Bobbi Brown: I am thrilled to be here today and talk about what we're seeing for 2019 and we'll talk a little bit about 2018 first. Okay, let's see what we're going to do. We're going to take a little journey today and we're going to have some fun. I saw this great article in the Wall Street Journal, 101 Ways to Live, Work and Goof Off More Ambitiously and one of them was, “Next time you have a real meltdown, literally melt down. It's very impressive.” These little quotes throughout and little words of wisdom as we go through, we're going to share those and also talk a lot about healthcare of course, but we do have to have some fun as we're doing this.

I am particularly, I love lists. I am a list maker. At the end of every year I make lists and so it's a lot of fun. On the right hand side you can see some of the things that are the more fun things and I snuck my dog in, I'm not sure everyone in the room knows, but she's up there and I dressed her up, which she of course didn't like. I think she's going to be a huge social influencer but she's of course not because she won't wear her clothes. The other thing that I saw a lot this year, the In and Out. I love In and Out lists. Washington Post does a great one every year, Wall Street Journal had this one on furniture.

Just when I got my house all done, now they're saying wicker is coming back. At Christmas time, I saw a million llamas everywhere. I Still can't exactly figure out what that was and so those were some of the kind of things that I saw from the fun standpoint. Let's talk a little bit more seriously but before we do, I want to say we're sharing today. we're going to do this together. I'm doing it with Steve Grossbart and as you advance in your career, you often have a chance to work with people that you worked with at a previous employer or a previous relationship and so much I'm thrilled to be working with Steven again and we're going to share our insights today.

Our stories for 2018. I went through some of the big magazines, the societies and you're going to see themes coming out of this. I loved doing the Harvard Business Review. The third best article was one on Excel, so go Excel. Total cost of care, digital consumer big in my space Healthcare Financial Management Association - total cost of care make sense as a digital consumer, it’s new for finance people to be out in that area, so we'll talk a little bit about that. There are a lot of articles on reform, a lot on social issues that we're seeing and on mergers and acquisitions and so we're going to talk about those. Sarah.

Sarah Stokes: Okay, we are to our first poll question. In your opinion, we'd like to know what was the top healthcare story in 2018? Your options are the midterm elections. Number two is Amazon, many articles have been written discussing the company's potential areas of expansion into healthcare including pharmacy, logistics and providing an electronic health record. Option three is CMS regulations including updates and changes to existing programs and new programs like bundled payment and the new ACA model.

Option four is consolidation and changing business models, including mergers, acquisitions and new players entering the market such as Google and Apple.

And lastly, our 5th option is consumerism, which includes the importance of involving patients in care and providing accurate billing information. We'll just give you a moment to get your votes in there and they're pouring in so far. Good. Do you have any words to expand on any of those Bobbi while we just let people wrap up their votes?

Bobbi Brown: No, I think you did a great job, thanks. It will be interesting to see what people think was their top story for the year. I'm going to go ahead and close that and we'll share the results. So, 17% reported the mid-term elections, 21% reported Amazon, 14% reported CMS regulations, 38% our majority in this poll voted for consolidation and changing business models and then 10% voted for consumerism. How does that line up with what you would have expected? Did that line up with your top story for 2018?

Sarah Stokes: Yes. Yes, it does. I am a little more excited about consumerism than what the poll is showing. The changing models, I think very important and regulations, I just think we all hate regulation and so that doesn't surprise me.

Bobbi Brown: You just need to click over on the arrow there. There we go. Okay, Google, this like I said my list. What was the top healthcare question on Google last year? There were four options here about diet, about disease, why am I always tired? Yeah, I want to do that too and the response was, the one that was the highest on Google was “What is the Keto Diet?” So, now we know. Health Catalyst as a company, we have over 70 clients and we have this wonderful department that puts together stories of what our clients are doing and really what we're trying to do is drive to outcomes for people.

Again, a lot of themes in here using risk prediction models, using machine learning, using patterns, all the data that we have, how are we going to use it to go forward to make improvements. We have data, but we need to make improvements with it. This is a particular story, we have a lot of stories out there. Customer success stories, you can get to them on our web. I just think that it's fun to be able to look back at the end of the year and say, “What have our clients done?” And, we had stories in the operational area, a lot in the clinical areas. Just so many different things that people do with the data as they're going through with it. So, that was fun to me.

Now let's get into the political arena. We all love that. There're some facts we have on here, the Federal exchange, the enrollment, it's closed now. 8.4 million consumers signed up. It was 8.7 last year, so a slight drop. We also are in a time of high unemployment and some states had expansion in Medicaid. Overall CMS was very pleased with this. They said they had resources to help with the enrollment and get everybody signed up that they wanted to get signed up.

We also had the midterm election and healthcare was just a big part. 41% of the eligible voters said healthcare was their key issue. The Democrats, the end result of that, Democrats have control of the house. Republicans in the Senate. Democrats really focusing on some different areas but on the right, I listed some

areas where I saw that there were some common areas between the two on drug pricing, transparency, the surprise billing in my state. I live in Arizona, as the first of January no more surprise billing for the consumer coming into ... You can't just get a bill out of nowhere if you were out of network, so it's good.

The other thing is the dish resolution. I all of a sudden realized by September 30th, medic, we need to get a resolution that some regulation is passed is how we're going to resolve that issue. Steve.

