?

Jonas Varnum: Again, I mentioned bundles have a specific time limit, so here, the time limit's 90 days inside BPCI Advanced, so what happens is, when a patient starts and gets admitted into a hospital, that's a day one, it's called a trigger episode, and we have to follow that patient from a specific point of time that starts at the trigger and then ends at that close date of 90 days. All of the costs associated with the patient's movement, with a few exclusions, whether that's some specific readmission exclusions and a few other things that can happen to a patient over that stay, we're going to be tracking that cost and comparing it to a benchmark price. At the end of the day, the goal is really to reduce this total cost of care. Remember that you get a bonus, you're up to 20% gain if this amount of total cost is actually reduced during this stay.

Jonas Varnum: Just following the path and patient here, patient, generally, can get discharged to a post-acute care environment pretty quickly after an inpatient stay. Maybe it's a lot longer after an inpatient stay, but you want to understand how long it takes before a patient's discharged, and then day 11 here, I love to make sure that all patients are followed up appropriately. Sometimes you see that, sometimes you don't, but maybe a patient's followed up with a physician at end of post-acute care space. Sometimes a patient will just be discharged from the post-acute space directly to home, sometimes it'll be directly from the hospital to home, but at some point, patient gets to go home, and then, hopefully, the patient is not readmitted.

Jonas Varnum: Generally, depending on the type of service, you can see a lot of readmissions. What's great about the BPCI Advanced area and about bundles in general as a system is that all of this information, the post-acute care and the home health information, that's generally happening external to a lot of data sources that organizations use originally as their single source of data. We see that come through in claims, so we can see all of this information about a patient's care in the claim line level. It's very helpful for us to understand a patient's story.

Jonas Varnum: With BPCI, I've mentioned the baseline prices and target prices and data analysts, I want to get a little bit weedy with you, as we just received some of the claims data from CMS. I think everybody got it by June 8th this year, which was a little bit delayed, so you have a baseline time period where organizations are saying, "Well, what have you, historically, spent on this type of a clinical

episode?" CMS and BPCI Advanced use a four-year baseline period from 2013 to 2016, from January 1, 2014 to December. They put some regional characteristics, some hospital-specific trends and a couple of other trends, and they created a target, a historical baseline price, circle benchmark price, and then that price is actually to get to a target price.

Jonas Varnum: They said, "Well, you have to save 3% on that historical benchmark price and then we'll give you the savings after that 3% discount, then we'll allow you to gain share on those savings." I think the thing that I want to call out to the data analysts here is sometimes you get benchmark prices that are not exactly the same information that you get in your actual target price look, so very specifically here, just keep in mind that some of these aggregate files we just got from CMS have four years of baseline and benchmark information, especially around volumes, but then your target price information and your raw, I'm sorry, your raw claim line information is really just three years of historical claims, so there's a little bit of trickiness always as you're trying to understand opportunities in side your target price. The biggest thing I'll call out on the target price is for your historical performance period. In BPCI, the performance period's a little bit different. There's nine-month first performance periods, starts October 1, and then it ends June 30th of 2019, and then we only have a six-month performance period throughout those two performance periods. Our benchmark reduction will stay at 3%, so our target price will be 3% below our historical benchmark price, but then it could change.

Jonas Varnum: We're missing a date there at the end, sorry about that, but the 12-30, it does end, right now, BPCI Advanced, in December of 2023 is what's anticipated. CMS will update, or they may not, that historical discount price around the January 2020 application time period. I mentioned that as part of the Advanced Alternative Payment Model, the quality metrics are included as a core component. What's good is there's really only two that are 100% applicable to all episodes, those are those first two, hospital readmission and the advanced care plan.

Jonas Varnum: As you're thinking about how to get ready for tracking quality across systems, it's important to start working on those quality measures as soon as possible, but those are the ones that we're going to be focused in on pretty immediately, if you haven't already, as far as building out those specific definitions and gathering them, and then the episode-specific quality metrics. It just depends on which types of episodes are the next five there that are listed. Finally, CMS's timeline here that's coming through for BPCI is, I think, by August 1, we've got to actually have our episode selected, and so then we knew that in March, we thought we'd get data at some time, and there was just a little bit delay. I'm sure it's causing headaches for a lot of people, but we've got some good data this year, I think.

