Surviving Value Based Care:
A Road Map to Success Under the New Reimbursement Model

[Tyler Morgan]
Good day and welcome to the Health Catalyst Webinar Series. Thank you to all who have joined us for today's webinar: Surviving Value Based Purchasing: A Road Map to Success Under the New Reimbursement Model. My name is Tyler Morgan and I will be your moderator today. Throughout our presentation, we encourage you to interact with our presenters by typing in questions and comments using the questions pane in your control panel. We will be answering questions at the end of the presentation during our questions and answers time. If we don't have time to address your questions during the webinar, we will follow up with you afterwards. We are recording today's session, and within 24 hours after the event, you will receive an email with a link to the recording, as well as the presentation slides. I am pleased to introduce our presenters today, Bobbi Brown and Jane Felmlee.

Bobbi Brown joined Health Catalyst in July 2012 as Vice President of Financial Engagement. With over 25 years of experience in healthcare finance, Bobbi's role at Health Catalyst has focused on working with clients to implement clinical projects with a financial return. Prior to coming to Catalyst, Bobbi was a team lead, working on the installation of planning software at Ascension Health in St. Louis. She has also worked for Kaiser Permanente and Sutter Health as Vice President of Financial Planning. At Intermountain Healthcare, Bobbi provided financial support to the clinical programs as assistant vice president of finance.

Jane Felmlee is a healthcare consultant with over 20 years in the industry. She has worked in a variety of leadership roles across several large healthcare providers, including the Mayo Clinic, Park Nicollet Health Services, and North Memorial Healthcare. Her passion is centered on improving internal processes and deploying reporting and analytic solutions to help organizations provide quality patient care in the most cost effective way. Her unique combination of experiences with lean processes, technology solutions, data warehousing, decision support, quality reporting, and healthcare analytics position her as an authority on measurement and change management.
I will now turn the time over to Bobbi Brown.

Bobbi...

**[Bobbi Brown]**

Okay. Thanks, Tyler. We want to welcome you all this morning and I really thank you for attending. We're going to spend about an hour going over this topic. And I'm going to cover three areas.

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**Agenda**

- Overview of Value-Based Purchasing
- Review of metrics
- Improvement Framework

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First of all, we're going to get an overview of value-based metrics and then look at some of the metrics that are a part of the program that CMS has put in place. And then Jane is going to get in and talk to you about an improvement framework that she has worked on at (03:05) where she has worked.

I just want to let you know a little bit about our background. I was fortunate enough to work in some really great organizations and be a financial resource for some clinical programs, working on ROI and making all these clinical programs really part of the system and part of the DNA of the organization and able to make change that was sustainable. Jane has had the same type of experience, managing a team of measurement and reporting specialists and working through a lot of change management.

So today we want to share our experience with you and hopefully get some feedback from you about what's going on right now in the healthcare. A good measurement of healthcare is what made a recent headline in USA today. I don't like the headline with hospital's reducing payroll, talking about ours as the industry that led the layoffs last month, about 8,000, mainly in the hospital industry. From June to September of 2013, we've laid out 41,000 people compared to 26,000 last year. Again, like I said, I'm not so sure that's good, but you know, we're getting a lot of press right now in our industry. The USA Today article author said, “... the healthcare law has reduced Medicare payments to hospital that provide lower quality service or have higher admission rates.” So that was their simple one sentence explanation of value-based purchasing.

Another good article that I saw that I really like, it came from Deloitte, their CFO headlines, and they have three rules for CFO – You want better before cheaper, you want revenue before cost, and the third rule is that there are no other rules. So that's what you only need to focus on and that's one of their authors who wrote
an article of how exceptional companies think and how to really get the superior before performance. But value-based purchasing really fits in to all of that and we'll be talking about those three rules. Again, better before cheaper, revenue before cost, no other rules.

Poll Question #1

What is your primary area of focus?

Please select one:

- Physician/clinical
- Quality
- Information system
- Finance
- Other

Poll Question #1: What is your primary area of focus?

So the first thing we're going to do is have a little poll and we really want to know the composition of everybody that we're talking to this morning. It's kinda hard I can't see you but you also can't see me. So, we want to ask what your primary area of focus is.
Tyler: And the poll is now closed. Bobbi, here are the results.

Bobbi: Oh okay. A lot of information system. It's kind of evenly spread. Not too many finance people but that's okay. We'll just go – now I have a good feel for the audience.
So the next slide that I want to talk about is the overview of value-based purchasing and what really is it, what are we talking about. The Harvard Business Review, October 2013 calls value-based purchasing, *The Strategy That Will Fix Health Care*, article written by Michael Porter and Thomas Lee. They're really saying, "Again, we're going to put the patient in the center of this and providers are going to be the ones leading the way and making value, the overarching goal that we need to achieve." Again, that's outcomes at lower cost and there's a good model in there. It fixes the areas that need to work together so that you will be able to really work in a value-based environment. He also mentions one good thing and I like this. "*This is not a swift transition, it's not going to be an easy transition, and it's not a linear transition. And you cannot do what you always get.*" So that's a good reminder for all of us and a very good article if you want to get a hold of it and look through it and try to relate some things to your own environment.

