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PRESENTATION

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Good morning. There you go thanks. Hey, welcome to ballroom Y at the Hyatt Regency in Orlando and yes, the rooms are arranged in alphabetical order. I wanted to start off today by apologizing for the long walk to our presentation room today. The bad news is that was a lot of steps to get in before breakfast. The good news is that it is my pleasure to welcome you to Tampa. It'll grow on you, just wait for it. Actually, this room is closer than last time we were here when we were in the -- in Ballroom Z, so we moved all the way up to Y. And I'm looking forward that in 24 years, we'll be right off the lobby. But enough about the alphabets and let's get to today's agenda. I'm going to take you through a little bit of just an introduction to what we're doing today. Brent Shafer, our Chairman and CEO, will give us some opening remarks and talk a little bit about the Cerner operating model. Jeff Townsend will talk about one of the elements of that operating model, greenhouse, the home of innovation. Don Trigg will then talk a little bit about the strategic growth initiatives. And we're very happy to welcome to Cerner David Bradshaw, a long-term friend of the firm and a recent add to the Cerner executive team. John Peterzalek will take us through marketplace and client relationships. Travis Dalton, our leader of the Federal business, will take us through an update of that business. Brenna Quinn, our leader in the revenue cycle business will give us an update on that important topic. And then I will provide a financial overview. At the end of that we'll have -- should have plenty time to get some Q&A. And so that today we're looking forward to. Thank you for joining us today.

Just showing our forward-looking statements and feel free to look at our website to get all of the details. Just for some of you that might not know Cerner very well. I just want to give a brief overview. It was founded in 1979, largest employer in Kansas City, 29,000 associates worldwide with 27,500 client facilities in over 35 countries. John will talk a little bit more later about our global breadth. 70 of the top 100 systems have a Cerner footprint, so we are everywhere in healthcare, and we are the largest provider of health IT to the Federal government. One of our key strategies is the investment in R&D as we internally develop much of our solutions and software, currently over $700 million annually invested in that process. We have a diversified highly recurring revenue stream, and I'll talk about that in my comments. Clinical and revenue cycle solutions and services across the entire continuum of care from acute to post acute and more. We have a cloud platform for population. Platforms are a very important part of our strategy, and Jeff Townsend will talk a little bit about that in his remarks. And certainly, as you look at our broad set of solutions and offerings, it spans license and SaaS, subscriptions, support-managed services and other tech-enabled services. In part of my discussion later, I'll talk a little about the business model and give you an update on what the contributions look like from those various models. And with that, I'd like to turn the stage over to Brent and get his comments. Thank you, Brent.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

All right, clicker. Thanks. Good morning. Thanks for being here. Thanks for joining us this morning. It's great to have you here. It -- the year passed quickly. I think, many of you I met for the first time last year at this event, and it's amazing how quickly 12 months goes. And if I stop and reflect for a minute about my first year, there is a few things that just stand out, and you can't miss them with this company with Cerner is one we signed a VA deal, which is some -- well, effectively the largest U.S. healthcare system there is, and we'll talk about that today, progress with that. We also signed a major contract in Sweden in Scona, which is 150 clinics, 10 hospitals, another major win for us. And then you've all heard about our investment in Lumeris. So $266 million investment. It's the second largest investment we've made in Cerner history, and we're excited about the momentum and the progress there, and that will come up in our discussion today as well.

And I think of mentioned a number of times part of what I try to do and you would expect in a first year is just get out and talk to a lot of clients, a lot of our partners, associates around the world. I've spend a lot of time doing that, really getting input and looking for the big themes. And what came out of that are some things you've heard about, but 3 big ones, which drive a lot of what we'll talk about today. One is a real focus around simplifying and being easier to do business with. We hear this from our clients. We hear there's a high need. They need us. They need us to go faster, but we need to make it easier for them. They're trying to solve a lot of problems, so we have a lot of work going on there. Two, we need to innovate faster, so Marc told -- mentioned the $700 million in development spending. We're big, and we have a lot of opportunity in front of us, a lot of great ideas to bring through, but with scale comes some complexity. And so what you're going to hear about today in the operating model is how to scale things quickly, how to move from new ideas, new concepts through the operating model to get them to scale to the whole market. And that's a big challenge, and I think a lot good work's been done to think through that. And of course, the goal of all 3 of these is to grow profitably over time and to have that continued drive. So we see great opportunity, and we'll go through some of the segments today. You'll get a feel for them but that overall is what we're about.

So you all know this, our core U.S. EHR market in our presence, it is a maturing market. We have a very strong position in this market, and we actually think that puts us in a great place. So if you know, some of the data around this, we have about 25% -- 25%, 26%, depending on the year of U.S. healthcare share position. And when you look globally, we're actually the largest EHR shareholder in the world. And literally -- Marc touched on this, but literally, the sun never sets on Cerner. So we're in 35 countries, 27,500 facilities. We touch 181 million lives every day. We support 2.7 million clinicians every day through their work. We have over 400 patents and a very strong commitment to R&D and development. We think all those things gives us a competitive edge in the next era of digitization. So -- and we believe that is just the beginning. It's not an end; it's a beginning. So the team's going to speak about the segment strategy and how we come at this, but you just see the scale of the market opportunities here and just thinking about a $280 billion global market in which we're positioned very well to play. So we think we have a structural advantage to do that, and we see the good opportunity to take advantage of adjacencies. To do that, some things that are fundamental to that growth and this comes up often in the calls are really green HealtheIntent to the masses. There is great opportunity there. We have an excellent position. We think we can do a lot more with that and how we support top health initiatives across the United States and around the world.

Also growing, outsourcing, RevWorks and ITWorks, there is great opportunity there. A lot of a market opportunity. And rev cycle, in which we have a significant position, saw good growth last year, have had a few growing pains, have a new leader with us taking strong hold of that business and gaining great momentum and a great learning in recent months. So we want to drive that forward and get the full benefit of the growth in that segment.

And Marc's going to -- Marc will walk through all the numbers, and you'll hear this through the presenters today. But what we want to get across is the opportunity for growth is very strong. Key drivers around AI, services, network, platform are all complementary to our core position in EHR. And Cerner has -- is really at the leading edge here in the new wave of health IT. So we expect healthy growth from these segments, and you'll get a little feel for where we're going and how we're coming at them through the course of the presentations.

So just a little bit now on the structure. As we got solicited feedback from associates and clients and tried to really spend some time as a team thinking through what do we need to do to position ourselves for the future. Having worked at a number of places is one thing to just started moving people and resources around, that's not really what we did. We took a lot of time to go very deep in how had we grown? What kind of structures did we have in place? How did they grow up over time? And frankly, we realized that we're structured in a way that was not conducive to productivity at $5.5 billion, $6 billion and going to $10 billion. And so truly trying to think very consciously about how do we structure for the future so that we can act -- make decisions with speed, deploy resources effectively, prioritize the best bets in a portfolio management process, et cetera. So the team -- this is team-generated, team-owned, and it really started with thinking through the strategy first then following with the structure that is sustainable and positions us for the future and then looking at the processes that support that structure. And the intent is to accelerate discovery and to scale innovation and to be able to do that on a rapid basis -- on an ongoing basis. So it's really an operating model that is built for the future.

Now we just are rolling this out in this month And we've introduced it, and you're going to hear more about it today and just kind of how we work with it. But basically, the greenhouse concept is an incubator. It's a familiar concept. It's particularly relevant to us because we have so much innovation to work through the system. And what we found is that we were in the same operating model having new ideas, competing for resources with operating issues that were already scaled, and you're consciously trying to rebalance these. So the idea is to create a special place for ideas that are very strong, have traction and can be scaled quickly through an incubator process and then put into the larger organization.

Second one is around strategic growth, and this is a specific focus on growing outside the EHR. So making sure we have dedicated resources and dedicated processes that drive us, so we're not defocused by our core business, which is so important on the new opportunities. So you'll hear more about that from Don.

And operations, obviously operations is a core, but a very specific focus there around reducing variability, finding efficiency, driving best practices across all of the segments in which we play. And then finally -- and maybe most importantly is a real, strong focus on client relationships, client service and client satisfaction, and you'll hear more about that from John. All of this is backed up with the focus around process improvement. So accountability; shared goals and driving increased collaboration and transparency; common metrics; common KPIs; a focus on life cycle, the solution or product life cycle and how we manage that; and really a focus around how we consciously partner and doing a better job of partnering. So it's all part of what backs up the model. If you've heard me talk a few times, you probably have seen these commitments, introduced these near the end of the year. But these are intended to be strategic pillars for us as we go forward, and we think if we deliver on these, we really position ourselves well for the future. First is client success. In a consolidating market with bigger and bigger footprints for our clients, it is absolutely critical that we help them succeed. As they succeed, we grow. We prosper, so we're very conscious, focused around that. The whole concept of network, creating connects across the whole continuum, and we'll talk more about that today, focus on experiences and outcomes and scaling best practices. This is so key, and you hear how much stress there is around using the EHR and using tools, of finding ways to focus on making it easier, better and better outcomes. And then, as I mentioned, very conscious practice around how we partner.

So a couple of examples. Some of this is just to give you some examples so just some simple ones. Our client's success. So we have an offering called dynamic documentation. It's been out for a while. And what it is it's an easier EHR data entry mechanism. It's a single input. It's populated across the record. It's very well liked. The interesting thing is it helps prevent burnout and clinician shortages just through -- just makes the whole process easier. The premier place we have, this is Nicklaus Children's in Miami. And what we found is that by using it, they can see about 4 more patients a day per doctor. And so you can just take something like that and say what's the savings that are possible across the country, if you deploy this, are just massive. So the dilemma is, we're 6 years post launch and only half of our Cerner client base have this. So this is a great illustration of a terrific idea solves a problem, can be scaled, but it's been hard to get adoption. And so this is -- we want to drive this more. These are great solutions. They really bring a benefit. So our goal is easier adoption and to be able to scale the benefits to the whole market.

Here is another one, just an illustration of intelligent health networks, and there's a lot ways to think about this. And I think Don will touch on some of this, but one that you just kind of -- you can see from a personal perspective. So asthmatics, asthmatics are 40% more likely to have an episode on a high-pollen day, right. It's just logical. And if you think about the cost around that for ED admissions, it's about $30,000 on average. It's typically a 3-day stay for an episode if it requires coming into an ED and all the costs that will surround that. So at Children's Hospital in Orange County, we've been working with them, and we're -- we have a program that really looks -- it's an intelligence network that is predictive. So it looks at EPA health data quality for the air, pollen and dust and then it alerts asthmatics, so it's preventative. And the idea here is to increase your meds, increase your inhaler therapy and, so on in advance, prevent the hospitalization. And we've been seeing great success with that. So it's an example of what's possible.