Stephen Grossbart: When we think about the midterms and what it means to the Affordable Care Act, it's not quite easy to come up with a clear pinpoint answer. The day after the election it's some ... According to some analysts, it cemented Obamacare's legacy and showed that the Democrats can actually win on healthcare. It also effectively ended Congress's attempts to repeal Obamacare with the Democratic House there can be no successful repeal of Obamacare. Yet, less than five weeks later, a federal judge in Texas ruled that the entire healthcare law is unconstitutional because during the tax reform initiative led by the Republicans on the hill, Congress voted to reduce the penalty for not getting health insurance down to $0.

The judge ruled that that effectively killed the constitutionality of the law because the supreme court had ruled that the law was constitutional because Congress had the taxing authority to do so. The following day lawyers who had been on both sides of the Affordable Care Act battles were saying this reasoning was flawed. There's very little legal experts who believe this ruling will stand up and bottom line is if Congress wanted to kill the Affordable Care Act, they needed to kill the Affordable Care Act not reduce the penalty down to $0. A new congress can come back and have the penalty back so that the law is still intact and we'll have to wait to see what the courts do.

In the meantime, three states had ballot proposals Idaho, Nebraska and Utah to expand Medicaid and two other states Kansas and main both elected new governors who will replace governors who had blocked state legislative attempts to expand Medicaid. So, the expansion of Medicaid is a sure thing probably in five of these states and we anticipate seeing an increase in Medicaid coverage up to 76 million by next year. The expansion of Medicaid is going forth and another thing that's happening in many states, they're also expanding state protections too and state laws that make it easier for people to get affordable care.

Another phenomenon that really came to fruition over the past two years is the growing interest in Medicare for all. Some of you may recall back in 2016, Bernie Sanders ran on it. Many of the new and progressive candidates for Congress emphasized Medicare for all. If we look at this graphic on the slide, if you look back to the first bar dates back to the era when Bill Clinton was president and only 40% of the population supported some type of single payer healthcare system.

At the time of the Affordable Care Act passage 2009, it was up to 46% and then six months before the November elections only 50% of the population. And this is, again just as Bernie Sanders was emphasizing and giving a focus on this. Only 50% believed in some type of single payer system. June of 2017, September of 2017 it kind of stuck at 53% and in that time or since the presidential election, it's now at 59%, so a big jump in end of 2017, early 2018 towards Americans being polled and voicing their support for expanded single payer system. And, it's most likely that in the House of Representatives a Medicare for all will be introduced.

I don't know that it's going to get the democratic votes to pass and it certainly won't get passed the Senate, but there's certainly a growing interest in this type of single payer system.

Bobbi Brown: Transparency was an area where, again there's agreement with both parties but what does it mean? It's always a definition. There are two graphs there and if you'll most of the states are gray, so that means we get an F on transparency, both on the cost side and on the quality side. A couple of states, California gets an A in quality scores and Minnesota, making them available to the public in a way that's usable to the public. Another thing that happened in this area is starting the first of the year, it should be 11.2019 hospitals have to post their prices online.

That's currently a requirement in California. So when I lived there, we went through that but again, prices ... and this is from a hospital I got online. You can't find it on everybody's website but I did find this on one website just as I got on to prepare for this. And again, listing just the prices with me as a consumer, I wouldn't know, do I need platelets? I don't know if I need platelets. On the DRG side, you have to post the DRGs and again this was done. This is live data that your average charge that you're going to have for that, that's cesarean section with complications and without complications so you can see the difference, so the public can see the difference.

You do want to be in compliance, you do want to review before you put it out there, what it means and understand that consumers are going to be a little bit shocked and maybe confused. You may be even confusing consumers and I've seen some ... I'm sure everybody has seen some editorials lately as “Well, what was this?” It is a step in the right direction. What the consumer really wants to know is, “How much am I going to pay? Of course. Maryland has an interesting website where the cost, it's for a couple of procedures. They've gone very deeply into each hospital and again, they show not just the hospital costs but what the total cost of that condition might be and also some quality metrics about that condition for that individual hospital. It's a good place, a good starting point of what we need to do more of for consumers.

Again, right now, if it were me. I'd be knowing this is out there, how is the public going to respond to this and how do I need to prepare a response to all of this. Population, what's going on with our population? The life expectancy 78.6 and

women, we do live a little longer. We're up to 81.1 but this was a slight drop from last year and last year it was 78.7. It is interesting when you look at the age bands for this. Of course, the suicide, our drug crisis is taking a toll on some of our younger population but for our older population, and this is where we need to plan for the future.

In 15 years, we're going to have 80 million more of beneficiaries. 10000 people join Medicare every day and our birth rate is at the lowest it's been in 30 years. And just a little graph over on the right hand side showing the age groups of people over 65 years old. In 2016, it's going to be 24% of the population. So as you're planning ahead for your future and, what do I need to build? Not as many beds. How can I serve this population? We have to acknowledge we're having an aging population and how do we really service them?

Stephen Grossbart: Thanks for reminding me that I'm getting old Bob, I really appreciate that.