![Trend of Hospital Margins](image)

**Trend of Hospital Margins**

Just to start out with some trends of hospital margins. You may be thinking why do we want to train or why do we want to change anything that we're doing now, what's going on. We're really in an environment, if you notice the green line on this graph, it's the overall Medicare margin that's been going down on a downward trend there from 2000 to 2008. I've been in the industry a while and I never thought this was an easy industry, but I don't remember how bad I had it back in 2000, I guess. So we're in an environment where our overall margins are being challenged, especially when your Medicare represents 30% to 40% of your business and it's been a negative 0.58% in 2011, making life a little difficult. Our revenue lever is not as easy to bend anymore. We've got a small increase in 2014 on our DRG payments. And also if you look at the margin that is even in worst shape, it's the outpatient margin and that's where all our volumes are increasing. So that just presents a lot of challenges to efforts in industry. Where we're having increases in volume is where we have a low margin.
The next slide talks about dollars that are at risk. When I first heard about value-based purchasing, a lot of people in my office, they said, "Oh, you know, it's kinda small. Oh not a big deal. We don't care that much about it." But if you look over time from 2013 to 2017, at some point in 2017, 7% of the Medicare revenue that comes to us is going to be at risk. The HAC is the Hospital-Acquired Condition. In 2015, there's actually a penalty that can go into place. Right now, we're not paid for those conditions if they weren't present on admission, but in 2015 there's potential of a penalty. The readmission penalty that started in 2013, same with value-based purchasing. And the MU is Meaningful Use. Again, right now, you can get some incentives for adding an EHR. But if you don't have an EHR, by 2015, again, there will be penalties put into place. So I think the cumulative impact of all of this is starting to grow fast, so we do need to pay more attention to what we're doing in the value-based area.
Background from MedPAC

The current aim is to transform Medicare from a fee-driven model to one that encourages delivery of efficient, high-quality care.

Focus on:
- Payment reform
- Delivery system reform

Medicare payment policies tend to set a precedent for other payers.

On the next slide, I want to just talk a little bit about MedPAC. MedPAC is an independent congressional agency that that advises Congress about Medicare and they issue a report every March and every June to Congress. And it's telling and reporting what's going to be happening in the future with Medicare regulation. Their aim right now is they want to transfer Medicare from a fee-driven model to one that encourages delivery of efficient, high-quality care. But to do this, they're focusing on payment reform and they're focusing on delivery system reform -- So trying to make the provider more responsible for the health of the individual. And we all know that what happens in Medicare is often a precedent for other payers to (10:47).

Context for Medicare payment policy

- Growth in healthcare and Medicare spending
- Impact on Federal budget and Medicare
- Variation in healthcare spending
  - Significant variation in use and spending, which does not correspond to better quality, raises flags that higher healthcare use and spending are not improving overall health and put beneficiaries at risk.

I did not include the graph that shows the percentage of GDP but we all know that healthcare and Medicare spending have been increasing. Right now, healthcare amounts for 18% of GDP and that's double from where it was in 1980, and it's projected to be closer to 20% by 2018. So it's obvious that they're forcing Medicare to make changes.
I recently attended a meeting where they started the meeting with a reflection I thought was about the cost of healthcare. And they were saying that we, as providers, have to take steps because as a society we can't afford this. We're crowding out the ability for schools, for education, for libraries and for playgrounds, so that we had an accountability to get started and make some changes and it really hit me when I heard other providers talking that way and really being very serious about trying to make changes in the healthcare environment.

The spending has slowed down. If you've seen, there's a lot of articles that show spending has been slowing down in the past couple of years. Right now, it's about 3% to 4%. But still overall Medicare is going to be enacting more and more programs that combine both a payment that is being impacted by a quality measure.

The MedPAC also mentioned there's just too much variation right now in our healthcare spending. It's not making our quality of our care any better and it raises flags as to what are we doing with healthcare and why can't we make it better.

**Facts from report**

- Over the next 10 years, Medicare spending will grow at an annual rate of 6.8 percent, consisting of 3.9 percent per-beneficiary growth and 2.9 percent enrollment growth.
- From 2004 to 2011, outpatient services per beneficiary grew 34 percent and inpatient admissions declined 8 percent.
- The overall 2013 Medicare margins are projected to be -6%.

Source: MedPAC report March 2013

Facts from report

Over the next 10 years, what's going to be happening, Medicare spending will grow at an annual rate, about 7%. Part of the 7% is the per-beneficiary growth and part of it is just the number of people going in to the Medicare population. So about 3% is due to enrollment growth and the rest is due to the per-beneficiary growth. Also, a trend is going on from 2004 to 2011, with outpatient services grew at 34% and the inpatient admissions declined about at 8%. And they were expecting the 2013 margin to be projected at about a negative 6%. So we're not declining a lot but we're not improving on our Medicare margin.
Medicare Facts

So some other facts about Medicare spending. We all have heard many times that 5% of our population takes about half of the healthcare spending. And the Medicare spending, if you look at the beneficiaries that have greater than 6 conditions, they're 14% but actually 46% of Medicare spending is spent on that 14% of the population.