Better experiences and outcomes. So here's an example. 4 million Cerner client visits in EDs, 4 million clients per day -- excuse me, rephrase it, 4 million patients per day in our clients each month. And so in that process and we're all familiar with that, there is registration, charting, moving the data around, aggregating the data. And as we look at that, we see patterns, best practices, what's the best practice that can be modeled. And from the most efficient EDs to the least, there is about a 70% shorter time average to stay in the ED, just around they do workflow and handle that. So if you think about that, if 30 minutes -- if you can save 30 minutes for each ED visit, you can return 200 years to patient -- 200 years of time back to patients and caregivers in a month. So scaling like this across the market does -- has huge benefit.

And then finally, partners. So if you had a chance to look around the HIMSS floor and, hopefully, you have, and if you walk by some of the major boosts, we actually did a count. So with a larger footprint boost, you'll see that we are present in 20% of those. So we're very active as a partner today, and we -- that's -- you could see that on the floor. And we have about 30 third-party apps on our platforms today as we speak, and we expect that to increase significantly as we go forward.

So some examples of partnerships that are with large players like SalesForce, where we partner with HealtheIntent to coordinate care, reduce cost and small partners like Carevive, and they are an oncology, best-in-breed care planning, software package that we partner with our Millennium base and get a great outcome for our clients, and that's the spectrum. And you'll see more of this from us. It's part of our future.

So we really believe that if we deliver on these 4 commitments and we will, that's what we're structuring to do, funding to do, resourcing to do, that we will be at the forefront of healthcare and transforming the future of healthcare. So glad to have you here with us today and to talk about some of those opportunities, we really think healthcare has tremendous opportunity. We're in great place. As mentioned, Jeff will talk through a little bit about scalable innovation and how we move faster; Don will talk us through growth markets and scoping the opportunity there; John will talk about the market sizing, and U.S. and non-U. S. strategy; Travis who runs the government business, joining us to give you an update; Brenna, who's taken a firm hold of revenue cycle, and we're really feeling great about the progress we're seeing there, will give you an update on rev cycle; and then Marc will walk you through all the financials. So thanks for -- again for being here. And I'll turn it over to you, Jeff.

Jeffrey A. Townsend - *Cerner Corporation - Executive VP & Chief of Innovation*

Thanks, Brent. Good morning. So I'm going to cover 3 areas. Those of you that have seen me present before there is very few if any numbers on my slides. And Marc made me put more words on this year than normal. So I'm going to try to walk you through the -- what we mean by saying innovating and scale, give you a little bit stronger definition of platform and how we use that, how we think that drives opportunities, and then I'll land on some specifics around the greenhouse approach to innovation. So at the -- what I'll kind of call the portfolio management approach to innovation. There is a traditional mechanism portfolio management where you look at kind of your entire suite of solutions services offerings, which ones are performing well, which ones aren't, which ones go bundled together, how they align to markets. And we have put a lot more rigor into that in the last year. The key part around the operating model though is there is also a portfolio of maturity of your solution. Is it a new idea? Are you working with one client, single-digit number of clients? How that solution gets from that stage to 20 to 50 clients to 100 to a few thousand? And as Brent mentioned, our -- I'd say our consistent model over time was heavily biased around take the idea, build the team and grow it over time. And that creates a fair amount of tension inside the organization. And our clients get to see that. And it's not always in a great way of one-size-fits-all operating model versus a multifaceted maturity model. So navigating the maturity, think of that picture somewhat as a wheel. And as things move from idea stage to early growth to high-scale operations, the characteristics of that solution has to change at each stage. So you have to drive more and more variance out. You have to depend on talent a little differently, and you have to search for the optimal business model as you do that. So the side effects should be fewer reorganizations as things mature and most of these transitions are planned. So there is a heavy component of talent development and how you build talent into those team as they go through that wheel. The entire thing, which is more tied to greenhouse, is a model for what healthcare will look like in the future and how we somewhat digitize that model to create repeatability and remove variance. So if you look at -- this is a somewhat simple 4 box of journey to scale.

So on the left-hand side, it goes from a local deployment to something you might deploy nationally. So if you implement or design something to go in once, the cloud deployable and its consumable at a national level. A simple example there might be something in revenue cycle like claims clearinghouse. The approach that solution takes against the next axis, which is across the bottom which is the skill set. Do I needed a deep domain expertise? Or have I used tools, techniques and methods to where I don't need quite as many skills or maybe not as much labor to deploy that? And so as something matures, it moves to the right on the bottom. And if we achieve technical scale, it moves to the top. So a simple way to look at the model against this picture is that it starts from lower left and it works its way to the top. The more nuanced reality is it looks like this. So if it's a solution, it is built or designed to be cloud deployable and highly leverageable as one of your mechanisms to drive down cost of variances is going to take that upper path. If it's something that's more human knowledge, more curated evidence, it requires clinical expertise, its maturity path may go across the bottom before it makes that bend. Your business model has to account for that because you have more labor in the lower path and more technology in the upper path. The sweet spot is if you can balance that growth through the center line. But I wouldn't want you think all of them are going to follow the exact same path, but this is how we now think. So if you took any one of our solutions, we can somewhat map it to this zone of where is it at and where we're trying to get it to. Are we trying to make revenue cycle more repeatable? Take out the variance in the labor or the skill set, it means you're going to push more on the technology side of that curve. So it's a different lens to portfolio management.

And here is a couple of more specific examples. So our work on sepsis was a design upfront that could be a nationally deployable solution that can get to our entire client base quickly and could be modified monthly as that algorithm gets refined and improved. And so it took that upward path and then moved to the right as the deployment scaled. If you take something like clinical decision support, more evidence, more consensus building, it takes longer to get it through there. Brent mentioned physician documentation and how long we've had that new capability out there. That one, I would kind of say is still stuck on that lower left-hand quadrant. So it's taken us 6 years. We're hovering around half of the base adopting it. There are reasons why that's stuck. Business model is not one of them. This is an upgrade to their prior solution, so it's is not something they have to buy. It's management of change and adoption. So when you hear a lot of physician burnout, user experience, you do a comparable. If you're touring that site and it says, "See how you're using the system." You walk on the HIMSS floor and you see how we show it today, there is a gap. It's not quite as -- it's more of a predominant gap than what we'd see on our phones, but we all upgrade our phones multiple times over the last several years. We're getting updates to those every week. We rarely go look at what the new feature functions are, and you look up 1 day and you're 5 years behind. And so that's our challenge in moving when we say adoption or innovation at scale. It's, can we get that idea widely adopted across the base in a short period of time and can we use the data from use of the systems to figure out why it is or is not adopted. So even in those cases, where organizations are using dynamic doc, they'll have 20% to 30% of their physicians that are behind the growth curve that are still taking longer that aren't seeing the 4 extra patients a day. So we have to find ways to pull those users forward.

So the shift to platforms. So you have a maturity model that is built into how you operate, what kind of stage gates for how things are going to move through. Our big leverage point is a high level of reuse regardless of what market, segment or healthcare zone we're trying to target. So healthcare is incredibly complex. The opportunity of having a highly reusable platform, as Brent mentioned, almost 20% of the booths there have some relationship with Cerner interacting with our platforms. It opens up a niche set of marketplaces that we provide scale for that idea for either the rare or the unique but that rare or unique across the country does happen enough that there is a market opportunity there. Even though, it may not happen enough for Cerner to go chase it. So our goal which is -- is that third bullet is, can we take our $700 million in R&D and get that number to $2 billion to $3 billion, but that is in Cerner dollars. So every one of those organizations that has a little Cerner plaque or sign in their booth, they're spending R&D dollars against our platform, making our platforms better, extending the capabilities of our platforms, opening up new things. And we're not having to spend the dollars to go get that. What we do have to do is play a role to help coordinate all those assets and align them much like the physician doc example that we can precision target those back into the base. Based on your usage, your need and the value this component will deliver, we think you're great candidate for it. So this last bullet, this time next year maybe we name it. But for now, I'm going to call it cognitive content that runs at the moment. So in every industry that's digitized and now you have cloud deployable, the ability to rapidly change content, change that clinical evidence and put it in front of that -- the decision maker in a moment's time is now available. The challenge is healthcare is not really wired for that rate of change and so part of what we have to navigate in our maturity cycle -- so I think we gave -- we give several clinical examples here. Opioid would be one that we introduced at CHC last year. There was no new software there. It was clinical decision support, content, guidelines, alerts, bundled together with the purpose of reducing overall prescribing rates of opioids. So the technical deployment is there. The adoption of getting organizations to say, "I'll make that priority. I'll free up the time to actually engage, train the physicians to make those changes," that's the rate limiter. So as you compare to other industries whether you're looking at retail, you're looking at media, content's kind of the fuel. We think this is the next wave of fuel, but it's not pure content. It's a mixture of software, clinical evidence, data, analytics, all built around a purpose, so it's a different kind of app. So at a very simplified level, our platforms sit at the bottom. We're reusing that code, technology, decision support to drive up into those other markets. We have a heavy amount of capabilities going into the provider space. And Don's is going to talk a fair amount around networks. Our collection of data across all those platforms has created opportunities for us in the research or just the pure insight space. And there is a growing shift of capabilities moving towards consumer. Our leverage is that it all happens off of one-shared code set. So it's one set of shared capabilities, so don't think of HealtheIntent as purely pop health. Don't think Millennium as just an EMR. Think of it more as part of a broader healthcare model that can cover the breadth of healthcare. So as those centered shared capabilities become more componentized and cloud deployable, those functions can move across those markets. So a key component of our bet on health networks or intelligent networks is that many of the functions that happen inside an enterprise today will move above that enterprise. Referrals is a simple and very common one. You'll see a lot of people in the industry attacking that today. But anything that coordinates care and goes across venues, across visits, across physicians, words driven by some kind of quality or risk-related mandate happens above the enterprise. But at a functional level, it's the same function of ordering, documenting, scheduling that happens in the enterprise, it just moves above. The second shift is more of the transactions are going to be done by consumers. So if I want to schedule my own appointment, it's the same scheduling logic over on the right, I expose it to the left. So it gives us a great deal of leverage as we head down a platform part of this. This is hard to pull off if you're operating model is wired as a product only operating model. And it's not wired to custom assemble or to navigate your solutions build for purpose. So the key is that these 2 tether together, and that's built into this model a fair amount.