Jonas Varnum: I will say that June and July, and even really before June and July, in April and May, if you are able to and still today use additional data sources to dive into your opportunities, I think that was extremely helpful and can really allow you

to see that teaser type of a slide of clinical variation. You can definitely see your clinical variation opportunity by looking beyond just the claims data, so claims data has got your target price, it's very helpful to have, but if we're just looking at true cost reduction, don't be afraid to look beyond the historical claims data. That's all safe for now, as we get in the due diligence conversation here of my slides. Lastly, we're going to be submitting our clinical episode list by August 1 and then September 3rd. There's a big carry design, it's probably your biggest additional document. Some Financial Arrangements List will also be due, a Physician Group Practice List is important for a lot of different entities.

Jonas Varnum: Those additional documents are due September 3rd, before the October 1st start date. What data sources should we think about? I just, maybe, hinted at them as we're looking at how to diligently evaluate our opportunities in episodes of care. Sarah, I'll turn it over to you.

Sarah Stokes: Yeah, so we have another poll question for you all. We're curious to know, analytically, how have you evaluated BPCI Advanced opportunities? Your options are have you reviewed BPCI Advanced claims data? You've reviewed the Advanced claims data and other claims data, you've reviewed multiple different data sources, none of the above, or not applicable.

Sarah Stokes: We also want to take this chance to remind you to submit any questions that you might have for our Q&A that is coming up here at the end of the session. All right, just one more second. All right, and then let's share the results. 9% said that they've exclusively reviewed BPCI Advanced claim data, 11% have also reviewed that data, in addition to other claims data, 27% have reviewed multiple different data sources, 11% are none of the above and 42% said not applicable at this time.

Jonas Varnum: Great. 20 and 27, one and two's, yeah. First of all, good to hear a lot of people have been able to access and shift through that claims data. I think reviewing other claims datasets, again, as the ACO operations are getting more and more scalable, using other claims data that might not be the identical patient population but allows you to view very similar populations and opportunities, very helpful. You can definitely view your post-acute opportunity through other claims datasets.

Jonas Varnum: Multiple different data sources, really excited to hear. That's where a lot of organizations have started tackling. Actually, that's the next this conversation is, diligence wise, for any episode of care and definitely bundles, what do you look for from your data sources to provide a good view of your opportunity? The first is your EMR. I think that, first of all, your vast majority of clinical variations going to be captured inside your anchor information and inside some of your inpatient information, so your EMR data, your clinical and costing information, use that as a first-level analysis, absolutely.

Jonas Varnum: Claims flies are really helpful for your post-anchor opportunities. I think the biggest thing that I'll say is that if you can benchmark that information and the

EMR information, I'll elude to a Health Catalyst that we call Touchstone, that's a benchmarking system we built, but it really allows you to see how you compare against good KPI's during your analysis, so do you have the ability to have a length of stay opportunity or a 30-day readmission opportunity just as a KPI? As far as reducing those KPI's, from a benchmark perspective, that's really valuable early on for you to see how you're performing, so think about those as your first level of analysis as you're evaluating bundles. You do want to use the payer's claims data as the single source of truth, I think I've just eluded to how with BPCI Advanced, that payment structure has their own set of rules and you really have to follow that benchmark and target price and their claims data to make sure that you're playing their game, if you want to receive the gain share there.

Jonas Varnum: How do you use those different data sources and then create value? If you follow my transformation logic here, my payment, my framework for transformation from that first slide early on I eluded to in those trees with step one being data transformation. It really starts with data transformation in aggregating different sources of data, and then placing them inside a data operating system, an EDW that allows you to clean all that information to combine it, so you're combining you're EMR information, you're combining your claims data, you're combining your different data sources, and then, as you combine them and clean them, then you can run whatever intelligence you want against them. Let's focus in on a pure use case here with bundled payments where, if you have an episode ID that's got an attending provider, and then that attending provider, you can match up to your EHR information and then you can really identify different metrics across both claims and clinical and show opportunities for variation reduction.