Bobbi Brown: I am as well, so none of us are getting any younger. A good thing about, I love consumerism probably because I'm a finance person and so anything that's in the marketing world is just something that I love. I found this study from Bain & Company and they are saying the Amazon effect, those bars with the red dots are what Amazon does that excels Amazon into the strategy as far as growth. And so, there are things like saves time, reduces effort, avoids the hassle. I mean, we're assuming that the quality is there and the cost there is ... It's just interesting to me, again, how can we imply this to healthcare and how is the consumer going to be impacted by this. The graph on the right hand side says, “What do consumers want when they're making decisions?” and convenient, easy access.

Now, if you follow the Amazon model, the article goes on to state, “Gee overtime you will have a higher revenue growth.” 11% for those companies that matched up with the Amazon model, their growth was much higher. We all know our patients, they're very frustrated with our billing process, 68% as a matter of fact. 30% of the patients are starting to rely on retail clinics. The area that's coming in to avoid the hassle. I just walk in the door and, so ahead of time. Again, what do you need to be doing? what you need to just look at what you're doing to get yourself in a space where your brand will be recognized and you'll be part of the patient preference so you'll be picked.

Just one thing where there was a company called chewy, of course, they sell dog things and they are beating Amazon at their own game because they have more variety and they also continue to ... and they really focused on what mattered to the pet owners not just a broader population but again segmentation, which used to be a big thing when I was in school, segmenting the market. Steve.

Stephen Grossbart: I was going to say I don't even bother going to my primary care physician for a flu vaccine. They don't have the vaccine and it's easier to pick it up with the cold cuts at the grocery store. Some of what's driving consumerism and some of that angst among our population is just the continuing cost of healthcare and it's

important to put things in context. We spend 18% of our gross domestic product on healthcare compared to our peer nations in the world, we have far out-paced even the next most expensive Switzerland, which is just over 12% of their gross domestic product.

Then the other interesting thing is even though we're the leader, we're number 6th when it comes to government healthcare spending. If you think about Medicaid, Medicare, tax breaks that employers get for providing health insurance. We spend a lot of government dollars on healthcare and interestingly our northern neighbors in Canada spend less of their taxpayers, they spend less of their gross domestic product on government insurance than we do in America and of course, we have the highest private healthcare spending as well. The frustration with price, the frustration with the inefficiencies in our healthcare system are partly related to the high cost that we pay and we're also finding that our healthcare quality is falling behind other industrial nations.

Bobbi Brown: Okay. How can we, again, get the consumer involved? Personalization and there's a great YouTuber out there and this teacher greets every one of his students within an individual handshake when they come in the classroom. It was on the news and it was just to me, a great way to really know how does somebody remember me? How do I get involved in my own healthcare? This whole personalization thing. There's a thing called the Blue Button. It's actually a government sponsored website helping the consumer to download their own health records and telling you what organizations you can go to download your health records.

The whole thought is getting the consumer more involved in their health care. How do we involve this emotional base? And one futurist that was talking about saying, “Well gee, maybe we need to make everybody a member.” When I was at Kaiser, I used to count membership and I know that Kaiser had a huge brand loyalty. It wasn't unusual to find someone who had been a Kaiser member for 45, 50 years and you just go, “Wow, I mean that's loyalty and somebody that really likes your brand and we all need to think about how we're going to do that in our own space.”

Kaiser has moved very heavily into telehealth. Again, it is a different model so they could do it and 78% of the consumers are interested in some sort of virtual healthcare services. Is that video? I don't know if it's video or if it's just online just talking or is it being able to talk to a consumer from the provider perspective. You can see Kaiser's numbers $65 million prescriptions are refilled online on an annual basis and they see 50% of their patients what they call distantly. There's change there, it's coming and finally CMS expanded for 2019. They expanded some regulations for telehealth and virtual care.

There are a discrete set of services that you can now bill for virtual check-ins, remote evaluation and this interprofessional, the consultation and I didn't even know there was such a thing but there is an American Telemedicine Association and they state that 34 states and the district of Columbia require that private

insurers cover telehealth the same as they cover in-person care. So, we'll see if Dr. Cosgrove is right and it is the year of telehealth in our industry.

Again, thinking about what are you going to do? I like to look and see what new roles are out there. There's a couple of new here Global Head of Digital and Personalized Health Care Partnering, a good title. Chief Strategic Innovation Officer, Chief Digital Officer. I saw one a Fortune 500 had a little blurb and said there's a Chief Storyteller, a Chief Flavor Officer that would be for me Chief Flavor Officer serve the purpose and what these new titles do is elevate that area into an area where you are acknowledging that your company is going to focus on that, so it's what your company values.

I think all of our roles are evolving. The CIO having to get more into digital health, talk about social, talk about ... The CIOs are not just installing software anymore and building software. They are really helping all of us use technology to improve our services. I think this is a trend that's going to continue on a very fast pace. The whole person. This was just so much fun. We had Dr. Penny Wheeler attended our conference that we put on every year and talked about what Allina is doing to connect patients to their resources, so that they can meet their unique and as the word unique identified needs in there, so the whole person care.

There are some things that are sad about this, our child poverty and it's happened in the last five years, so we're changing. We do have some positive things though. We have some states that have very good health scores. There's also a website out there, Healthy People, it talks about goals that ... and it really, it's a good website because it shows areas of disparity in the population and for different types of medical conditions. Again, there's so much we have to do there, so much we can talk about and so much that it will mean a lot for providers and payers to do more work with their community so improving these social, what we call Social Determinants Health SDOH.