So last section. So the front of the wheel, greenhouse. And it's purposely named, and it will somewhat playoff of -- it's a controlled environment. This is where the seedlings start. But at some point, they get too large to live inside the house, and they have to move out. Or you can no longer move the next set of plants in. So built inside there is really kind of 4 core capabilities. And that graphic on the right, I'm not going to go through again. I've done that with this group a few times. But it is how we think about modeling healthcare. So we've invested heavily over the last several years modeling the experience of how to use our technology. We've started to make inroads into what are probably the other 2 areas that are incredibly important. What is the model practice? So how do I actually do my work? And what are the outcomes? And so the ability to target, I want to actually increase the throughput of number of patients I see per day as an outcome and work my way backwards is what we're attempting to be able to accomplish.

So every time you see one of those little snippets of organization XYZ just saved millions of dollars through this one capability, our goal is to understand how and why? Is that truly best practice? If it is, it goes into the model. If it makes it into the modern, then it's how we do it 1,000 times. And the faster we can do that 1,000 times and do more of them, the more of those organizations kind of get on the rapid change curve. So at a delivery level, it's a small set of clients, controlled environment. We've both invested or aligned to deal with kind of the uncertainty of new. We think that helps us accelerate innovation. So historically, we'd have an idea, we'd have to go find someplace that believed in the idea as well. We'd have to kind of tool or buildup on both sides. And then we kind of figure out whether that organization is good at doing new things. So we're going to design for organizations that are built for that and want to do that for the long run. The problem-solving part of this is many of the things we start won't be prepackaged. On the beginning, they'll be problem-solving based. So fix the opioid prescribing challenge in this community. We'll back into what that means at a productized level later.

And the last one is -- so similar to what you might see in the technology side of a network operating center or security operating center, we're standing up a value operating center. So across our entire client base, what things have they turned on? What have they not turned on? What's the opportunity for them to improve? And for those that are using it or not using, can we understand why? And so, this is kind of our model to attempt to create a methodology around, for now, I call it the science of healthcare improvement. So can we actually create a science for not only this innovation worked at the first place, which is kind of where we are today. We write the code, we deploy it. Client says, "Code worked, didn't break anything. Met my functional need," we declare victory. We move onto the next thing to work on. This takes it further to say did it really solve the original problem or did it just fix the symptom. How hard was it to get in? So one of the reasons on Brent's physician documentation example is you have to relearn how to documentation versus the old method. And your years of custom-built quick phrases and templates have to be retooled. You have to rebuild your content. So it's a big effort to move to that new tool, and it's worth it. But a lot of clients don't see that tipping point. So we're failing on that. It's too hard to make the switch change, which is why we don't have the adoption. And then, are there different ways we have to engage, which may be the client doesn't have time to do it themselves, but they would pay us to do it and just offer some of those things turnkey. So this right-hand side is kind of what we think the secret sauce is going to be to deliver a scale. And as I said, these are just a couple of examples, so we frequently get up here. I'll get up here and say, "Here's a new cool thing, Client X, saved tons of money. It proves that this technology is worth engaging with." But we don't come back and talk about the bottom part of that slide. This is when it hits 50% or more of our base. It didn't take 6 years to get it out, it only takes 2. That accelerates a lot of things in our model if we can pull it off. Now I'll turn it over to Don.

Donald D. Trigg - *Cerner Corporation - EVP of Strategic Growth*

Thanks. Good morning. So I'm going to pick up on a couple of things that Brent talked about and that Jeff described in his session as well. And I think -- starting with Jeff, I think one of the primary kind of orienting concepts for my section is going to be this concept of health network. And what do we think about when we're describing health network? We're talking about predominantly provider-based strategies in an MSA to build out a set of network assets and then to drive a monetization strategy around it. And so we think we have unique set of tools across all platforms, Millennium, CareAware and HealtheIntent that position us really well to help advance that business strategy on a market-by-market basis. So I'm going to talk a little bit about some of the macros that are playing out in the marketplace that we think represent tailwinds around that concept. Then from Brent's perspective, I'm going to unpack the strategic growth pillar of our operating model and talk a little bit about where we're going to focus for growth in 2019 and some of the financial projections, we think, represent the activity in that space, which Marc will talk about further. And then, I'm going to introduce David Bradshaw, our new Senior Vice President for Consumer & Employer, who's going to talk about our strategy specific to that market segment.

So with that, let me jump in. So from a provider health network trend, obviously, the first significant thing that we talked about multiple times and here have some fresh data around from Kaufman Hall is ongoing trend around M&A and acquisition activity on the provider side of healthcare. And what we saw this year and full year 2018 was a gravitation towards much larger average seller size in excess of $400 million in NPR and interesting strategies about -- around noncontiguous acquisitions where folks have built out a network within a region and now think there is extensibility to other adjacent markets that they want to operate in and back-office operating scale around that model. So let's just look at a couple of different use cases that are representative inside our base of client activity. And I picked mega sort of midsize acquisition of peers and then a smaller use case. So obviously, CommonSpirit and the acquisition around Dignity and CHI, now creates one of the largest not-for-profit health systems in the country, almost $3 billion in combined revenues. But the interesting piece of this is what they now have to do across, not just 21 states, but across a set of MSAs within those states to actually begin to advance market-by-market strategies and build out those health networks. So the kinds of dialogues that we're having with the Dignity, CHI as a combined entity, are things like how do we think about the data assets in a way that helps you design and think through network strategy within a discrete market. How do we think about tooling like CRM that allows you to think about how you're going to manage that combination of owned and affiliated provider assets. And also, how you're going to start engaging with patients and members to drive economics around those networks.

Health Quest & Western Connecticut. Two fairly comparably sized organizations, both Cerner clients. Again, very common business strategies around approach see leverage in the operating model through the combination. And finally, Mosaic, I think interesting in both what they did around network, trying to move outside of their rural geography into a major population base with nonacute assets, ultimately selling those nonacute assets to a major IDN within the market but then also repositioning within that rural geography, redesigning their network through a set of acquisitions from SSM. So very dynamic marketplace, health networks on a market-by-market basis. And again, technology assets, we think in our space, that can be very important in terms of how those business strategies get advanced.

Importantly, we tend to think about the headline hospital-based acquisition activity, but consolidation trend on a market-by-market basis is being -- is absolutely oriented outside and beyond the hospital. And we obviously see that with a heavy orientation and focus around key specialty areas. And I'll talk a little bit about our aperture around it, which is how do create winds inside traditional fee-for-service that are also preparatory for fee-for-value. So as those networks are getting built out, obviously, we have to get into what are the economic drivers around those networks strategies, and that's where we think the significant business opportunities for Cerner reside. Obviously, the big multi-year trend is government as the largest payer in our space with what we still think is an unsustainable cost curve and where we still believe IT has a significant lever for taking on and tackling that cost curve. Two big pieces of that, that we see as trend inside our base is, obviously, there's a strategy around growing top line revenue in key service lines, but we also see significant focus on working the expense line to make money at Medicare rates. And it all gets into labor calculus and workforce calculus very quickly because that's 50% of total spend. So a lot of what you see us doing off the CareAware platform, are strategies around the hospital operations, communications that can be a complement to AI and automation strategies and things like virtual health that represent a way to think about the productivity equation differently and more effectively at the enterprise level.

We've used this slide in the past to talk about this continuum, and this is something that we use fairly actively in client conversations. But this is absolutely the continuum we're on. And we think with government becoming a bigger percent of spend and healthcare becoming a bigger percent of GDP, there is gravitational trend towards value-based payment. I think we sometimes fall into the trap of trying to think about timing calculus around things like (inaudible) And what's playing out in the value-based care space. I think our contention would be that there are lots of use cases around management of your health network assets that can be driven by fee-for-service calculations that also then end up being hugely preparatory for risk-based contracting, so Jeff alluded to one. As we start to think about network referral and leakage strategies, I'm not only optimizing more high-margin service lines inside my network, but I'm also beginning to understand aspects of the provider network, how it performs in a way that's preparatory for where I want to go from a risk perspective.

So this has been a, I think, space that we've been interested in arguably for multiple decades but, certainly, a focus for us in the last 12 months and will be a big focus for us in 2019. And here are a couple of things that Brent alluded to that represent a combination of build, partner invest and pure-partner strategies in this network space. So obviously a large push into the Medicare Advantage space with the work that we're doing with Lumeris, including the opportunity to build out the technology platform within their 4.5-star plan in St. Louis, 70,000 members so really to prove out HealtheIntent as a technology foundation at scale. An announcement we made today with BayCare and the work we're doing with SalesForce, again, how do you think about CRM as this key capability for how we manage the network, both on the provider and on the member side. The work we're doing with American Well to think about virtualization strategies around the network and then some interesting and early experimentation that we're doing outside of our employer business with nontraditional network assets. So in this case, building out a near-site clinic capability in the Malvern market, using our own employees as the anchor tenant. But I think an interesting concept for us to think about for minority MSA markets where we don't have a dominant provider footprint, what would it look like to collaborate with a payer around individual and small group? What would it look like to take one of our existing juggle and player relationships and use them as an anchor for a near-site clinic asset in an MSA? And obviously to Brent's point, I think -- and to Jeff's point, we're thinking a lot about opportunities for partnership and for acquisition and for investment. As we look at the inflows of capital on a lot of the early stage activity, we see significant opportunities there, we think it's validating a thesis around health networks and we'll continue to be opportunistic as we play forward our strategy in the next 12, 24, and 60-plus months.

So with that, let me switch to the strategic growth pillar of the operating model and very quickly talk through some of the key principals around approach, some of the market segments that we're going to focus on in 2019, and what -- how we're thinking about that from a 5-year financial projection perspective. So as Brent described over the second half of last year, we spent a lot of time talking about how we wanted to go get greater focus around strategic growth and creating 100-plus million dollar businesses. These were the 5 principles that we used to define our thinking around approach, so this concept of this hospital to health network switch was important. Just thinking around MSA level provider consolidation. Again, no single provider has greater than 10% total share in our space. So it's a market that isn't highly consolidated at the national level, but it's growing in its level of consolidation at the market-by-market level.