Jonas Varnum: I think that, actually, I'm eluding to step two, so you want to use that data from all these different data sources to determine the opportunities, both within your inpatient settings, but also across your continuum. The other thing that I'd say is really important for bundles is you need to align your data with more of a qualitative perspective. How does this actually feel across our organization? Does a congestive heart failure type of initiative, an episode of care, does it actually make sense for us?

Jonas Varnum: The way that we've done it over here at Catalyst has been this, I think we've seen a lot of different opportunity matrix up there, but the goals are probably similar with however you want to evaluate your opportunities and bundles. You want to identify strategic volume, you want to make sure, from a quantitative perspective, that there's opportunities across very important cost and operational, financial KPI's and metrics, and that quantitative snapshot, again, using different data sources, those quantitative snapshots should not have just EHR or just claims information, it can have both, if you want. It's just more powerful that way. That snapshot can give you a really good information and early insight into, then, taking that into a qualitative evaluation.

Jonas Varnum: Okay, it makes some sense on paper, does it make sense across our organization? Is there a physician champion? Could we have some readiness

across the specialists to take this on or are the specialists already in so many different initiatives that maybe it doesn't make sense? What's it look like from a care management perspective and care transformation model? I'll get into that a little bit.

Jonas Varnum: These are some of the goals. I think the end stage of using an evaluation matrix like this is you actually not only can see whether or not you'd be successful inside one particular program, like BPCI Advanced, but also just do we have variation and opportunities to improve over time? I think there's multiple ways to slice up this quantitative analysis, but the qualitative analysis will continue to better that. You can also start more qualitatively.

Jonas Varnum: Do we even want to tackle a cardiology type of the service line? What does a qualitative assessment really look like, though? I think that's something I've heard people ask. Really, what you want to start with is a perfect state or an ideal state, and really, you can see those in readiness assessments. If we really want to be here, and here we are, what do we have to do to make some changes and to improve?

Jonas Varnum: Readiness assessments is something that really identifies the next tactical approaches that you can do across your hospital, your service line, your continuum. I think care management is very much something that should be assessed, and maybe the care management components that impact redesign within bundles. How do you start generating some feedback inside these qualitative assessment areas? Who do you need to seek out? You're really going to be seeking out a whole bunch of different domains.

Jonas Varnum: You need to include clinical buy-in early, and buy-in's not even the right term, it connotes that you are really interested in just running with a project and then, all of a sudden, we're going to rope people in. No, you need leaders early on, and then, finally, make sure that the people that you're working with for tactical initiative identification are involved, strategically both a quality level and an operations level. Sorry, I was expecting another poll, we don't have another poll here. Lastly, we're going to be talking a little bit more about operationalizing that bundle success after you've created your matrix.

Jonas Varnum: We've left the analytic transformation land of our framework for transformation, and we're getting into both payment and care transformation and what that really means. For payment transformation in bundled payments, I don't want to minimize the fact that there are really good incentives now to align with providers across the continuum to maximize care variations. Gain sharing's very important. It's one of the keys to the bundled payment program.

Jonas Varnum: We actually now have dollars that we can share with the clinicians who are impacting our clinical variation programs. I think I see gain sharing more of interests in those ACO-type models. Sometimes other people are just more focused on truly reducing the clinical variation, and there is a lot of dollars there, but gain sharing can really help align different providers across the

continuum and it needs to be used appropriately. You want to build data systems to understand and project what is happening with that payment.

Jonas Varnum: At the end of the day, that's probably an intelligence report on a regular basis with just standard intelligence and PM-PM reduction type information, as well as ad-hoc information that you can really use to monitor how you're doing, from a payment perspective. In care redesign and in care management, you're engaging a lot of different teams to actually create the best patient workflow solution that will reduce costs across the continuum. Those are the types of operational tactics, like readmission reductions, that are going to impact the metrics that you found in your opportunity matrix. I think care management is one of the areas that you can use, you can bolster some of your care redesign planning.

Jonas Varnum: I will say that sometimes I hear the definition of care management being focused less on the performance improvement world or a post-discharge setting, and I think what you can really learn from good care managers who have reduced overall total cost care across continuum is how they've done that successfully and use some of their insights in your care redesign planning. At the end of the day, just make sure you're scaling across siloed areas of your system. That's the first key to success in the transformation model, is to make sure that you've setup an appropriate governance group, steering group, that can champion this work across the organization. I've seen that, generally, you're going to have one care transformation structure that'll be focused a little bit more on bundles.