When you look at the Disease Prevalence from the chart on the right-hand side of the screen, we can see where we're getting worst. Actually some of our heart failure has been improving, the number of people with those conditions. But on diabetes, we got a little worse. On COPD, we stayed the same. And some of our acute conditions have stayed pretty constant over that time.

Another fact that they mentioned was a lot of urban hospitals in 2010, 93% of the urban hospitals had an MRI. That's no surprise. 60% of them had a PET scan that's up 10% from 2005. And 36% of the urban hospitals now have robotics surgery, that's a 22% from 2005. And again, we've all done and I've certainly done a lot of ROIs on these high-end medical equipments and we hope that we are improving the cost to our population, but we really have to think twice and really do some further analysis on that.
High performing hospitals. With the first graph that I shared, I shared that a lot of hospitals are losing on Medicare margin. But what was good to me to see was that 14% of the hospitals actually are making money on Medicare. Their overall Medicare margin is 2%. And they have this 14% of our hospitals, which is about 300 of them. They are also able to have very good success for it for risk adjusted mortality, risk adjusted readmission rates, and their cost structure was lower than the other hospitals. So they have the quality and they are able to make a margin. So it is a doable thing. So now we need to find those hospitals. Hopefully they're on the line and they can tell us how they do it.
CMS Programs (subset of 41 programs)

But CMS Programs, we've talked about what they are trying to do. Now, they have about 41 different programs not just for hospitals but also for home health, for nursing homes, for physicians, but it revolved around this value-based incentive. The first one we're going to talk about a little bit more is the value-based purchasing incentive program, the readmission penalty program, it's in its second year, and I also mentioned the Hospital Acquired Conditions are going to start in 2015. Meaningful Use has been an incentive program since they've switched into a penalty program.

All of those above you need to participate in. The bottom two, the ACO and the bundled payments, you can decide if you're going to be a participant in there. We have 32 pioneer ACOs. In early 2013, another 106 ACOs were granted Medicare license type of thing. And right now we're going through another round, so it will be interesting to see. In the fall, those applications were due in the summer. It will be interesting to me to see in the fall how many more ACOs get at it and there's going to be lots of articles about the success of the 32, what was successful for them, what wasn't. So they're great learning experiences out there for all of us to learn about what's going on with these programs.

Medicare, itself, they have – on their website, they have an innovative program tab and it's listed in one of the last slides that's in this presentation. It's a very good tab to flip through and see where Medicare is going. And they also have a section in there on data and I downloaded some of the data and the data is very good. They showed, for example, in the area that I'm in, I'm in Salt Lake – they showed all of the Medicare by county, all of the dollars that went out and the fee for service. So I could see how many dollars were going to physicians, I could see what was going to home health, and I could compare that with the national average. So it's very good. If you're trying to get into some of those different programs, you may want to see what's going on in your area.
CMS Template for Programs

- Identification of quality measures
- Payment for quality performance
- Measures of physician and provider resource use
- Payment for value - promote efficiency while providing high quality care
- Alignment of financial incentives among providers
- Transparency and public reporting

Overall, Medicare is trying their template for their program focused on the quality, payment for quality, measures for physician and provider resource use. Just overall they're trying transparency and public reporting. If you've been on hospital and compare, you're probably seeing all the different measurements that are out there and how your facility compares.
Yearly Incentives

Just to talk a little bit swinging to the metrics section now and get a little more specific on some of these measures. On the readmit program, I mentioned it gradually grows, 1%, 2%, up to 3% in 2015. And then on the value purchasing, that's 1%, 1.25%, 1.5%. So in the value-based purchasing, all hospital coverage is payment by a percentage and then you can either, as the year goes on, you'll either get an additional payment or a penalty based on your scores. So everything goes into a big pot and then you get some – hopefully, you'll be one of the hospitals that are making some incentive dollars back.

VIP Clinical Measures

I just wanted to show you on the next two pages the different clinical measures and the patient experience of care and the outcome measures. The clinical measures, right now there's 13 listed. There are 12 for this year.
The blue area on the screen shows the one that are in effect for that year. There are some that come on in later years and there are some that dropped off. The interesting thing about drop-offs, when I worked at Intermountain Healthcare, we would reach 100% on some measures and then we'd stop measuring it and lo and behold, in about 6 months, you go back and see the measure had dropped just a little bit. So there's something in our psyche about being able to always see measurements and we always want to do well and we want to stay at about 100%. So there are clinical measures, patient experience, and the outcome measures which in total comes to what Medicare calls TPS or your Total Performance Scores. So I showed the clinical measures. The interesting thing, I've mentioned I have a finance group. I can now say some of these words, which we all have to learn how to be able to pronounce these words and I've gone around and talked to people on clinical areas and said, okay, how do we improve this? And I've learned a lot talking to physicians and the clinical quality nurses.