And then, I think importantly, this concept of technology heterogeneity. While the market has been chasing one EMR since Meaningful Use, acquisition and affiliation strategies have introduced a high degree of EMR and technology heterogeneity into these networks. So we have to have strategies that are multi-EMR in their orientation and that health organizations deal with that technology heterogeneity at scale. There is a materiality piece that's critical. We looked at large $1-plus billion TAMs where we thought there was a reasonable chance of 10-plus percent share. We're obviously looking for leverage inside CareAware, HealtheIntent and Millennium. We wanted to make sure that we understood the barriers to entry from a minimum viable product requirement. And then, obviously, we're thinking a lot about speed to revenue, both on a 1- and a 3-year basis and how partnerships and acquisition strategies can help accelerate revenue attainment around spaces that we're interested in and want to focus on.

So these are the 6 market segments that we're going to design around structurally for 2019. And as I said, David is actually going to spend some time talking about the consumer/employer space. But we love the network services space, one of the core network services that we need to help health systems go build out their strategies on a market-by-market basis. We think there is interesting trend and trajectory around state government. And in particular, modularization of the MMIS contracts and our opportunity to play a role as a new participant in that space, and we have several interesting and early footprints there. We continue to like LTPAC and Behavioral Health. You guys have seen us make some acquisition activity in there, and but it's an area we think has market trend and where we'd like to bring focus. We also want to think about that space relative to BPCI and what we're doing from a bundle-payment perspective.

Jeff talked a little bit about this concept of data-as-a-service and some of the things that we're doing in that space. I think it's interesting set of adjacencies for us in many ways, in some ways new markets. As we think about the Duke relationship around DCRI and some of the things that we've done in the life sciences and pharma space. We see interesting growth opportunities there. And then as I mentioned, as we think about the labor calculus and how we actually drive efficiencies, in the post Meaningful Use environment, a set of interesting business cases that we're going to look to advance around hospital operations, around communication and around virtual health off our CareAware platform.

So I think plenty of opportunity. I think we're trying to bring some line of sight focus to these 6 market segments that we like a great deal, all of which have existing businesses in them that we think offer leverage, both from a top line and from an expense line perspective. And as Marc will sort of describe in greater detail as we work through our 6% to 9% projections, and we think about what the business looks like on a 5-year basis, line of sight focus for us is around how do we take a $300 million population health business, grow it on a 25% CAGR basis to $900 million over the next 5 years and then how do we think about acquisition, partnership and organic strategies across these 6 market segments initially to actually drive towards that 7.5% or midrange of projection with an additional $600 million in top line revenue. So we think that's achievable. We see a ton of opportunity and a ton of leverage in our existing assets, and we're excited about advancing it forward over the course of full year 2019.

One of the areas that we like a lot and that you've heard us talk about in the past is our work in the employer services space, which we think has not only important leverage in it but also is highly extensible to building out our consumer capabilities.

I'm very excited to have David Bradshaw joining us as Senior Vice President for Consumer & Employer. And he's going to spend a few minutes talking to you a little bit about that strategic space, and how we look to advance growth strategies around it in the year to come.

David Bradshaw

So just by way of background, I spent 20 years in industry at Memorial Hermann in Houston, Texas. All 20 years of that was in the CIO role, the last 5 have been as the Chief Strategy Officer and prior to that was 14 years at IBM in the sales and marketing and IBM Global Services. So this is kind of my third job out of college. And it's very interesting to see now the opportunity to blend both a vendor background, 20 years in the industry, and now bringing that to bear with the tools and the assets that Cerner has and as an example on this Consumer & Employer segment. It's not lost on any of us the fragmentation that our industry has as well as the fragmentation of consumer tools. We know the expectations are rising. We can all see that. And this is the CIO's dilemma on the far right side that if we are not careful as an industry, we're going to end up with about a dozen apps supporting the ecosystem that Don described to the network. And that's not really our vision, and that's not really our role, and we see that as an opportunity to be a convener and platform, if you will, for these consumer-oriented solutions.

There's no real loss that it's about a person, and people play different roles in the healthcare system. They shop. They look for their mother-in-law, a doctor. They're tending to their children. They also become patients. These are the same people. They get a medical record number and they have a doctor, and they create results. But they also get a plan. And that is a major part of our strategy as we look across all of the platforms and how do we start to digitize the plan for the patient in addition to the historical records.

And then when they enjoy a membership relationship, maybe with a provider-sponsored health plan, maybe in an ACO, there's the whole financial settlement of deductibles and HRAs and balance after insurance. And so part of what informs our view of our consumer strategy is this notion that the person plays different roles throughout the healthcare system. There's no shortage of places to start. You can go out on the HIMSS floor, and you can see vendors, point solutions working across this continuum. Our strategy is really building off of the Meaningful Use portal, that's deployed in hundreds of our clients, which is really in around receiving care and managing that health. We're moving upstream from that around previsit work. So shopping for a doctor, scheduling a visit, running through the financial protocol, paying your copay before you ever arrive to the outpatient facility and then the adjacent post discharge. And that's where -- and the other strategic business unit with LTAC and PAC, how do we gracefully pass a patient over into a long-term, acute-care setting where they have the tools and the knowledge to better manage their health.

Kind of our core foundation of this is our Consumer Framework, which is our second-generation HealtheLife product, which brings together not only the Cerner core tools but establishes a platform for innovation amongst ourselves and our other partners. So this is an example of the some of the co-development work that Cerner and Memorial Hermann actually engaged upon where we can bring together through these emerging standards of APIs third-party solutions that augment and build upon an integrated architecture for the health system and delivering upon the promise to their consumers, their patients and their members.

One of the big investments that Cerner has made over the last several years that goes to first clients in the summer of 2019 is a second-generation health and wellness platform. Many years ago Cerner acquired a company that has been completely rebuilt onto the HealtheIntent platform, and that goes to our largest most significant clients starting in the summer. And it's really beyond what we would recognize as a traditional employer-based wellness platform. This really starts to capture the longitudinal plan. So what is it that are your health goals? What is it that you and your doctor are working on as well as then managing communications back to your care manager, the communications back to your physician or their staff assistant? And so this is a product that is in development, and we should -- we said start with our first clients in the spring. This product had its origins in the employers. And as Don said, we see self-funded employers as a very strong market opportunity for us, not only with the health and wellness product that we're delivering, but also as they continue to try to fight this ongoing trend that they just continue to see. Roughly half of the marketplace is looking for disruptive type of solutions. And we think Cerner with the HealtheIntent platform is a vehicle to provide those solutions to those large self-funded employers. So with HealtheIntent as the middle, we really see an array of solutions, Don alluded to some of the on-site clinic work. In addition to that we have a fully functional TPA. Our technology to provide insights into the employer of what's happening with their population as their third-party administrator provides that data over on to the HealtheIntent platform and then how does that then inform a whole set of care management services where Cerner is acting as a coach or a wellness counselor or a care manager and those business models are on a "per member or per month or a per employee per month" type of model.

And then Don also alluded to our American Well partnership of how we bring a lower cost conclusion of a clinical interaction to an employer using video technology into that employer base. We see this as a very strong growth opportunity for us. So kind of then wrapping up on consumer and employer, we built these large-scale HealtheIntent databases. This information often has the highest fidelity, cleanliness of any data system in the ecosystem. And that really then creates a new opportunity for us to leverage our partnership with SalesForce. As the health industry starts to move into customer relationship management, physician relationship management, we see HealtheIntent as one of the foundational building blocks to light up that SalesForce platform with high-fidelity data. And this partnership was announced. Our team is active. The pipeline seems to be very large and resilient, and we're working through our first go-live set of customers primarily around gaps of care closure.

So in the at-risk model, HealtheIntent is managing registries. Some of our clients, maybe tens of thousands of not met individuals. Other clients were at hundreds of thousands of not met around a colonoscopy or a breast cancer screening or some quality measure or some HCC opportunity. And HealtheIntent knows this information, puts it face up into the physician's workflow. But what we now have at our disposal with our SalesForce partnership is the ability to put those 300,000 not met patients onto a journey and SalesForce and have SalesForce go and reach them and nudge them and engage them into action because the traditional healthcare system just doesn't have the labor to call 300,000 people on the phone, or you don't want to wait till they end up to the -- coming to the doctor's office. And so we see this as a very strong ROI. We also see this as an opportunity for our services team to provide this as a turnkey service to some of our clients as another element of how we take the same assets but look at the market differently and create new solutions and new revenue streams.

So kind of in summary, this move -- market is moving very fast. There's many fragmented options. What we're doing is bringing together a platform and curation of partners and our own solutions, health and wellness into the summer. We see employers seeking real solutions from Cerner and as a growth opportunity and HealtheIntent and SalesForce as 2 platforms that really work together to create something that is unique in the industry.

And so with that, I'm going to turn it over to John, who will walk through some of the client relationships.

John T. Peterzalek - *Cerner Corporation - Executive VP & Chief Client Officer*

Thank you. As I'm walking up here -- am I on? As I'm walking up here, I was encouraged because sitting there we're about 1 hour into this program. First, I was reminded by my watch that I need to stand, then I was encouraged by my watch that I need to stand. And walking up here, it demanded that I stand. So if anybody else is in there in the same category, please feel free, I won't take it personal if you need to stand up. But I want to cover 3 things here: and one is the market that we're in, or the world that our clients live in; our position in the industry; and then a little bit about how we align with our clients.

So first, kind of the world that our clients and we live in is broadly across the U.S., digitalization is happening. If you look at the acute-care world out there, pretty much all acute facilities in the U.S. are running on a certified platform. And about 90% of the ambulatory world out there is digitized.

So this sets us up incredibly well for all the second-order impacts that come out of digitalization. Outside the U.S, it's starting to happen out there, and the good thing about the U.S. when you have an opportunity out there, it usually comes with a large number of places of service, a large population and those type of things. So as digitalization happens outside of the U.S., I think you'll see the same trend that you see inside the U.S. as all the second-order impacts that come from all that hard work getting the core put in there. So what does that drive from our -- from the market? And you heard, most of them up here when -- through Jeff's, Don's and David's presentation.

But the rising consumer. And consumer is still a word that has many different definitions. It could be defined as a market or a marketplace. It can be defined as a patient. It can be defined as a member. But however, you slice it, consumerism is rising easier points of access, more access to data, more involvement in my care process, more information. It's all out there, and the digitization makes that possible. We have a shift from volume to value. We have been talking about that for many years. How quickly we get there is really the only debate. It is going to happen, and we need to be positioned, Our clients are being positioned when the true-value reimbursements come.