Stephen Grossbart: This slide is also related to Social Determinants Health. It's the ultimate end product of some of the challenges we face in our country. Our life expectancy has declined and is now among the lowest in amongst 17 high income and peer nations. If we look at a variation within our nation, it's dramatic. Big drivers for that are access to health care, early childhood development, education, work conditions and the aging process and so on. We could look at this across our nation. If you live on the upper east side of Manhattan, your life expectancy is 10 years greater than people who live five miles north of you in the south of Bronx.

This was something that Don Berwick highlighted at the Institute for Healthcare Improvement meeting last December. So life expectancy declines six months for every minute you drive on the subway or two point three years for every mile you drive and the opportunities for addressing this are challenging. To really get at social determinants there's so much and it's so complex. Partnering with your community is critical and Rush University Medical Center has done some

exciting work and there's a number of innovative communities and health systems out there who are working to try to change the equation in healthcare and I think we're going to see more of this.

When you think about it, we spend as a nation 782 billion dollars a year in healthcare. Healthcare industry employs 5.6 million people and we hold investment portfolios of about 400 billion. Health systems have a tremendous potential influence on the way our communities survive and support. Rush is actually saying it's their job to work towards improving life expectancy both in their community, both internal community, their employees as well as external. There is a change hiring locally and developing talent. They've increased their minimum wage up to, I believe $22, which they say is the minimum for a sustainable income to support health.

They're turning to local resources in the neighborhood where their hospital and medical center based. They're buying locally. There was a trend years ago that we would leverage our supply chain strength by negotiating aggressive contracts at a national level. Rush has decided whenever they can, they're going to buy locally, they're going to invest locally and then their employees and staff are investing a lot of energy and volunteer work in their communities and that collectively, they believe will improve the quality of health and increased life expectancy in the neighborhoods where they serve.

Bobbi Brown: Okay, one thing that's exciting to me about social determinants of health is the ability to tell stories at a personal level and I think that's what's so powerful is we can change lives down at an individual family. And then, that to me, I think is a place we all need to be thinking about is we do need to think broadly and then think about how we can impact an individual. Believe it or not, I said I was going to give you 101 facts, we're halfway. We're halfway to our facts here, so let's talk a little bit about the IT world.

A little out of my space but I figure when the New Yorker can have robots on their cover, this was their Thanksgiving cover, you know that the robots are moving into our world. The consumer fair that's in Las Vegas every year was year or last week, I believe. If you're anything lots of things get sent out from that and they had a flying car of course, which is great. They also got into other type ... Well, I guess the flying car is not exactly a health related product, but I'll make it one.

Hearing aids, they got into hearing aids and of course a lot of wearables and I thought, “Hearing aid, that's something that yeah, we should be able to improve, it shouldn't be the same old hearing aid that we've had before.” And then, my accounting association published a paper about the robotic accounting department. Again, if it's coming to the accounting department, it's coming to your department. About what are we doing now that's very repetitive that could be done in another way through machine learning and how is it going to impact your area and thinking about how it's going to impact your area and the change process that you're going to have to go through.

Interoperability, when the new regs came out, I got a lot of calls about, “Oh, aren't you excited about measures and,” I said, “Well, gee, the most important thing to me is interoperability. We're going to have to show interoperability in part of MACRA MIPs. 25% of your score for 2019 will be that you can say, and you're going to get various points for it. That you can say that you are promoting interoperability and so, to me I thought, “Well, what does that mean? I'd love to say the word but what does it really mean?”

And so, what I thought was great is they've actually given us some ... CMS has given us some regs that describe this. What's e-prescribing, What's going through the health information exchange, what are you putting from the provider to the patient and what kind of public health, what records are you sharing with public health data, your registry, different kind of surveillance reporting? That you need to be able to show that you're doing. I think again from the IT perspective this is a world with a lot of changes.

The merger world, all of these things that happened in 2018. So yes, there were a lot of mergers. Advocate, Aurora, it actually started in 2017, closed in 2018. All of these are not closed now but some of them that are interesting to me. There was a couple called off that cultures don't mix. What they thought was going to work didn't work. Dignity Health, CHI Sometimes they will give a new name. They have decided that did not close in 2018 at the end of the year. They wanted another month and they're going to give their new name CommonSpirit Health. ProMedica, HC ManorCare runs a lot of skilled nursing facilities throughout the country.

Again, as we're going to new methods of payment, some people are looking at the merger and acquisition route to fulfill that. Stanford Health, Good Samaritan Society again a lot of ... In Good Samaritan, a lot of sniff bids and one other sad fact for me is that 21 Hospitals closed in 2018. This is where we had the highest rating, this new delivery and partnerships and some unexpected partners. And for Amazon, every time I read about Amazon, it's a new thing. Are they going to control our supply chain? They bought a pharmacy company last year, Pill Pack.

Are they going to enter into the insurance market? Are they going to create an EMR? Are They going to? Are they going to just integrate, are they going to provide clinics to people? It's interesting on our side, on the health side, we've hired a lot of people from the industry, these high tech industries but Google has hired former executives of Geisinger in Cleveland Clinic to help them out. Google is also exploring partnerships with Walgreens. I saw today Walgreens getting in and talking to many other different types.