![VBP - continued](image)

VBP – continued

The patient care experience, there are 8 measures there. They will continue to be throughout the time period of this program. And then the outcome measures, this is where they continue to add. They added three new ones this year for mortality. Next year, they'll be adding a composite for patient safety scores and some other CAUTI and CLABSI kind of infection scores, a lot of these having to do with postoperative hip fractures, pulmonary, sepsis, wound. And then in 2015, they're actually adding a Medicare spending per beneficiary and that's going to be measured by taking the claims and there is a number of adjustment for age and severity for the part A and part B claims and the time period extends 3 days prior to 3 days post the discharge and that's how that will be measured.
Value Based Purchasing

So the interesting thing about the value-based purchasing is that the weighting changes every year. Right now, we're in a year this year and in 2014, as you can see on the screen, where 25% will be on outcomes, 30% on the patient experience, and 45% on the clinical. And the interesting thing about the dates too, our baseline period for 2014 were 2010 and our performance grade that were measured against was 2012. And they move a little bit each year for each measurement, so it takes a little bit of thinking to keep up with all the Medicare, little nuances to this.

Example of scoring

The way this moves forward is based on achievement and improvement. Achievement, you can think of yourself being compared to everyone else and improvement is how I compared to myself during the baseline
period. So one of the SCIP measures here, it shows their performance. They were at 99.22, with an achievement score of 7, and an improvement score of 4. Medicare takes the higher and adds that up into your total performance score. So again, you want to do better verses yourself and then you also want to do better than your peers. You would get a zero score if you didn't even make the benchmark or if you were worst than your baseline

Updates on Programs

So again, how did we do in these programs? So let's review – on the readmission program, what actually happened was the fine decreased a little bit. It was at a 0.42% and for 2014 it went down to a 0.38%. So in 2013, 2,213 hospitals received a fine. In 2014, 2,225 hospitals received a fine. And actually in 2014, these penalties increased for about a thousand hospitals over last year. The big thing that we need to look at is our readmit rate progress. The overall readmit rate is running at about 12% for everything and it hasn't moved that much. So, on value-based purchasing, what happens – in the first year, about 1,600 hospitals got additional payment, 1,400 got less payment. So quite a bit of variation in there. There was a forecast that went out from Health Affairs last year and they said that 65% of hospitals will have a payment change of a pretty small payment change and they're a small number of hospitals, which is how this was intended to work. In 2014, the way it worked out is about 54% of the hospitals were within 25% of the medium. So 54% of the hospitals got between 1% and 1.5% in additional payment.
New Financial Metrics

One thing I like to think about as I'm thinking about value-based purchasing is what kind of measures do we need to be looking at and what do we need to be focusing on? And I just put a few up on the screen. These were the ones that I like to focus on, looking at throughput, looking at the readmission rates, by patient satisfaction, what's going on with their patients, what's the measurement of the mortality rate on the bottom. There is a new measures in 2014 – and you need to ask yourself, can I measure these, can I get them easily, am I monitoring these, what quality metrics are important in my facility, and how do we look at our cost structure in our time to containment cost, we know we're going to have cost increases but we really need to control our cost.

Moody's has some new measurements this year (Moody's are the ones that help you rating for bond). They're asking about your unique patients. They're asking about what's your Medicare readmission rate, what's your overall readmission rate, what's your number of employed physicians. So we can see that our market is changing and people are asking us for new metrics and new measures.
Commercial Market

I just wanted to talk a little bit about the commercial market. Right now, 60% of the health plans are saying that more than half of their business is going to be under value-based purchasing within 5 years. So there's a couple examples here, United Healthcare, they have an ACO expansion plan. We can see a large ACO in California, how they saved cost and were able to reduce readmission. Blue Cross Blue Shield of Massachusetts, again, able to save in the second year of an ACO. I have seen where some physicians are skeptical of some of these value-based purchasing programs. They are worried that data isn't going to be accurate. I think how we solved that is we just tried to work with the payers and get good data out there on both sides, both the payer's side and the provider's side.

California P4P

In California, where I worked there was a pay per performance program there that started in 2003. It's grown quite a bit. The good thing about it was there were 85 measures that were publicly reported and they were uniformly defined. Every payer didn't give you a different definition of readmission. Every payer didn't weigh all the measurements the same but we have the same basic structure.
Michigan is another state. Their Blue Cross Blue Shield at Michigan overall is trying to get a better health system for that state. That program started in 2005. In 2011, they added in the hospitals and they've seen some great results. ER visits have dropped from 7% to 10% and some of their high-tech radiology procedures have gone down.

Value Based Health Care

Vaccines. Anesthesia. Penicillin. Bypass surgery. Decoding the human genome. Unquestionably, all are life-saving medical breakthroughs. But one breakthrough that will change the face of medicine is being slowed by criticism, misunderstanding, and a reluctance to do things differently.