Consolidation. We hit a little bit of that. The world is consolidating out there. And that is not only a U.S. phenomenon, it's consolidating around the world, provider side, payer side, and we have to be ready for that.

And then finally, the technology that's out there. The points of access you can have data. You can collect from your watch. You can collect from all kinds of wearables. You can collect anywhere. All that data is relevant to my care journey, and I need to able to do something with that and present it when I need care for my benefit.

And then the top issues facing healthcare. I don't think these are a mystery to anybody, they've been out. There -- and just to hit a couple of highlights. There is just a relentless pressure on reducing costs and being more efficient and doing more, better, higher quality with less. All the rising of the consumer means the patient experience needs to be much better. It needs to be easier. I need to access my information better. I need to access my health benefits more quickly. All of those things that we're used to in the consumer world are being demanded in our healthcare world.

And then finally, all of the issues around how do you manage your population. How you keep me out of the system, not bring me into the system are proliferating everywhere out there in the world as well.

Our market. So we are one of the market leaders, and between us and our primary competitor, we own over 50% of the market. I think market -- or somebody had mentioned earlier, it might have Brent that we all run about 26% of the market and -- in the U.S. So we're about even in market share. And outside the U.S., we are by far the market leader in healthcare information technology. In the last 2 years, and the 2 years being '15 through '17, we have added, Cerner has added the most acute facilities of any other supplier. So we continued to add clients to our world. And then, the interesting part is that of -- even though we own 26%, 27% of the market share and the 2 major suppliers own over 50%, there are still 1,900 facilities, in the U.S. that are not a nonmarket-leading -- that are a nonmarket-leading EHRs, which means our opportunity in a replacement market remains strong, and we continue to work those every year in the same volumes that we've had in the past.

Of those 1,900 facilities many of them are smaller. We've had conversations before. While the opportunity in terms of share numbers are there, the size of those opportunities tend to be smaller in the new market or in the new client arena. But it sets up really well for our ASP offering that we have and that business has been growing considerably for us year over year over year as some of the smaller entities are looking for a viable solution for them to use.

And finally, we talked about population health quite a bit. And it's -- what we need to look at, and we need to make sure it's clear, that even though HealtheIntent serves the population health function, it is much broader than that. It is a platform for health, and that's playing very well not on only in our provider segments, our nonproviders, employers, payers, all of those components that platform is doing really well.

A little bit on our clients and our growing community of clients. The first one in 2018 you have to mention is we brought the VA in as a client. It happened in the second quarter of 2018. The great thing about the VA is not only do we get to provide a service that benefits our veterans and provides a great service to them, it also gives us lift in other markets as well. It is -- it provides credibility and capability in other government services regardless if they're Defense or VA, and it also has a great impact outside of the U.S. as other administrations around veterans, Departments of

Defense look to us to provide a similar service. So we get a lot of uplift from the VA. And I will mention again the opportunity to serve our veterans is a responsibility we take very seriously, and we will do well.

Also up here, we have representatives from outside the U.S. We had a strong year outside of the U.S., and you'll see nameplates like Monash, Scona in Sweden, which was mentioned earlier that we are adding those clients as well. And then just an example of a nonprovider employer in Publix. So we're getting to have our clients -- we're actually sort of redefining our definition of clients, and it's broader than providers. And we're expanding that base every year.

Outside the U.S., I'll hit this quickly. As we mentioned a couple of times, we had -- we made significant progress in the Nordics. That still is an area of opportunity for us. We had mentioned the Scona contract. We also signed a second region in Sweden, which is VGR, and we expect to get more regions as we work through the process. But that growth is considerable, those come as big contracts. And you also see some of our core markets that we've been in for years. Australia, the Middle East and Canada growing as well. In the U.K., I know there's been interest in U.K. in the past since about 2003 with the program, but over the last year and a half or so, they -- the U.K. or the NHS has come out with a program-run exemplars, and they named 12 digital examplars that are going to be the lights for technology in the U.K. And Cerner is the primary solution provider in 7 of those 12. So great opportunities in the U.K. as well and those other markets we've invested heavily in. On Monday night, we were fortunate enough to receive the KLAS Award for best-in-class outside the U.S. and the Middle East, Asia and Australia.

My final comment on outside the U.S. is the majority of the paying systems outside the U.S. are single-payer-type systems, which lead themselves to having our population health strategies. There is a direct connection between keeping your populations healthy and a reduction of expense. It is very clear, and our population health strategies are critical outside the U.S. And you'll see very good traction in that in places like the U.K. as part of the digital exemplars, Australia and emerging in Canada as well.

White space. So Brent had mentioned that Cerner has a footprint in 70 of the top 100 health systems in the U.S. It may not be a Millennium footprint, but we have a footprint or provide services to 70% of the top 100. The great thing about that is, and if you look at our clients, our largest clients, these big systems come with big opportunities. And in 2018, we had 8 clients that generated $1.5 billion worth of bookings. And that is not just a 1-year phenomenon that every year, we have some mixture of these large systems generating significant opportunities for us. And then having a footprint in some of the other larger facilities where we may not have a Millennium footprint, allows us to show our capabilities, our capacity and the value we can provide and provides opportunity as well. Within our current clients, where Millennium is the primary supplier, there are still over 400 hospitals or 400 entities that do not have our Millennium EMR. Those provide natural opportunities for us to expand. They usually come to these clients through acquisitions and gives us a great opportunity to keep expanding our footprint within our client base. Brent will talk a little bit about revenue cycle, so I won't go into that, but our would revenue cycle opportunities continue to grow out there and as well as our ambulatory opportunities within our client base. Where on the ambulatory opportunity side, as we push outside of the 4 walls of the hospital, it's incredibly important that we have a strong footprint there, and we continue to grow in that space as well.

And my last comment will be on the adjacencies around our services that surround our solution with outsourcing our revenue cycle management, and those type of things being key strategies for us to grow. And we continue to grow those businesses year-over-year. And the way that the financial challenges are lining up out there, these are great opportunities, provide great value for our clients to become more efficient and provide more for their markets.

Finally, a couple of words on how we align with our clients. So we make a great effort that if you are a Cerner client that we sit with you and work with you on understanding your roadmap as a client. Where you're going? What you want to accomplish? What your strategies are? And then we align around those strategies, and we drive them internally with our services and client-facing people through KPIs. But we want to make sure that every individual client, we are aware of their priorities. We are aware of their imperatives, and we align our services to those imperatives. And if you look at what the top imperatives of our client, these are not going to be a surprise to anybody, but it shows how we align to them. And as our clients look to grow, they look to enhance their patient safety, improve the health of the populations. All of these are key growth strategies for us. And the best place we can be is when our client strategies equal our sales. Then we're in a great place of alignment, and we will continue to grow. So with that, I'll turn it over to Travis.

Travis Dalton

Appreciate it. Thank you, sir. Good morning. My name is Travis Dalton. I run the Federal -- government business for Cerner. Been with the company 18 years, been running the business, Federal, since 2012. So been along for the entirety of the journey with the DoD and VA. Along the way, I've clearly morphed into a government guy since I'm the only guy with Cerner with a suit and tie. At least Mr. Bradshaw wore a tie, so that's good. I can bring him to D.C.

So again, quickly, I'm going to run you through progress on the Federal business. How we are dealing with DoD and VA, a couple of small programs we're working on? I'd like to talk about our progress. Important that -- as we progress that we're in an ever-changing environment, so you have political cycles, you have turnover, you've got annual budget cycle. So we have to continually express the value of the program and why we're doing this. So what I call that putting Kevlar around the program. I think that's important that we sell the value on a continual basis. Why are we doing this? Why is the DoD and the VA joining together? So modernization of technology. I think they both want to get out of the technology business, leverage commercial investment, quality and outcome so using technology. A lot of the things that have been talked about up here before have been highly relevant to the VA and the DoD.

Connecting the continuum, the VA has 130 separate instances of VistA today, which is a system that they use. Connecting data continuity, seamless care are very, very difficult in that environment. So we're able within a single enclave to seamlessly work between the DoD and VA. That's of high value to them.

Force readiness. One of the largest interesting fact is that one of the biggest reasons that service members are declared unfit for duty is dental. I think I said that last year, but it remains the case. And it's not always just dental issues, but it's lack of visibility into the dental record. We're actually providing integration with dental into the medical record. That's important for them. And then finally, research and innovation. The VA's one of the largest research entities in the world. And so, we've got an incredible opportunity to harness the power of that data to work with them and to leverage the technology from Cerner.

How are we approaching this? So we're -- the DoD solution that's in place today really accounts for about 70% of what we doing with the VA as well. So we have an excellent head start in terms of the work that we've done today and going forward. The VA is doing about 30% or so additional capabilities. So they're going to be doing cardiology, long-term care. They're doing things with HealtheIntent around data migration that the DoD isn't doing. So they'll be working in concert together. We've got a great starting place with the DoD. The VA is trust but verify, so we're going through a process with them where they are going through those workflows ensuring that they the work for veterans, but we're in a good place to start from.

We've learned a lot of lessons from DoD. You probably had the opportunity to read about some of those. There has also been a lot of good stuff out there that I'll talk a little bit more about. It's been published. But we're doing some things that are differently around change management and program management, so we've got a full team that's out in the Pacific Northwest that's working with the VMCs or the VA Medical Centers out there. Workflow-based training. So we've created a 400-level training program you would see like with a college curriculum. And we have also created an Informatics Institute. So we're really focused on creating superuser capability that we didn't have with DoD.

Help desk. So Cerner will provide the level 1 help desk that wasn't the case and -- on their other programs. And then we have a sustainment model where we'll have folks out in the -- they call them divisions or the regions that will never leave throughout the entirety of the program. So we'll be able to sustain effort, we'll be able to continue to support them in a way that I think will add tremendous value.

Timelines. We're happy with our progress. We've got 23 Waves with the Department of Defense where IOC now or what they call Initial Operating Capability, which is their first set of hospitals are -- have been live for over 2 years. So the system is active, it's in use. They're using it daily. We're pleased with our progress. Based on the acronym you'd never know it, but ATP is actually really important and that means authority to proceed. And that's a major government milestone. Essentially what they do is they bring you to the Pentagon, go into a bunker, have to leave your phone in the locker. Have this huge meeting where you go through where you're on the program, major milestones, documentation and how you're going to proceed. And then you come out with a decision on whether you're able to proceed into the Waves. So we were able to achieve ATP. We're proceeding with the Wave deployments for DoD. That's critical for us as you know because we're now starting to ramp up our people, our workflow, our process and our resources in support of DoD. Major decision as we move out.