The big CVS/Aetna the first one, this is going to be combining 10000 stores, 1100 clinics and $22 million enrollees, so what does that really mean? The executive officer said, “Well, we're going to create a plan that's going to differentiate CVS in these patient journeys. Again, make them simpler, make them more personalized while making care more accessible. Again, that fits a lot

with what I was saying we need to do in healthcare. That could be a very winning strategy for him, only time will tell.

And of course, on the bottom we still had United Healthcare an insurance company buying physician practices and others were following in the same line. Again, trying to control, they're trying to control the first input into the system. So, it's exciting.

Let's switch tracks a little bit here and talk about volumes. What's going on? I got some utilization stats from the American Hospital Association. Admits per thousand on the right continuing to drop, leveled out a little bit in the past couple of years. I'm sure as we mentioned, the Medicare population going in there. Admits were up less than a percent from 16 to 17. The days were flat, slight decreases in inpatient surgeries and slight decreases in births, our outpatient volume was flat.

If you look at that chat in the center, the black and blue bars, the inpatient and outpatient in a hospital, the revenue is getting closer together. It used to be hospitals were mainly inpatient facilities and now they're getting much that revenue gap is not as great as it was. And, over on the right hand side, I got that chart from a real estate group showing the number of outpatient facilities that had been opened across the years and you can see again, steady growth in that.

AHA their future scan said 71% of the people that responded, healthcare people that responded to the survey said they're going to be acquiring off-site facilities for outpatient care. Finance, stable, stable, stable, stable. Moody's has this negative with glimmers of stability, I like that. They are also saying 10% of the hospitals are at risk for closure. You look at the Medicare margin, a Medicare margin now 9.9% negative in 2017. You look at the growth of revenue over expenses and unfortunately the expense growth is exceeding the revenue growth not good for our industry.

What makes a high bond rating? A couple different things you need to think about. Am I in any of these categories? Do I have a strong leading market position, strong operating margins, good balance sheet metrics and growing market? Is my population growing in the area that I serve or can I expand to get outside of that area? I just looked at some operating income from information that I had and I don't have operating percent on there but from year to year, most of the large systems showed an increase.

Cost, we need to be zealots on cost. When Steve put up that graph showing our cost as a nation in healthcare and one of our great CFO at UPFC, he's saying, “We need to be zealots. We need to track and it needs to not just be finance doing it. It needs to be the administrative team do it.” Our healthcare spend is moderating. We were only up 3.9%. We're still spending about $10000 per capita per year and we're not the only industry doing that. I saw a lot of things on ... We all saw GM coming out as the sedan car is not selling, they're retooling and unfortunately doing layoffs.

Walgreens itself, they're going to use a zero-based budgeting approach to try to get a billion dollars out of their cost structure and they're trying to do this to reshape the organization because they want to drive growth, so it is happening. Our CMS programs continue along much the same way that they have. Most of these programs are value based and they've been in place three, four, five years now. Not The MIPS but a lot of the hospital programs have been in place for a while and you can see some results there on the re-admission.

We've changed the payment structure and the re-admission rates are going down. I know a lot of our clients are working on re-admission and is that the right thing to do for the patient? Yes, it is. We do want to keep people out of the hospital and get them back to their home as quickly as possible.

Stephen Grossbart: And, I could add there. We don't see any dramatic changes to these value-based programs, they're going to look a lot like they did last year. This year they'll be virtually the same as last year, so just keep doing the good work.

Bobbi Brown: Yes. The Medicare Advantage program it represents right now 34% of the Medicare population but there's a top seven insurers that have 76% of the enrollment. It's a margin of 2.6 They had a good increase from CMS last year and CMS is going to let them ... The insurance companies have a brighter definition of benefits. You can offer dental in the past. Now they're broadening that to you can offer home care services, offer someone to help your loved one do the settings at home. Medicare, again Advantage growing.

The accountable care space. Yup, it grew. This is where, if I probably made a mistake last year. I think value based was just going to grow, grow, grow and it is going to grow but not as rapidly as I said. You'll see there is a little bit of leveling off in the past couple of years but there's still a thousand ACOs across the country and there are still some large insurers. We know Medicare, we'll talk a little bit about Medicare in a second here. Medicare, they went back and forth on this and now the HSS secretary actually said, “We need bold new payment models.”

He wants the ACOs to take on real risk and what he means by that is not just an upside. If you do well, you get something but he wants an upside and a downside so that if you don't do well, you have to pay back to the government and that's a little scary for everybody. I'm just always ... and he felt that the payment models that have been in place so far have had lackluster results. We're also seeing the AHA future scan. We'll see if this comes true. There were not a lot of health systems looking to get into the own insurance market but there are a lot of health systems working closer with self-funded employers. I think employers may be a market that we need to get into a whole lot more and help out our employers control their cost.

Pathways to success. That's the new ACO model for CMS. I just love this, the final regs came out December 21st and the letter of intent is due January 2nd to the 18th. I guess CMS thought none of us were going to take off for Santa Clause

or well the holidays and the actual application is due February 19th. That's not giving you a sufficient time at all and I've seen again, things come flying across in the past couple of days, you know, “This can't be so I don't know if they'll extend the deadline.” If they do extend the deadline that's fine. That gives you a little more time but if this is something that you think you want to do. You can see that these things are going to move quickly. I would say you need to be preparing and thinking about it and developing a strategy or a straw man or how you're going to do this in your organization.