That breakthrough is value-based care, the goal of which is to lower health care costs and improve quality and outcomes. Value-Based Health Care Is Inevitable and That's Good

- by Toby Cosgrove, M.D., Cleveland Clinic CEO

Value Based Health Care

I just want to talk about an organization very highly regarded, the Cleveland Clinic. The CEO there actually mentions value-based health care that's inevitable and that's good. He's calling it a breakthrough. He wrote a web response to the Harvard Business Review article and he wants to make sure that we're mining data and lowering our cost. He actually in the article states that he actually posts up on the wall sum the costs to sum of supplies, so physicians can see the costs and become more aware of costs.
Impact of Changes in Payment

What will all this do, what's all the impact or changes in payment? We're going from a volume world to a value world. We're going to be managing a population. We're going to have more incentives on the quality side, more alignment with physicians and I think IT is going to be core to a strategy. A hospital is important but we also need to consider the whole care continuum.

So I am going to turn it over to Jane now. She's going to share her experiences on the framework and discuss about how the organizations will ever commit to these challenges.

Framework:

QuickPoll

How does your organization distribute outcome performance?

Please select all that apply

- Internal website
- External website
- Only to quality staff
- Does not distribute

Framework: Poll Question #2

[Jane Felmlee]
Thanks Bobbi for that overview of value-based purchasing and the metrics. Clearly it's a complex topic for sure. I'm going to start this off with another poll question. We want to check with the audience and understand how your organization currently distributes outcome information. And you can select obviously more than one if it applies and you will be able to select more than one. So Tyler is going to moderate that poll question for us, please.

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Tyler: Alright. The poll is now closed. And Jane, here are the results.

Jane: I'm coming with you. But the great news is that only 10% do not distribute. So it seems like there is definitely a move toward transparency, particularly on the internal websites and while 30% are actually communicating via an external website. That's great to hear.
I'm going to start my portion really focusing on the improvement framework. And interesting, I've included kind of a very oversimplification of the value-based purchasing information flow. The scores in blue really represent the basic process that CMS is going to go through to measuring score, each of our organizations. And I'm going to focus specifically on the box highlighted in orange. And I left it out there so simplified because it really is only one single box but clearly beneath it a significant work and effort on the part of every health organization that's now working to understand this new world and put into place a sustainable framework.
Clearly this doesn't just happen. It would be nice if we had a turnkey solution, but we don't. So the new model represents really a fundamental shift from fee for service to value-based care as Bobbi has informed us of earlier. And to really be effective in this model, healthcare organizations need to keep an eye on the clinical processes of care, patient experience, outcomes, and by the way, delivering all in an efficient and cost-effective manner. There are many quality improvement methods and recommendations for getting organized, and by the way, you can Google them on the internet and find lots of resources, including Health Catalyst site full of whitepapers, webinars and how-to guides. But today I'm going to focus on some rather basics framework considerations and share some experiences I've had.

VBF FY2014 Worksheet Example

This slide is simply a sample of a value-based purchasing worksheet. It is the outcome of the value-based information flow I showed a few slides earlier. And most of us understand that the concept of core measures really isn't new. It's been around since 2003. A bit changed. And the one that's getting everybody's attention is the fact that it's really no longer good enough to simply report the information. We've moved truly in the pace of performance model of reimbursement. And this worksheet is the method that CMS is going to use to communicate to you, how well you're doing, and how you stack up against the rest.

Bobbi talked specifically about some of the variables and it includes your baseline, which is way back to 2010, your performance numbers, which is measured during 2011, and then the National Clinical Data Performance benchmarks and thresholds, and then obviously there's some output section or the scoring methodology, the outcome results of that. This worksheet was released in the middle of 2012 and is the basis for payments you're now receiving from CMS. And since this model is cost-neutral, clearly there will be winners and losers. And as Bobbi pointed out, the high performers will be rewarded, and she gave some examples where as if they will be rewarded at the expense of the low performers.
Need a sustainable framework

This next slide really is a summary of some of what Bobbi went through. And the takeaway is really there's nothing we can do to change history. **And so, organizations that are poised to leverage data will be in the best position to identify issues proactively.** And that's the keyword – is proactively. And develop their improvement strategies and drive the change they need to meet the new performance expectations. Clearly this needs to be done in order to get ahead of the curve rather than looking back in the rearview mirror.

Ingredients for Success

I'm a firm believer that we can be most successful if we develop a strategy that is balanced and it needs to be balanced across people, process and technology. I will address each of these individually.
Ingredients for Success – Technology

The first one I'm going to talk about is technology.

Legacy Reporting Environment

And most of you are probably familiar with the current complexity of reporting and analysis within the healthcare space and may have probably invested a significant time to cobble together their own information that spends more than one computer application. I recall numerous personal examples of actually calling our trustee report writer to ask that if she would please dump some data for me. And once I received the data dump, using my trusted Excel, I begin to cobble together my analysis. And clearly, being human, I realized my initial data request was missing some key data and darn, I had to go back to her and kindly ask her to modify
her report and give me some additional elements. Well, you probably understand that by that time she’d moved on to her next task and my request sat at a new cue. I think you get the point. I had no access to information and I know many of you are probably in that same boat. Clearly using this central report writer process significantly increased the lead time for me to do my work.