VA, we've got 47 Waves. We're into the IOC with the VA. We're looking at the first half of next year for that first set of go-lives for them. And then we're also with the VA, we're going to start some Wave deployments in parallel to that IOC. So we're going to be a little bit more aggressive in terms of how we move out collectively with them. And some of that's based on the common baseline that we have with the DoD.

So program summary. I talked about this already, but on the Department of Defense, we've kicked off those Waves, so we're moving into Travis Air Force Base, Mountain View (sic) [Home]. You can see the list there. We're going to start Wave 2, 3 and 4 in parallel. Again that's important for us as we scale and ramp this business. And we're moving forward with some new capability that they have. So we're going to be installing our patient accounting module as well as we go forward. And Brent will talk about rev cycles. But that's important for us moving that into that environment.

Challenges, there are many. There are many challenges. But a couple of big ones are environment management. So these are very large programs, are highly complex, and they're sharing an enclave. So it's how do you deconflict the activities that have to occur technically and within the enclave, based on the programmatic activities for both programs. We have a joint environment management team that's with us, Leidos, DoD, VA. That's operating daily. That's looking at those program milestones, mapping those, looking at the gaps and deconflicting. That also plays in the timely decision-making, so how are we -- how are the VA and DoD operating and acting together? We've got several things that we're doing there. We have regular meetings with them together collectively. They've got an interagency program office structure that they have been using. I think that they're working on a joint program office structure that they'll be utilizing as well. So we're seeing very positive trends in the right direction on decision-making. And I would also say at the -- really at the working level, I have been very, very impressed and pleased with the work that is happening between the DoD and the VA. So we're feeling good about that as well right now.

So the VA program. We're on contract, so that's a good thing. That was an interesting process. I won't take you through all the details, but we're glad to be moving out. We kicked off the sites. We got 18 EHR councils, so one thing we've done is we've established these workflow councils. And we're using lots of capability and expertise, so they have industry experts from all over the industry outside of just Cerner expertise. So Yale, Duke, Stanford, Mayo, Kaiser, Tenet, big Cerner clients, all are providing content and industry experts onto these individual councils to make sure that we're getting broad input from the industry and that we're accounting for that.

And then, we're working on the local workshops. So we're out in the Pacific Northwest on a regular basis, and we're working through some local work with them, making sure that their prepared and ready. I think that's crucial for our ability to be successful. I mentioned the decision-making element, that's important. And then from Cerner perspective, we continue to harden our operational processes. So we are the prime contractor on the VA. I think you're all aware of that. We're a subcontractor on the DoD. Interesting dynamic there as you can imagine. Leidos is our prime contractor on DoD. They're a sub to us on VA. So it's quite a dynamic environment that we're in, but we're all working together in the best interest. So we're continuing to work on those processes to harden those processes as well. So outcomes and changing the narrative, we're really -- we're actually very pleased with where we at on DoD. We're getting efficiency and outcomes, clinical outcomes. Their throughput in the ED has improved very much so dramatically. They're avoiding duplicate orders, so they're saving money. They're seeing -- they're having much better experience with referral management because they have a single longitudinal record. And so we're getting good data. That data is published. We're putting that out there on a regular basis. At the VA, we're trying to change the narrative a little bit. They have -- they tend to -- we tend to talk in terms of APIs and interop. And we want to be talking about chronic condition management. We want to be talking about opioid -- curbing opioid abuse. These are all things that we can do with the power of Cerner technology. We can do that with the data that's there. We can do that with advanced analytics. We can do that with HealtheIntent, which is a major part of this program and also again suicide prevention. So we have an algorithm. We have a suicide rule that we're running, allows for early intervention as it relates to both opioid epidemic -- or opioid issues and suicide prevention issues.

Real quickly here, opportunities to grow. So how do we grow? Execution is crucial here. We have a $9.9 billion IDIQ. Essentially what that means is you got the opportunity through delivery to earn that ceiling. And so as we deliver, we'll be executing what are called task orders. Those task orders then flow into Cerner in terms of dollars revenue, et cetera. So we're working through that process. We're getting -- we've done 7 task orders to date, and we expect to continue to accelerate that.

Value-added capabilities. We think we have the opportunity with the work we're doing with VA to sell back to DoD. So for example, HealtheIntent, we're doing data migration activities with the VA. The DoD is highly interested in that. I fully expect them to utilize that, so there is some chance to cross-pollinate there.

And then other agency relationships. Coast Guard is joining the program. We're here with -- or meeting with Indian Health Services today. We've got a number of non-U. S. military that we're meeting with. Spain, Australia, U.K., and others that we've met with this week that have high interest.

And then finally, strategic opportunities. We're -- our business is very much in the Federal space built around partnership. So we have requirements around partnership, small business requirements. And so, we have, I think, around 32 partners in total as part of our program. So we continue -- we're going to continue to cultivate great partners, the best partners out there. It's not uncommon within the space to look at acquisition activity in terms of getting onto additional contract vehicles that you may not have today and, also, moving into other agency relationships. Some companies buy into incumbent situations looking at other agencies. I would expect as we grow and mature and move forward, we'll look at doing that both operationally but also in terms of our ability to move into other possibilities. So that's it on Federal. Again, to summarize, we're happy with where we're at it. We're pleased. Lots of risk out there, but we're managing that risk, and I really appreciative the opportunity to take you through our business. I'll turn it over to Brenna to talk about the revenue cycle.

Brenna Quinn

Good morning, everyone. I am Brenna Quinn. And I have recently assumed responsibility for the revenue cycle business within Cerner. A little bit of background about myself. I have -- bring over 30 years of healthcare IT experience. I actually joined Cerner by way of the Siemens Health Services acquisition. And so, prior to joining Cerner, I had a variety of executive roles within Siemens across different businesses, but a primary role I held was Head of the Revenue Cycle business in Siemens, which was responsible for Envision, MS4 and Soarian. That led to ultimately being responsible for all of the software solutions in the Siemens portfolio at the time of acquisition. I came into Cerner and have been through the integration, took a lead role there, worked with Mike Nill in sort of operational governance. And then this fall, an opportunity presented itself for me to rejoin the revenue cycle team, and I'm very excited to be a part of it, particularly as we talk about how much opportunity there is in the revenue cycle market, both broadly in the solution area as well as the services area.

So Brent touched upon it a bit, and John touched upon it a bit. But I think, we all know this is a huge market opportunity. It is a growing market for a lot of reasons. Providers are still struggling with, obviously, driving down costs, but they're dealing with taking on more risks, more plan types more population types. And as a member of this audience just said to me on the break, there is also a lot of crappy software out there. And so that presents a great opportunity to replace those aging technologies that are costly to support and maintain. Likewise, as providers are starting to think about new technologies in their space, they're also looking at how do I take some of the burden of this off of me and really focus on other core aspects of strength, and that's where the service really comes into play.

And so while the market is strong so has our performance been. 2018 represented a really strong year in revenue cycle, both in bookings and revenue across what we represent, which is an integrated EMR revenue cycle, that's our Millennium platform, as well as our standalone platform which is the Soarian financial platform. And in the services business, which is RevWorks, business office outsourcing, full rev cycle outsourcing. All of them saw a significant growth in the past year.

Along with that, we had a record number of new live events. So 75 new Millennium patient accounting live events occurred in 2018. So a tremendous amount of activity, which also require a lot of activity on our side. So in this past year, we brought on over 600 new, experienced revenue cycle associates. So we've in the past talked about bringing on lots of numbers of people, and I think the key thing to underscore here is we deliberately focused on recruiting folks who brought revenue cycle talent to the organization. And in a very short order, we added 600 new expense folks. And so all of that, I think, creates a strong foundation for ongoing growth. Every one of those live clients, as they start to work with the system, they tend to turn to us for service opportunities. So that great -- gives us great growth opportunity in the workspace. As far as the core, we still have if you think about, we have over 100 clients still sitting on Envision and MS4 platforms that we're working with on a regular basis to migrate them to Millennium. As we do, every one of those conversations includes a services conversation. And as John pointed out, we still have a significant amount of our Millennium EMR clients that are on non-Millennium CPA, patient accounting. So great opportunity for us to grow. And I think '18 created a great foundation for us.

We've also started to see some of the performance we'd like to see out of our clients where we're affecting some of their core KPIs such as cash to collect, AR, decreased -- improved claim rates. So here's some of the examples that we've seen in this past year. Where we're really focused is sort of taking some of these, obviously, traditional KPI improvements and driving more towards total cost to collect because that's really what our clients are looking for, that's what providers are focused on right now.

And so while we prepare for the next turn of the crank and saw a great amount of activity in 2018, 2018 also presented a learning opportunity for us. As we had the highest volume of live events, we experienced growing pains and our clients were vocal, and we took the time to stop and listen. And we have spent the last couple of months doing a self-assessment. Okay, now that we are getting the feedback, what are the things that we need to focus on and how can we improve? And so we've made a variety of changes, including fitting into the new operating model that Brent has articulated which is really an all-in model that we worked across the organization and create a very tightly integrated revenue cycle business unit and create an overall systemic approach to continuous improvement. And so I, working with my team, working with clients, working with some industry partners have built a plan that is really focused on how do we put in some near-term improvements because our clients have told us. We hear them. We also know we need -- have the opportunity for long-term growth, so there's long-term levers being pulled. We need to continue to expand our revenue cycle expertise as a company and really grow our DNA and be known as a revenue cycle company. So we've got great opportunity there. And in order to do that we need to be listening and actively iterating on our plans. And that is our intended approach going forward.