What does it really mean to have bundled payments? The five goals for this new CMS model. Accountability and competition, we mentioned that. Continue of quality, integrity and well the one I'm really am excited about is the beneficiary engagement. ACOs will now be able to talk directly to the beneficiary and they'll be able to offer a beneficiary some incentive for care. Just talking a little bit about two of our large insurance companies. United Healthcare they have a nice value based arrangement that's right on their website same with Humana. They call their program the intersection of health + care. What they're seeing. Again, all of these are decreasing costs through the ED and through hospital admissions.

Episodes of Care Bundles, I love bundles. They're Medicare payments and again this is the one that started out voluntary, then it went to mandatory, then it went back to voluntary and right now the new voluntary one is called BPCI Advanced, started October of 2018. There's 1547 participants and it's split between ... Those are actually split between the hospital and physician organizations that signed up for this. Quality scores are part of it and they also gave you an opt out rate. So you had the ability to sign up, get the data but you could opt out in March 19. Again, you'd have to be able to analyze your data and say, “Can I really make it in a bundle?”

And again, a bundle, what that means is it's combining the part A and part B together and giving you one rate. The most common bundles that people signed up for 53% signed up for major joint replacement, 45% CHF and 44% for sepsis. So there were a lot of responses to this, a lot of people put their toe in the market and I think that's a good thing to see. I'm going to start getting data, can I analyze that data? Can I really? Do I have the care management? Do I have the rest of my organization aligned with trying to deliver a bundle not just something of get the patient out of my hospital after a short period of time.

I thought it was really fun that Medtronic, a great company. He sees a future, their CEO, where medical technology companies accept more risk on how they get paid. He's taking financial accountability for incomes. They have signed up for this anti-bacterial sleeve, a deal with Aetna non-prompt and very, very few ... They haven't had to give a lot of refunds, so they're making, they're doing what they say their product is supposed to do and they're willing to take risk on it. Risk is an area that was never my favorite thing to do. Of course, I'm a finance person so I'm risk averse but it's out there. So, you've got to think about how

much risk can my organization take and what does that mean for us? How do we respond to that?

Stephen Grossbart: So, your to do list coming out of this webinar is to think about, do you need to update your plan based on the knowledge you now have and think about how these changes are going to impact your organization. I think in the area of value-based care, we're going to see ACOs continue, bundles are going to continue, risk-based contracts are going to probably be the fastest growing part of the equation. This is going to add to your data burden. You cannot get into these various arrangements if you don't have the analytical capability. So learn how to analyze claims data.

This is a big Achilles heel for most health systems, claims data and understanding and forecasting the impacts of risk is the greatest challenge and build your capacity, integrate claims data with clinical data because for those of us who are on the providers' side of the equation, we are here ultimately to leverage the clinical care we provide to reduce the cost of those claims. Plan for data, new types of data and develop the metrics that support your business as you move into these new areas to venture.

Collaborating with community partners. The Social Determinants of Health are important. Continue to think how you can work effectively relations with employers for example, relations with your community and your volunteers and charitable organizations in your towns and cities. And then finally, in terms of the Affordable Care Act, we've spent the last two years wondering if it's going to stay or go. It looks like for now it's going to be business as usual. We can expect health and human services to chip away at provisions of the Affordable Care Act but nothing major can happen without an act of Congress.

The only wildcard here is the supreme court alone can disrupt the Affordable Care Act before 2020 election and it's impossible to predict what's going to happen. It will be interesting to see if the court is with its stronger conservative majority is going to fundamentally change a rule and unconstitutional or adhere to the precedents that the court's already set up, but that one that I don't think either Bobbi nor I are willing to venture a guess or predict on that one.

Bobbi Brown: Sarah.

Sarah Stokes: All right, we've got our next poll question for you here. Given everything we've talked about today. In your opinion, what will be the top healthcare story in 2019? So your first option is the Affordable Care Act as Steve mentioned there are lots of proposed changes that could affect the reach and scope of that. Your second option is big market share gains in new care-delivery models. Your third option is CMS regulations including updates and changes to existing programs and new programs like the bundled payment and the new ACO model. Your fourth option is consolidation and changing business models including mergers, acquisitions, new players entering the market such as Google, Apple and the ever mentioned Amazon and the 5th option is consumerism, which includes

that importance of involving patients in care and providing accurate billing information.

We'll give you just a few moments here to go ahead and respond to that poll. We are nearing the end of the presentation, so if you have any questions that are top of mind, this is a good opportunity for you to submit those before we dive into the Q&A session here in just a moment. Okay, we're going to go ahead and close that poll and share the results. 9% reported the Affordable Care Act, 21% reported big market share gains in new care-delivery models, 8% reported CMS regulations, 47% the majority in this poll reported consolidation and changing business models aligning with what we saw earlier and then 14% reported consumerism.

Bobbi Brown: That's great. I think this is great. I'm glad consumerism is on there and those changing models. They kind of interact. I mean, I know you're probably thinking when I put this together there's some of these that overlap each other, we know that, but we just wanted to get your opinion on what's going to be happening in 2019. Steve, any comments?