Jonas Varnum: That might even be a quality improvement work group out of an ACO, but it takes a very bifurcated bundles look. I think that's healthy and appropriate, and it might even carve out specific work groups inside that committee that are really focused on here's your protocol for stroke and we are measuring these types of information's, and here's our chart board that tells us how often we're meeting, those are all very specific pieces of our governance structure that really need to be included as part of this timing of selection and bundles. The biggest thing that I think we continue to see in literature is those organizations that micromanage their bundled payment opportunities, generally seem to have more success. You have to stay on top of this is an opportunity. Don't go spend money on software tool or anything that you then just stop tracking and using. It's just not really worth it.

Jonas Varnum: You definitely have the opportunity to scale across other workers, so you need to make sure that you understand components of the data, security, analytics, you're going to be producing intelligence from your BI groups on a consistent basis, your basis intelligence groups, you need to have weekly meetings to measure where patients are actually going and where their utilization trends are, and then make sure that you're tracking what you anticipate the reconciliation amount will be. This is tricky because we have preliminary target prices, so it's a little bit harder in BPCI. It's a little bit harder to know exactly where we'll come out on reconciliation, but make sure you're just monitoring

your trends from a financial perspective on a regular basis. I don't know if I've touched on clinical variation.

Jonas Varnum: I think what I want to call out here is the majority of the savings that I think systems that are interested in bundles can still see is through general care variation reduction programs. When you standardize your clinical protocols, when you standardize clinical quality, you have giant opportunity here to reduce inpatient waste from what we've definitely seen is labor and device, supplies have all been areas that bundles has impacted from a waste reduction perspective. I want to call out, for those that are interested in knowing more about this area, Health Catalyst has a ton of success stories, over 150 on our website, and quote a few of those, actually talk about Pareto Analysis and different ways to review clinical variation. If you want more information on that topic, I suggest starting there. Care transformation, so one of the things I eluded to earlier was the Lewin report that came out on the BPCI program, and it's, particularly, I think, the third-year analysis of how did BPCI actually do. Pretty lengthy report, but one of the key things that they found was in major joint replacements for lower extremities.

Jonas Varnum: There was a statistical significance in how post-acute care providers could reduce their length of stay, and overall, the actual reduction and total payment amount across those particular bundles, so post-acute care continues to be, probably, the lowest hanging fruit that I think people are interested in cutting out and carving out. It's a lot easier to say, "Hey, can you change your systems?" I think one of the things that I'll suggest is that you make sure that you have a good post-discharge strategy, that you make sure that you engage patients early on and really have the physician start with a conversation prior to the patient going in for an elected procedure that says, "Do you know what you want to be from a discharge planning perspective? Do you want to be discharged to which type of facility, and here's, actually, facilities that might make some sense."

Jonas Varnum: Patients always have the choice in that conversation, but those types of tactics allow you to really reduce spend in your post-acute care space. Care redesign, we'll get you a little bit more. I think post-discharge coordination is something that I continue to see as a tactic to reduce overall continuum spend. It's fairly valuable, from a care gap closure type of a perspective, if you want to think of it that way, where patients are really more engaged in understanding exactly what's happening as they transition out from the inpatient world.

Jonas Varnum: We've talked about clinical variation, but what does that look like from a cross-continuum view and what does that look like with different data sources? This is an example of fictitious information, but a very real example that I've seen working with providers where you sometimes can have 70% of the episode volume, or 80%, driven by just a handful of providers, and then, even those handful of providers have substantial variations in their EMR outcomes and their inpatient outcomes and how they use supplies, as well as some of their readmission rates. What happens to the patients when they leave the facility just by where they're referring the patient to, so using this type of an approach

where you have a lot of different sources of information that give you a good picture of who's performing well, who can have a good conversation with a physician champion about maybe changing a little bit of the way they practice care. It's a lot easier for me to say it, it's a marathon type of a conversation, but this is how it gets started. It gets started with showing this data across a lot of different perspectives.