So I'm just going to highlight 4 key focus areas that we have active plans in place that we are invested in, and we are moving aggressively in. So first is improve the client experience. The first -- we all know that rev cycle go-lives are painful and scary. We're coming from a system and going to something new, so there's a paradigm shift. And typically, there's a risk to the performance and risk to the metrics. Most organizations can tolerate that, provided you quickly get back to baseline. And you have to monitor that performance and stay with your clients to ensure that they achieve these metric and then exceed that performance. And so we spent a lot of time hardening our implementation methodologies to ensure that we're building in gateways and standards that, A, begin with what are the basic KPIs before you went live. And our job is not done until we've gotten you back to that baseline and then we start to pass to improvements to exceed your pre-conversion metrics. So significant changes have been made in the implementation methodology and our current recent live events are showing those improvements. We also see, and I think Jeff talked about it, our clients don't always stay current with the software that we deliver, so we need to be more proactive about driving currency because there are enhancement that have been made that clients could be taking advantage of, we need to work with them to ensure that they do. And we need to continue to educate our clients about the capabilities that they've got, how to make a paradigm shift to a new system and train our own folks. So significant efforts going on in the overall improve-the-client experience. On the solution capabilities, we have a roadmap that we've invested in. We've added more engineering capacity. We've integrated all of our engineering team and refreshed our roadmap. We're focused on really putting more automation and workflow into the core back end of the patient accounting capabilities. While at the same time, we open up more APIs so that we can work with best-of-class partners as we just did with -- we have announced our financial clearance module with Experian. So those are things we'll continue to do is open up for more partnerships to extend the revenue cycle capabilities broadly.

And then finally, to leverage common componentry across our platforms. So we have some very strong capabilities in the Millennium platform. We also have very strong capabilities in the Soarian Financials platform. We are now working much more aggressively to create common components that can be leveraged by both platforms. So essentially, taking the best of the best of our 2 platforms and creating 1 stronger integrated platform.

As we do this, we've learned that we need to stay much closer to our clients. We need to have a iterative model where we're working with them, getting feedback and responding to that feedback. So we now have labs, that are open to many clients at the user levels, so they can give us feedback as we're designing. Then we have an executive level forum that we'll be meeting with periodically every year to validate our plans, think through strategic improvements that we can make. Again, work much more in partnership as we evolve.

And then finally, grow that services business. We have great opportunity there. So as we continue to grow, we're going to look at service line expansion so moving into spaces like coding as well as new market opportunities. So as we put all this together, we have -- these aren't -- this isn't a PowerPoint plan. This is a real plan. This is a plan that we have put bodies behind, we've put dollars behind, and it's all underway. And so I think we've got a lot of energy around the fact that yes, we have some improvements to make, but we feel really confident that we now have the right levers in place, the right team in place and a lot of energy behind going and taking advantage of that opportunity that is presented to us. So that's really the high level of where we are with rev cycle And I'm going to wrap it up and turn it over to Marc.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

I'm sure all of you are regretting that second cup of coffee you had this morning right now because you'd probably like to take a little bit of a break. I assure you, we won't be much longer, and we do want to leave time to have Q&A a little bit later. So I want to take you through something that may be a little bit more familiar to many of us is the financial side of the business. So let me walk through the financial overview at some pace here. The full year highlights, I think, almost everybody in this room is familiar with our growth in bookings 6%, revenue grew 4% to the $5.366 billion a little bit lower than our initial target due to the timing of the VA contract signing and some lower software. I think, obviously, with GAAP earnings number with the allowance for the Fujitsu that we -- item that we took in Q4, non-GAAP operating earnings were down 12%. A lot of that is investment. We talked about at the beginning of the year that '18 was going to be a year in which we invested in the business. And we absolutely did that adding the 600 people into our service center in Kansas City that are still ramping up to speed, and we'll do so through part of the first of this year. So we are investing in the business, and we're going to continue given the number of opportunities that you saw us talk about today. I think it would not make sense not to invest in those.

Operating cash flows was strong with 11% growth over the year and then free cash flow grew 9%. So overall, especially from a cash standpoint, reasonable performance but, once again, reflective of an investment year.

I'm going to take through the business model slides to give you an update relative to each, as indicates every year. This is really a good way to view our business. Each of these lines of business has different characteristics from a margin perspective. And I think it's important to understand how each of those behaves and their impact relative to the total business.

So comparing for the years, if you look at the license software, revenue was flat year-over-year as SaaS growth, which is over, obviously, subscription type revenue recognition offset some decline in the traditional software. Obviously the bigger percent of SaaS we have in our license, the more visibility we have, which I'll talk about in a little bit.

Contribution margin was relatively flat, down 1% and as I indicated, we're over 40% of our license business is coming from the SaaS model today. Our tech resale revenue was down 10%, primarily, due to Q4 transactions pushing and third-party suppliers that are transitioning more to subscription-based rather than just onetime sales-based activities. Once again, as we resell those subscriptions that gives us long-term view, but it doesn't -- didn't impact us in that specific quarter. Contribution margin becomes -- between the mix of hardware and third-party software stayed flat at about 16%. Subscriptions revenue was down 31%, but that's primarily driven by a partial reclass to support under 606, the new revenue standard. So we will actually be able to have a reset in 2018. And going forward, we'll be able to actually track the growth in those numbers on an apples-to-apples basis. This, going from '17 to '18, doesn't provide that apples-to-apples comparison. Contribution in that space has been a little bit lower because the mix of business is a slightly lower contribution margin than we've seen in the past.

Professional services. Revenue was up strong. That includes our Works businesses, which had a very significant contribution to the revenue growth during the quarter -- or during the year. The contribution margin from those -- the services business declined 200 basis points. That's primarily related to that additional Works business, which, as we've talked about, is initially at much lower margins than our standard services business. But our goal over time is through automation and the use of technology to bring those margins up as we move forward.

Managed Services is our hosting business and other assistance we provide to clients was up 10%. Revenue contribution or the margin contribution is actually very strong in that business. It's up to about 40% compared to 38% due to continued cost leverage we see in that business.

Support and maintenance revenue was up 7% with low single-digit organic growth combined with some of the reclass of revenue from the 606 adoption. Contribution margin remains flat on that business. So going down to the indirect expenses, and these are the expenses that are kind of left over after we specifically identify expenses against the businesses above. R&D as a percent of revenue was up slightly at 12% up from 11% reflecting some of the investments we're making. SG&A is 16% of revenue, which is up from 15% in the prior years. That does reflect some of the noncash impact that we have in the business that flows through on that line. For the year, operating margins were just slightly less than 19% for the year. So I'll talk a little bit about operating margins as we go forward, but that's kind of the tale of the tape for the year.

As we talk about long-term growth -- I think one of the key elements, as we talk about long-term growth, is to keep in mind one of the mantras that we've adopted with Brent coming to Cerner is predictable growth. So the numbers we're going to talk about today are the numbers that we feel fall under the predictable growth range. Can be over attain them? That's a possibility. But I think what we're focused on is talking about attainable goal and sharing them with this group and with all of our investors and shareholder. So as we look at this plan and if you look at the graphic that's here, it kind of provides various elements of what that growth is going to come from. And I'll just kind of take you through a little bit of what each of those elements is and then I'll talk about what each means. So that base element, the core, is what we've talked about to you before. That's our base license business. That's the EHR. That's all the businesses that we do that aren't identified specifically in the other elements. The Federal, obviously, Travis talked to you about that. That is a clear area for growth of us. Just the government business will ramp over about a 4-year period to over $1 billion annual revenue. So I mean, Travis does his job, and we keep delivering on it. And I think that's a critical element to consider to consider as you look at our growth as we go forward. And we're breaking that out separately in the past. We kind of had Federal as part of the core, but we think it's important to provide visibility that you can see how that's growing.

Revenue cycle. Brenna indicated, we feel like we're turning the corner on the getting all of our ducks in order on that. The demand is there, significant opportunity. And we expect to go harvest a lot of that opportunity.

The ITWorks element, this is only the services components of ITWorks. In the past, we probably -- we've talked about, "Hey, what's the revenue coming from that ITWorks client because it's kind of a big bundle?" But as we go forward, we think it's important to specify just the services component of that ITWorks because that's going to impact our margins to the extent that it is single-digit margins to begin with as we grow and look for more leverage. That's separated out now as a specific services element.

Population health is the gray area. That's the one that we expect to grow. And we talk about that growing from $300 million to $900 million. And we think the opportunities are there. Clearly, the adoption of risk has slowed some of that growth. But that business attacks not just a risk-based population but kind of attacks even fee-for-service world opportunity, especially with the HealtheIntent platform and its ability to share data and the data analytics element.

And then Don's area that we've talked about, which is the strategic growth target. So in order for us to be in that range from 6% to 9% growth, certainly we can get to the bottom end of that without having a whole lot of new strategic growth. But that wouldn't be leveraging the opportunity we see here. So what we're expecting is to be able to kind of get back from that -- in that mid- to upper part of that 6% to 9% growth range by leveraging some of those strategic growth opportunities, which are -- not only investment in the business but also investment in additional opportunities. So I think this lays out what our goal is, it's 5 years. It's predictable. We feel very good about the opportunities here. And we think that we're making the investments in both in '18 and '19 that will enable us to get there. I think, for the most part, I've covered all the words on this other side of slide. We just indicate that we are still a growth company, and we see the opportunities here but we want to lay them out in a way that we think everybody can look at these and say, those really feel like attainable targets and we think that you guys can get there. And that's -- and absolutely we think we can get there or better.

So let me talk to you about operating margins, right? So at this point, it's about a 19% level, we believe that they've stabilized. We believe they reflect the investments we're making in the business. We think that makes sense and creates opportunities for us to get -- to start increasing those as we kind of rollout of 19% and go forward. We've talked about the target to get over 20%. We're not shooting to just get to 20% operating margins and saying, "That's it, hey, good enough, we've done what this business can drive." That is not the case. It turns out that on the way to getting higher, 20% is between 19% and going higher. So 20% is a milestone that will be on the way, to me, to higher potential operating margins. But we want to set basically just to be clear, initial goal here over 20%, there is leverage in this business. We should be able to increase operating margins beyond 20%. But I think, once again, predictable, clear line of sight, that's the number we'll talk about. And we're trying to get out of the business of saying, "Hey, we're going to grow 30, 40 bps per year." Because this will be -- it may not be just a nice straight line of growth, it will depend on the mix of business and it'll depend on somewhat on the investments. But we are set up to basically start growing. Because one of the things that I don't know that people really focus on as we look at our business, we look at the cost. Part of this planning process, part of all the strategic operating models that we have been looking at has related to what are we going to -- what's our portfolio management? What are we go and invest in? And one thing we really haven't talked to you a whole lot about is that we are in the process -- and certainly we announced VSP, we talked about as part of that process. We are in the process of identifying $150 million over 2 years of spend that we are going to reinvest in areas in the business that we think we can grow. So we are going to take and refocus that money over the next 2 years, it's not going to hit -- it's not $150 million in '19, but mostly it grows over those 2 years that we'll take dollars that we're spending today and put them in other parts of our business. It's not going to fall to the bottom line. It's going to be something that we're going to harvest because we see a bunch of opportunities to go and invest and I think the things you've -- we've talked about today. We're going to go invest in our rev cycle clients. We're going to make sure that they're using our current technology and that they are using all of the best practices that we know can make them successful. We're going to get our clients on the latest version of software. You heard how important that is for our future growth. We're going to invest our dollars. And we're not going to necessarily ask our client to spend their money. We're going to help them, we're going to offer to go do that to help them get to that. We're going to look at modernizing our platform, right. We can't be in an environment where we have to go to each client and do a manual upgrade every time we want them to be -- to get current and get up to the latest and greatest things we offer. So we'll be looking at modernizing the platform -- and certainly, Don, we want to fund his strategic growth initiatives. We want to make sure that he has the ability to go drive those new businesses that we think are part of the key part of our growth. So you've really got those 4 elements and some others that are going to be focused -- the focus of taking that $150 million and redirecting it. But I think that's something that we probably haven't done as good a job about talking about, but we are basically finalizing that as we speak.