**Legacy Reporting Environment**

- **Ease of Use**: Coding report objects were cryptic and relationships between data was poorly defined
- **Integration**: Integration of data from different source systems was hard or impossible
- **Efficiency**: Report run times were long and in some cases did not complete at all
- **Visualization**: End user presentation reporting tools non-existent
- **User Self Reliance**: No ability for report consumers to “fish for themselves”

So some of the downfalls of that legacy reporting environment are obvious to those of us who have been there and I think that’s many of the audience. But coding report objects are cryptic and relationships are poorly defined. It’s difficult to integrate data across systems. It takes a long time to run these reports and hopefully they finish. The end user presentation tools either don’t exist or they’re varied across applications. And then I don’t know about the group in the audience but I like to "fish for myself" and it was difficult to actually accomplish that in the environment we were in.

**Catalyst’s Adaptive Data Model**

Metadata: EDW Atlas Security and Auditing
Catalyst's Adaptive Data Model

So with an investment in a data warehouse, whether it's the Catalyst Adaptive Model or any other data warehouse, I believe organizations will be able to leverage technology than to actually do some of the heavy lifting and actually collect and link data. This includes clinical, operational, and financial data. No longer will we need to bribe report writers to send data so we can put it in our trusted Excel and patch together your analysis or report. Once properly trained, you can actually "fish for yourself" and I can actually attest to that. And you combine that with resources like data architects and outcomes analysts and I believe you truly have a very powerful team to help you drive change and measurement. They can help you organize your data for enhanced data discovery and actually help with some of the data mining and visualization of outcomes and process. And I believe that organizations that embrace the value of data analytics will be in the best position to actually survive and thrive in this new value-based pay for performance model. The more we know, the better.

And then just touching on some highlights from the slide, a data warehouse, hopefully many of you are familiar with the concept, but we collect data from key systems within our organization, whether it's our EMR Epic, for instance, or our time tracking within our administrative data or our patient satisfaction, or even our financial systems. Data is brought into a data warehouse with little to no transformation. And so it really does remain quite pure. And the true value of this data warehouse is in providing links. So if you can set this up in the way that all that information and all that data is set up for you, it makes our jobs much easier and it organizes them in a way for speed and really for really nice reporting and visualization, whether the subject area is readmissions or diabetes or sepsis or even staffing to volume. I'm a believer in that – and I'll call them the data people, namely data architects, they can organize this data in a way that really does strongly support the improvement work. This creates consistency and it really shortens the lead time to deliver analysis and visualization and that's what we need to do to get ahead of the curve and actually utilize this information to drive change that we need to keep our reimbursement flowing.
Patient Satisfaction - Sample Visualization

This is just an example of visualization that's been set on top of patient satisfaction data. And I put it here just to show that organizations that actually are able to bring data together and actually create visualization on top of it can provide valuable insight into what's actually going on within the data.

Patient Satisfaction – Drill Down

And the next slide is really just again pointing out within the patient satisfaction area. You can actually pick any area, but within the patient satisfaction area. As long as the data is available, it can be kept and captured in a standard format. There are some really neat business intelligence tools that can be leveraged to create both an analytic application or a standard outcome measurement visualization. So in this example, we can actually drill right down to the patient satisfaction question. And since this data comes right from your internal systems, it's much more timely than say waiting for CMS to send us a worksheet that tells us how we did historically. So this kind of information is much more timely and allows us to be proactive and actually see trends as they occur. And when it falls in the hands of the right people, it can actually provide timely signals and actually make this information actionable.
The next ingredient is people. And of course we need to make sure we have the right people doing the right work. Since healthcare is truly a team sport, I believe organizations that could get the right resources aligned can really create a dramatic – have a dramatic impact and this means bringing together subject matter experts like physicians, nurses, pharmacists, lab techs with, as I call them the data people or data provisioning folks, like EMR educators, IT application support resources and data architects, and combine them with, of course, your trusted analysts who are often found in IT, finance, and quality. It is truly a powerful combination.

During my work with one team I was able to actually witness firsthand the excitement of clinicians when they actually began to see the amount of data that could be analyzed and distilled to tell quite a cool story, and clearly, clinicians and providers are hungry for data. It seems all had a different theory about what was actually taking place and bringing the data to the table allowed the group to actually level set on what is truly happening and set the stage for the team to figure out how to actually move ahead and improve care.
Involve and Align the Right People

So my takeaways really include identifying a strong process champion and this is often times an impassioned physician. In one of my teams, the physician lead was a strong advocate for improvement and leveraging data and also was very tolerant of data, which is also a good attribute to a physician lead, but it also helped that he began to understand the strong ties between the data and the process. The data is only as good as the underlying processes that actually capture the data, and this was a valuable learning opportunity for the entire team.