Jonas Varnum: I want to give that cross-continuum view. All right. I think we need to focus in a little bit more on what types of intelligence are really helpful. You have to know your PMPM trends and you have to be able to slice and dice where your costs are occurring across the continuum, whether that's in the inpatient world, maybe there's substantial variation in the outpatient area. I think the big thing that I've enjoyed working with through Catalyst is more of a notification system that makes sure nothing falls through the cracks. We call that leading wisely.

Jonas Varnum: I think, anyway, that you can have an email or a ping or an alert on a daily basis, on a regular basis, about rich patients that are inside your patient population for a bundled payment, for any type of population health management initiative that allows you to put out that fire immediately and to truly change your outcome. For the executives out there, I think that when you have a system that allows you to really view changes in real-time, and claims won't do that, you need to glue it to your inpatient and EMR information, then that really can help you reduce clinical variation and improve patient outcomes. There is a substantial amount of care redesign required, and I think this is the general process that I see a lot of organizations use to be successful, but that, again, it's a marathon of a practice where you have to start early and identify very concrete aims for you to improve on over time. You need to build and refine and continue to work on the metrics behind how those aims can be impacted, and then, what happens at the frontline level, how do you roll this out?

Jonas Varnum: Care redesigns going to be a required part of the CMS submission. There's a lot of ways that you can create this and then there's a lot of ways that you can put this up on a shelf and not think about it again. Don't do that. It's very important that you impact and follow through on your care redesign plan, impact your patient populations.

Jonas Varnum: I think one of the ways that you can do that is through care management. I'll call it that way, or I'll call it care management in that definition term of just, overall, using care managers, care coordinators across the care management continuum to impact patients, and so you're identifying and refining populations. Those populations might be, let's pick on the congestive heart failure population, it might be a subset of that group of that episode who's high risk, et cetera, and you need to design services and processes that really meet those patient's needs, and then you really need to hone in on your interventions at which area of the care continuum that patient will be impacting. Remember that patient process.

Jonas Varnum: It starts at day one in the hospital, and even before that, there's a pre-hospitalization component where you're discussing patient management needs, discussing their travel and transportation and some other components of their social economic state, then you're getting into, well, what's going to happen after your surgery? These are the ways that you reduce readmissions, and I think you're seeing them captured there as a patient-engagement tactic. It's that type of management hats really important here in bundled payments. Finally, don't let a readmission program be your only channel of communication. Use technology, use communication on a regular front with your patients, that's the way you really track it.

Jonas Varnum: I think that really concludes my time. Sarah, I think we've got some slides coming up here.

Sarah Stokes: Yeah. Yeah, thanks, Jonas. That was great. Before we move into the questions and answers, we do have a few quick poll questions for you all. The first one here, while today's topic was an educational webinar focused on bundled payments, we often have attendees who want to know a bit more about Health Catalyst products and professional services. If you'd like someone from Health Catalyst to contact you to learn more, please answer this poll question, and we appreciate your responses.

Sarah Stokes: Okay, leave it open for just another minute here. All right. We will move on here. Okay, if you'll go to the next slide for me there, Jonas. Okay. Next here, we had a few giveaways for complimentary Healthcare Analytics Summit passes, this is an annual event with more than a thousand provider and payer attendees.

Sarah Stokes: This year it's going to be occurring September 11th to 13th, it will feature topnotch keynote speakers form the healthcare industry and beyond, and this is a quick glimpse at some of our speakers that we have coming up. All right, Jonas, if you can go to the next slide for me. If you know that you can attend the Healthcare Analytics Summit and are interested in being considered for complimentary passes for a team of three to attend, please answer this poll question quick for us. Okay, we'll give you just another second here to get your responses in.

Sarah Stokes: Okay. Perfect. Okay. One more slide for me, Jonas. All right. Lastly, if you know that you're able to attend the Healthcare Analytics Summit and are interested in being considered for an individual complimentary pass, please answer this poll question. Oops, sorry, wrong one there. Answer this one for me.

Sarah Stokes: Okay. Great. Everybody's getting their responses in quick here. I'll leave it for just one more second, and perfect. That's great. Okay. Jonas, if you'll advance one more slide for me. We really appreciate all of your responses, and now we're going to move over to the Q&A.

Sarah Stokes: We do still have a few minutes here and we've had a lot of great questions coming, so Jonas, our first question for you comes from Jessica, and her question is: How do bundled payments work if a patient goes to multiple facilities?