Stephen Grossbart: I find it interesting. We're expecting something that we don't expect. Consolidation and changing business models those are rapidly developing and a year ago we weren't talking about Amazon and Berkshire Hathaway and but no one really ... I guess we were hearing hints that Aetna and CVS might Merge but these are surprising and will continue, no doubt.

Bobbi Brown: Yes, I just wish I could see everybody and get a read on your body language. Anyway, 2019 will be the year of, it looks like changing models but from a fun standpoint. There was an NPR article, a news article that came on in the end and I'm not a tarot card reader and so ... but this was the card a Six of Swords I think it is and what it means is we're moving toward change. And of course, I love when I say this, you could say this about anything but I thought, “Well it actually is true, we are moving toward change.”

The color of the year for 2019, just some fun facts for you, it's living coral, the food. That's a combination of lettuce and celery or something like that. The moon, I think we're going to see a ton of stuff about the moon. Maybe I'm just this month. It's been on the cover of every magazine. We're having a red mood or something this month then I think we're coming up to some anniversaries of things that happened on the moon and we also had China go to the moon, so I'm putting moon in there.

Then this year take a chance of what are you going to do this year? I will read an article on robots in healthcare, I will look and see what artificial intelligence can do for me, I'll make sure that consumers know the price of what they're going to pay when they come to my organization. I'll make sure that they want to come to my organization. That I've met the preferences that meet my market. Any thoughts for you, what you're going to do this year?

Stephen Grossbart: I'm going to take a deeper look at how to be involved in the community and how to help our clients be involved in the community with our analytic tools and so on. I'm now a little worried about those robots as well. I have enough trouble with my iPhone, so I'm going to read up on those and I can only count up to two.

Bobbi Brown: Okay, Sarah I will turn it back to you.

Sarah Stokes: Okay, we have one final poll question for you all before we dive into the Q&A. Well, today's topic was an educational webinar focused on healthcare trends and predictions for the future. Some attendees would like to know more about Health Catalyst's products and professional services. If you would like to learn more, please answer this poll question and we're going to just go ahead and leave that poll question open for a moment as we start to dive into the questions.

This is a question that came in fairly early on when you were sharing the chart of, you know, showing the country and how the majority had scored an F on that transparency and quality scale. Jocelyn was wondering if you could remember who judges that, who is the ones compiling those score?

Bobbi Brown: Yeah, below the slide there was a source there and I think they're called Center for Transparency of Health. There is an organization that measures that. They do it every year. You can get on, they have on their website and they have a very nice, they rank each state and go through in a lot more detailed than obviously what I could show.

Sarah Stokes: Okay, perfect. Our next question comes from Lauren and she provides a little context here. First she says, “With all the conversations stressing the need for cost reduction and cost control, we seem to overlook the government policies that impact the social determinants of health. If we don't talk about the health consequences of the Farm Bill, corporate responsibility or with agencies like the FDA, EPA, USDA that have authority to make changes, we will never be able to control costs. We need to focus on reducing the need for health services not just how we can make things cheaper. Do you think this will become a focus in 2019?”

Stephen Grossbart: My first responses is, I hope so. I think it needs to be a focus. I do see a growing number of health systems looking at the communities they're serving in and looking to see how they can more effectively support that community, understanding that those are also the people who seek healthcare services, also their employees and I think there's certainly conversations about how we can ... collaborating with our community can actually improve healthcare of the nation and by the time they come to our hospitals so much can't be undone.

Bobbi Brown: And, what I've seen from our clients is a lot is taking place. It's easier on the state level generally to get involved in the state level. Just a client yesterday and they had a lot of contacts with the state Medicaid and not as ... it was harder for

them to work with Medicare but on the state they were very active getting involved with different programs failure to thrive and really being able to make a change. We'll see. I agree with Steve, I'd like to see it happen. I see a lot happening at the state level as well.

Sarah Stokes: All right. Our next question comes from Aby and she asks, “How does the number of hospital closures from last year, that 21 number you shared, compare to previous years, does it suggest any sort of trends?”

Bobbi Brown: It's usually around that number and I certainly can go look it up, but it does suggest a trend in the rural areas. There are more closing in the rural areas, which is ... It's a little sad.

Stephen Grossbart: One of the forecasts you've cited was a 10% reduction in hospitals in the next 12 months?

Bobbi Brown: Yeah, that came from-

Stephen Grossbart: That's a 300 plus.

Bobbi Brown: Yes. They said they're at risk of closure so again, there could be more consolidation. What's happened with several hospitals, they didn't close. They closed their inpatient beds but they kept the outpatient facility open and that could be happening a lot too.

Sarah Stokes: All right. Our next question comes from Tom and I'm going to try and paraphrase it a little bit. He mentions CVS and Aetna in that merger. I think he's asking, “Is this consumerism led by retail integration? Is that kind of how you would classify that?”

Bobbi Brown: Well, CVS is the main partner there. I just think it's a new way to think of how are we going to provide. “I am both the insurer and I am I'm providing the care, how do we do that?” And, we've had several - Mountain C.A.R.E and we have Kaiser in that same kind of model on a different kind of scale. This is going to be geographically very large, so any comments Steven? Okay.

Sarah Stokes: All right and I do want to call out, we're one minute out from the top of the hour. Bobbi and Steve have both agreed to stay on a little bit long to answer our remaining questions. So, we're just going to keep chugging along here. Our next question comes from Didi, who asks, “Where do you see pharmacists who are no longer just considered as pill dispensers playing a role in the healthcare industry?”