And next I'm continually humbled by the people on the frontline of the healthcare who really do want to improve outcomes and process. They are closest to the process and provide an enormous amount of insight into what's happening and why the data looks the way it does.

And connecting them with the "data people". I guess I keep mentioning the "data people" but they are definitely your friends and they can capture and organize data in ways that not only frees up our time but creates valuable insight for the team.

And measuring what matters. That speaks to really being focused on the data that you're gathering and the metrics you are compiling. And I've witnessed teams that nearly enter the data overload or analysis paralysis mode and it really does take a strong and focused leader to keep the team on task. And it's also very important to develop a standard framework complete with some team charters that document the team's specific outcome measures and then timeframes – I think that really helps to keep folks focused. Otherwise, teams have a tendency to keep asking for more and more data and you can quickly run down that proverbial rabbit hole.

Then last but probably the most important is the feedback, and it's so important to develop timely feedback mechanisms that inform people tasked with the improvement efforts. Ideally, there is a transparency at the organizational level, which is based on our poll seems like we're making some progress, not only at the organizational level but transparency at the critical outcome measures, so that we have information to give back to the people on the frontline who actually make the process happen. This speaks to continuous feedback and training and this is – you know, once we have this transparency and feedback loop, we need to
make sure it continues to be there so that we can keep an eye on the process because resources then become kind of they gravitate towards the next improvement after and we can't lose sight of the improvements that were already made and we need to make sure that we're holding the games.

**Ingredients for Success**

- **People**: Get the right people doing the right work
- **Process**: Develop standard, reliable processes
- **Technology**: Leverage technology where possible

**Ingredients for Success – Process**

The last key ingredient for success is the process. And creating standard and reliable processes ensure definitely that our efforts-directed improvement can be sustained, and it's such an important part of our work. We hate to lose ground when we've invested so much time and resource into improving the process. And this will be especially important as CMS begins to add not only more measures but also the effectiveness measures that really look at the cost of care. The trick is to improve quality without increasing cost. Bobbi pointed out some examples where some organizations actually are ahead of the curve on this and the challenge for all of us is to make sure we're working smarter.

**Identify Opportunities**
This slide, excuse me, it was purposely blurred, but it's only an example of a process map of the CMS core measures process. I used this as an example of the important work that needs to occur to understand and ultimately document the process as it exists at the frontline. This exercise was conducted by our stakeholders in the core measures data abstraction process and included people from quality, IT, and decision support. Although this exercise was very powerful, it was not only from the aspect of getting the people together but also in learning the full process, we quickly came to appreciate the hard work of the data abstraction folks. I know we have a lot of quality people on the line and this was kind of eye opening for a lot of us. This work resulted in identifying additional data elements that we could capture electronically rather than manually abstracted. And it sounds like a small thing but it actually made a big difference on behalf of the data abstraction folks. And on a personal note, participating on these value stream mapping exercise is probably some of the most gratifying work I'd been involved with, and to get everybody involved in the process is very eye-opening and quite frankly the "aha" moments are plentiful. And you're seeing this value stream map, basically the orange-colored burst that identify opportunities are areas that people involved in the process had identified as those areas to go after and the whole process in and of itself really is getting everybody on the same page and understanding the dependencies and interrelationships across our process to their workflow.

Reduce Wasted Time

In the world of lean, there is a basic concept of waste versus value-add and I just put the slide in here to really demonstrate and within our process improvement work, we really strive to reduce the wasted time and convert it to value-add time. You'll see this as identifying 5 activities, basically understanding the need, hunting for the data, compiling, interpreting and distributing data. And the real value-add comes in item 4 which is interpreting and improving. This isn't meant to minimize the work of those who are hunting for data or gathering or compiling. It simply means that we have an opportunity to take those precious resources and direct them at actually improving the care, which is ultimately the end game. And in both the abstraction process flow that I showed at the earlier slide, as well as later in section prevention process flow, dramatic improvements have been made.
Personal Testimony

And clearly these tools are working. And you can see from the testimony of one of the folks from the frontline of infection prevention, they have substantially improved the chart abstraction process which has freed up time, actually improved patient safety and quality. And I love her quote just toward the middle, "The more we're out there preventing – rather than measuring – infections, the bigger a difference we can make, educating clinicians and, as a result, increasing patient safety and quality." And to me this really sums it up nicely. It's not an option to simply hire an army of data abstraction folks to measure. Organizations are going to stand out on those that take full advantage of technology in order that they can direct precious resources to the task of actually improving the care.

Closing Thoughts

• It is not optional
• Engage & align providers, analysts, abstractors, and subject matter experts
• Leverage data (close to the source) to drive change
• Be transparent
• Keep the patient at the center
Closing Thoughts

In my closing, I really just wanted to summarize briefly. We all know this is not optional. We can't bury our heads in the sand but we need to rally together to figure out how to succeed in this new pay per performance world and the stakes are getting higher, as Bobbi indicated. We need to engage the right people to first understand the current reality and then work to attack performance improvement. And in order to be efficient, we need to leverage technology rather than simply adding more staff, which is really not an option. Focused dashboards and scorecards when communicated to the right people at the time will keep all informed of progress. And lastly, let's not forget the patient who is at the heart of all that we do. I have witnessed one team in particular that brought a patient into the improvement work and I recall his eloquent feedback and I quote, "I think we have some opportunities here." And wow, is he right.