Jonas Varnum: Yeah. A couple different ways that that can occur. Jessica, I don't know exactly what type of situation you're thinking about. Sometimes there's transfer logic where, if a patient starts at one facility and then gets transferred over, and generally, again, at the highest level, it's going to be payer specific and defined at the payer program, but if for CMS's scenario where, if you're getting transferred, a patient, from a place that is included as a bundled payment program and then it goes to a different facility, that place where the patient triggered the episode, where that hospital said, "Here's my congestive heart failure bundle and I'm participating," and then I send it over to a different hospital and they're not participating, that original area, that original hospital is still on the hook for that patient's overall cost. I hope that's what you're eluding to.

Jonas Varnum: That's a good question. It's great. It really causes you to make sure that you are working with both clinical teams and knowing where they generally like to refer patients out to, especially for more complex care, if that's needed. It's very valuable for you to keep monitoring your patient over time when you're on the hook for them.

Sarah Stokes: Okay. Perfect. Our next question comes from Marcelo and the question is: Are the bundle payments something that acute care hospitals select or are they relative to ACO's?

Jonas Varnum: Yeah. It's the acute care hospital selecting them in the CMS environment. I think it's still very much relevant to the ACO population, it just depends on who's included in your ACO, so I think there's a lot of different ACO's out there. You've got physician group practices that also have acute care hospitals, and they're all in ACO together, it just depends on how you get in that ACO. The acute care hospital case, generally, the facility that trigger the bundled payment, physician groups can, as well.

Sarah Stokes: Excellent. Okay. Our next question comes from Adam who asks: What factors do you believe are important when deciding which bundles to participate in?

Jonas Varnum: Yeah. You know, I think if you have an interest in just having true clinical variation reduction and you don't want to have to pay a penalty, then you're opened up to more of the bundles that have a higher target price, that you've got a better target price opportunity, but if you're just interested in really cost savings to a system, if you can generate enough interest in attacking cost-savings initiative, regardless of jumping into a bundle. It can be of interest to providers to jump in because there's this advanced alternative payment model component where they can get a bump. Yeah, I think the target price, Adam, is a really important feature to look at, and then other KPI's, very specific to those

episodes are very important, and then lastly, at the independent physician level, or is that physician ready to take on the work that's required to change their care processes?

Sarah Stokes: Okay, great. Our next question comes from Andre who says: Data streams for care improvement initiatives come mostly from EHR, which are notoriously dependent on data entry operators. Even the most advanced EHR's, like Epic, have difficulty with data collection. How do you account for and improve on data collection?

Jonas Varnum: Yeah, I think that's a good question. One of the processes of just standardizing data and looking at it in different ways can happen to us at Catalyst, and if you can view bad data, then hopefully before you put it into a report or into an actual intelligence graphic, then you can just keep working on cleaning data. I think that's very much a step that you have to do, and kind of bad data in, bad data out. It's a really good point. You got to make sure you have good data from all of your sources.

Sarah Stokes: Okay. We're going to do two more questions before we wrap up here. Romanus asks: Can a hospital, who is in a next-gen ACO, take part in BPCI Advanced? Would the attribution list have to be considered for both entities?

Jonas Varnum: Yes, you can participate in both. There's some limits to your ability to collect savings as a next-gen participator and, essentially, bundles. CMS will not want you to double dip on some of the saving amounts, particularly with at-risk contracts. The other thing I would suggest is making sure that you have some sort of master beneficiary index.

Jonas Varnum: If you're in a next-gen, that's kind of cross-walking all of your different patients across both the ACO, different other sources, including the BPCI data. From an attribution perspective, I think that's a different conversation. Sarah, sorry, you might have to repeat that, actually.

Sarah Stokes: Just the whole question?

Jonas Varnum: Just the attribution comment.

Sarah Stokes: Oh, yeah, no problem, it was: Would the attribution list have to be considered for both entities?

Jonas Varnum: Both entities. I mean, yes, at the end of the day. I probably want to take that conversation a little bit offline for attribution sake, but you're definitely cross-viewing your different populations.

Sarah Stokes: Okay. We're actually going to end things right now, as we have hit the top of the hour. We want to thank you all for joining us today.