Bobbi Brown: Particularly on the care management side, on the social determinants of health? Again, I was just at a place yesterday, the head of the enterprise, again one of these new titles, Enterprise Care Management was a pharmacist.

Stephen Grossbart: And, we're seeing increasing role in retail pharmacy providing care counseling and support, helping monitoring medications, following up with physicians. We don't always know what our patients are receiving. Retail pharmacists often do because many people use the same pharmacy again and again. I do see that role in helping and supporting the care management of particularly the elderly patients to be significant.

Sarah Stokes: Great. Our next question comes from Bernie, who is asking, “What new solutions specifically will Health Catalyst provide as a result of these emerging trends?”

Bobbi Brown: We're doing a lot of work in the artificial intelligence area. I think we'll probably be having some webinars on that in the future and we have a lot even on our website about that now healthcare.ai you can go out. So yes, we will be doing a lot there. We're continuing to refine our population health. We're continuing to look at a diabetes, just those conditions where the heavy bundles were, we're doing a lot of work on orthopedics, continue to do work on sepsis. So any other things that you're-

Stephen Grossbart: Increased focus on ambulatory or community-based quality is going to evolve as well.

Sarah Stokes: All right. Our next question comes from Keith, who says, “If I understood the chart dealing with Medicare reimbursement at hospitals, which seemed to indicate a 10% shortfall. How is that sustainable from the hospital's point of view?”

Bobbi Brown: It's sustainable because we're fortunate that our commercial payers have been ... their rates again might be 300% of Medicare and so they are paying us more and how long will that continue? And, I've been saying that for a long time. How long is the commercial payer going to continue to accept that burden? In the past, I've seen a lot of hospitals focus on trying to get to a break even for Medicare but it's getting harder and harder, so I don't know how you feel Steve.

Stephen Grossbart: It makes a compelling point for reducing waste among all your patients who ... but definitely for your Medicare patients there's a tremendous amount of waste in healthcare and you're not being reimbursed for this. I mean estimates as much as 40% of the work that's done in the hospital is some form of waste an unnecessary X-Ray, an unnecessary MRI, duplicating a test that occurred already in the community and so on.

Sarah Stokes: All right. Your next question comes from Matthew, who says, “We provide data to delivery systems but they report that data especially from plans, it's difficult to obtain. The plans are the logjam, any thoughts about HHS helping that issue or other players helping force the plans to open up access?”

Bobbi Brown: I don't see anything from HHS. They are focused on transparency, so that should be an area that they, but I don't see anything from HHS on the short-term. On the short-term, I do see just the providers and payers working closer together and trying to create a more collaborative spirit and companies ... I will give a plug for Health Catalyst, we can ingest that data and help you use it. It's not always easy data to do but we can ingest it and help you use it.

Stephen Grossbart: One important thing is when you're negotiating with a payer for some sort of risk-based agreement, a contract, getting the data, understanding the data and negotiating terms around how that data is going to arrive at the front end is very important.

Bobbi Brown: That's true.

Stephen Grossbart: The health plans are not that hesitant to put it in a risk contract, but we have to know how to use that data and they have to provide us with the data we need. It's a part of that negotiation and discussion.

Sarah Stokes: Okay, looks like we have about three more questions. So Denise asks, “How are consumers being included in creating changes for more accessible, affordable healthcare?” She says, “Et cetera,” and then she added an addendum of, “How is the voice of the customer being included?”

Bobbi Brown: I have seen some of our clients include them on councils. That's a good thing about the federal government if under the federally qualified health centers the board has to be made up ... 51% of the board has to be made up of people that are receiving the services. I have seen various organizations take various steps to do that. I said this whole beneficiary involvement for the new pathways for success will open up areas for us to explore more with the patients, I think.

Sarah Stokes: All right. Our second to last question, it looks like it comes from Claire. She said, “Beyond the traditional Social Determinants of Health housing and transportation, what other psychosocial needs are top priorities for providers this year?”

Bobbi Brown: I'm hearing loneliness.

Stephen Grossbart: I was going to say loneliness. Loneliness is a big one.

Bobbi Brown: And, that's sometimes impeding the work that you might want to do remotely because the consumer wants to come in and see face to face. They want to talk to the front office person and if you ever go into a doctor's office, there is always a person there that wants to talk to people, so yeah.

Sarah Stokes: All right. Our last question comes from Russell, who asks, “What other macro trends societal or global do you predict will have a major impact on healthcare? I'm assuming over this next year.”

Bobbi Brown: I went light on the IT side because it's not particularly my area of expertise, so I think they are going to ... and I also went light on any kind of drug, new drugs that are coming out those kind of things. FDA, I didn't dig into the FDA approval list or anything like that, which might be a place where there could be something. It's almost a year because we're not in an election year. I think we're going to continue a lot on the policy side. Just same old, same old but you have to be ready to move faster than you've moved and Steve, I don't know if you have.

Stephen Grossbart: I would agree with your Bobbi, I don't have anything to add.

Bobbi Brown: Okay.

Sarah Stokes: All right. Well, that wraps up our Q&A for today. We want to thank Bobbi and Steve for taking the time to present and stay on a little bit of extra time for that Q&A.

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