This concludes my portion of the presentation. Next, Tyler will be moderating audience questions.

Tyler?

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Resources

www.healthcatalyst.com

- White Paper: Surviving Value-Based Purchasing in Healthcare
- How-to Guide: How to Prepare for Value-based Payment

www.cms.gov

- The Official Website for the Medicare Hospital Value-based Purchasing Program
- Innovation Models

Tyler: Thank you so much, Jane. Could you advance the next slide? We do have some resources for everyone, not only at the Health Catalyst website with the whitepaper and how-to guide, but also there are resources available to you at the CMS website as well.

And I would like to remind everyone again that we will be sending out a link to all of these slides, as well as the recorded webinar to everyone that's registered today.

Will you advance to the last slide, Jane, please?
Tyler: Thank you. As we're giving you an opportunity to put some questions into the questions pane, we'd like to let everybody know that we do have some upcoming webinars in our Health Catalyst Webinar Series. Webinar is on the Analytics Adoption Model, a Healthcare Transformation, but also The Value Equation. And information on those and links to register to those will also be made available in the email that's sent out to everybody.

Let's start with our first question. Our first question is, how is the market responding to patient experience care metrics, such as HCAHPS metrics, knowing that patient experience is difficult to measure based on any number of given variables and the fact that survey data can widely vary?

Bobbi: This is Bobbi. I will take a shot at answering that question. Moving the patient experience metrics is never easy. Where I worked in the past, we have had some consulting groups come in and give us a framework, again some kind of framework. Just distributing reports was very helpful, making sure that it was top of the agenda on everyone's mind that continual reinforcement was helpful. I had to take my sister to the emergency room this weekend and it was amazing, the change that I've seen from the last time I had to go in the emergency room. People were aware. They were doing a remodel. So they had the map of different places to go sit and people were very nice to us and I would give them very high satisfaction marks, even though we had to wait, because people were concerned about us and you could tell that they were concerned. So, not an easy answer, but keep monitoring and measuring.

Tyler: Alright. Our next question is how does the Joint Commission Quality Measurement System play into CMS and organizational efforts? Are there too many competing systems?

Bobbi: There are a lot of measures out there. When I started in this position, I did a lot of research on measurement, I just thought, oh my heavens, and some of the meaningful use measures were not the same exact measurement. Even though they had the same kind of label, there were different exceptions on them. This is not believable. But I think Medicare has listened and they tried to make some of the measures, the direct commission measures, play in to CMS. Yes, there are – I think we do have too many measurement systems and that's why I brought up the program in California where the health plans talked together and decided this is how we're going to measure
We need to continue to do that. Jane, do you have any comments on that from your experience in the hospital?

Jane: No, just that I know they are attempting to blend them and it sure makes the job of the quality staff and the abstractors difficult.

Tyler: Alright. Our next question, it looks like a clarifying question, when you mentioned hospital, do you mean hospital plus contracted outpatient clinics?

Bobbi: Yes, I did. It was a generic kind of term. All of our structures now in healthcare are pretty complicated. Most hospitals that we get involved with have a lot of clinics attached to them, physician, various different physician practices that they've acquired, some of them have a health plan, some of them have an ACO. So our structure is becoming more and more difficult and...But yes, it was a generic term.

Tyler: Alright. Another question. You mentioned "physician lead", what other organizational champions are necessary for the framework you described?

Bobbi: That's probably me. What other physician champions...well, in the organization that I have cited most frequently in this talk, we actually engaged the chief medical officer and the chief medical information officer, as well as the quality leader in really developing and supporting the measurement infrastructure and the whole quality governance. So it's really about the governance overarching infrastructure, which is more your kind of committee infrastructure, versus each of the kind of performance improvement cycles of work where I was specifically talking about kind of at the grounds level the improvement work versus the overarching clinical quality governance, if that helps.

Tyler: Great. Bobbi, Jane, we are just past the top of the hour. So the webinar now is going to close. If there's anything else you like to add before we close the webinar....

Bobbi: No, I just want to thank everyone for listening and I hope you got some ideas.

Jane: Yes, thank you. I echo that.

Tyler: Alright. Well, thank you very much for joining us. After this meeting closes, you'll have the opportunity to take a short 5-question survey. Please take a few minutes and fill out the survey, so we can continue to bring you relevant content. Within 24 hours, you will be receiving an email with a link to the recording of this webinar, along with the presentation slides and the links to register for any of our upcoming webinars. On behalf of Bobbi Brown and Jane Felmlee, as well as the folks that help Catalyst, I'd like to thank you for joining us today.

Have a great day. This webinar has now concluded.

[END OF TRANSCRIPT]