So I think, clearly, returning 20% on the way to higher margins, that is absolutely a mile post. But can get better than that with, certainly, a target of growing revenue, growing earnings faster than we grow revenue by creating leverage. And as we talk about that revenue, the one thing I think is a key element to the business that you really have to understand is the recurring and visible elements of it. The fact that as we go into -- for '18, recurring or highly visible was 89%, and that was up from 88%. And as we go into the current year, I think our visibility continues to increase. So I think 85% of the 2019 revenue guidance is scheduled to come back from backlog and another contracted revenue. That's the highest that, that number has been in the history of Cerner.

So once again, we continue to move the model to a much more recurring -- to a recurring model based on the support, managed services, subscriptions, Works, SaaS, all of those things that are reoccurring and then things that are highly visible that we have in backlog that we know are going to roll out in any particular period. The graphic here kind of breaks down for you where the elements of the business are, and I will just highlight the software. The fact that 11% of our revenue is coming from software, which is fairly low for a software company. We do a lot of services. But of that 11%, 5% is coming from SaaS, as I referenced earlier.

And if you look out, so what is that trend going to be? Is that going to get -- continue to improve? And our expectation is yes. If you look at the 5-year view to 2023, you get to the point where recurring and highly visible becomes 93% of the opportunity. And that's just more of our business becomes on a PMPM basis or on a SaaS basis or on some type of a recurring basis. So that gives us a higher level of confidence in some of those revenue projections we put out there when we start seeing the model basically be at that level of visibility.

Talk a little bit about free cash flow and capital allocation. And on the call, we talked about the fact that our Board of Directors is looking to declare a dividend for the first time in the company. I just want to make sure that everybody understands that doesn't mean we're not a growth company anymore. We spent a lot of time listening to our shareholders, asking them what they thought about our capital allocation, asking them what they would like to see in the business. As we -- the culmination of all that input was, hey, I think given the 70% of the S&P companies around our size have a dividend, it made sure -- it made sense as part of our capital allocation strategy to return dollars to the shareholders in the form of a dividend. So we clearly are looking to go do that. And I think it makes sense given the level of free cash flow we throw off and the ability to leverage our balance sheet for some of the other strategic growth areas that we have on our radar that it's a -- that I think it makes a lot of sense to go do that. And I think that's just one of the elements that comes through, for me anyway, of making sure that we are responsive, but we are also keeping enough capital in the company to do what we need to do.

So if you look at the graph on the right side, it kind of shows that the bottom level is we're declaring a dividend. Keep in mind that dividend probably is -- the last half of the year is when we begin making dividend payments. So the graph kind of goes from half of the dividend to the full dividend amount in 2020. Our expectation, obviously, is to continue to grow earnings, continue to grow that dividend over time. That's a commitment you really have to make if you're going to do a dividend. We will continue doing some share repurchases. Our policy is normally to offset any dilution we create by giving out equity grants, and we look to continue to do that. But that still leaves a significant amount of free cash flow available to invest in our strategic initiatives and even do additional share repurchases as the opportunity arise.

These graphs merely reflect kind of a perceived rollout. Keep in mind, we will always be looking at the allocation strategy on an annual basis. Clearly, the dividend is locked in, but we'll be listening to shareholders and listening to kind of what they're interested in and is there any tweaks to this model that makes sense from their standpoint and, obviously, from the business's standpoint. But certainly, strong capital, free cash flow and we like our updated capital allocation approach.

So I think as I close, I think -- really, I think it's things that we are doing to try to focus on shareholder value and alignment. Clearly, the capital allocation, as I said, is one of those instances where we are asking shareholders what they like to see. And clearly, dividend with continuing share repurchases was high on their list. We want to provide attainable long-term targets. We want those numbers to be real ones that you can look at and say, yes, I see how you can get to those. And I think that's going to be something as our -- as we follow our predictable growth mantra that you're going to see us focusing on. We would much rather over attain what we talked to you about than be challenged to meet it. And I think that's definitely a focus as we go forward.

We're going to deliver earnings growth in excess of revenue growth. That is going to happen. That's part of the deal here after we get through 2019. And then I think we talked about that from a variable compensation standpoint, previously, we've always been on -- we've, basically, been on EPS for senior leadership. I think we are going to move to a triumvirate, if you will, of metrics between revenue, EPS and free cash flow because I think those are the things that shareholders actually want us to be focused on, and we want the leadership team to be compensated on that basis.

So with that, I'd like to turn it over to Brent for a brief summary, and then we'll open it up for Q&A.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Went over a little long. So I'll keep it short. It'll be a short summary.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Great.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

(technical difficulty)

presenters, and thank you for being here today. Hopefully, what you hear from us are a couple of things. We've put an operating model in place. We believe that positions us for the future. It gives us efficiency, helps us get the innovations to scale quickly. And by getting to scale, we get the revenue quickly. And so it's a double win. We have resources focused on the key growth areas outside the EHR, around strategic growth as well as the internal innovation around greenhouse. And we think that's a double win, along with looking for efficiencies in operations and how we scale. You also heard the focus we've put on client relationships, client retention, new client growth, absolutely key to us. And John's role we created at the roughly midyear as Chief Client Officer to signal to the organization and to the market that we're very, very serious about this.

You also heard the good work going on at -- in the Federal sector with Travis and his whole team is present in that effort. And we feel very confident about the work there. We had, as he mentioned, a number of folks in talking with us yesterday. And we're on a positive trend, feel good about that. And rev cycle is one of our best near-term opportunities. As mentioned, there's some work we need to do there. Delighted to have Brenna in her role, driving great execution as we go forward. And then you just heard from Marc, and so I won't repeat that. But again, appreciate everyone being here.

And Marc, I'll let you, if you would, take over in Q&A.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Thank you. Our goal today is to try to get at least 15, 20 minutes of Q&A in. So if you have a question, please raise your hand, let's go here first.

QUESTIONS AND ANSWERS

Robert Patrick Jones - *Goldman Sachs Group Inc., Research Division - VP*

Bob Jones, Goldman Sachs. You guys recast the revenue buckets. But factoring in some of the changes that you made, it does seem like the 2 areas that stick out as being lower than the previous plan is, obviously, the core and, it looks like, rev cycle. So I guess, first, is that right? And then as we think about what's happened over the last year, maybe if you could just talk about what's changed relative to those 2 segments that has you maybe a little less optimistic on the outlook?

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Yes, I think if you look at the model, I'd say we always expect to -- I mean, the model has always kind of had core basically kind of flattening over long term, right? I mean, it just makes sense that you're not going to continue to drive out if the line is fed by onetime software elements, so that isn't going to grow as much. So I'm not sure that there's a whole lot of difference between that core and what we've talked about in the past. I think if you look at the numbers, I think, pop helped depending on how far back you go, that's a significantly different number. That's probably as much a different number as anything else there. I think rev cycle actually is a pretty -- isn't an unreasonable level of growth compared -- considering the last 3 years that we've added probably $200 million to that business just in the last couple of years, and we're just starting to hit our stride. And I think when Brenna delivers the success on our client base that we expect her to deliver, I think that's going to make a huge difference in that business because the demand is there. People want to outsource or we are -- we already get a lot of targeted outsourcing that comes with pretty nice margins actually. But those bigger Works businesses, those are in the -- those will be in the marketplace. We just have to get ourselves to the point where people are willing to hand us the keys. So I think, if I'm looking at that model, I'd say those are the key changes. I think designating the growth area as saying, hey, we do need to deliver some growth, it probably may or may not come in those areas that we're talking about. So we want to make sure it's clear that we've got to go invest in those to get that incremental top line growth to be able to get kind of to our midpoint and top end of that range. But all of them were -- are designed to feel like, yes, those are real numbers in that 5-year period. Now keep in mind, the old model went to 2025, so it's another couple of years of growth that would have been in there that you kind of have to make sure when you look, compare them, you're not looking at the endpoints. You've got to kind of compare that same time frame. Good question. Mike?

Michael Aaron Cherny - *BofA Merrill Lynch, Research Division - Director*

Mike Cherny from Bank of America. You talked about the updated operating model, obviously, with Brent now here for a year. As you think about that, call it, moderation, line of sight of growth, whatever the appropriate term going forward that's going to be, and the slight reduction but with something with more visibility, how do you balance that moderation on the cost side? There is a specific target area of focus for reinvestment. But at the same time, with the biggest piece of your business now being in a mature market, you would think that it wouldn't be beyond just reallocation of resources but also some removal of resources as you focus on a -- the new operating model and that consistency of both revenue growth and maybe, over time, persistency of margin expansion outside of mix. So just in terms of thinking about that operating expense line and that balance over time, do you expect to take on the reinvestment of savings opportunities versus some of the cost cuts and where you think the best line of sight is on some of those specific cost cuts?

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Well, I think as we look at the model, as I had mentioned, the $150 million that were going through the business, some of those -- if you have IP talent, we're not going to cut those costs, right? Those are a very valuable resource. And we're going to reallocate those to places that we think we can go grow strategically. And it turns out, when you're looking at growth, one of the things you actually do have to focus on is a leaky bucket approach, right, because if your focused only on the growth and you're not taking care of your clients, so you're not adding the features and functions to the existing platforms that the market's demanding, you're going to have clients start leaving. And it's hard to replace $100 million of revenue from clients that had decided to go to someplace else with new initiatives to grow the business. So there's a balance, Mike, between what you invest in relative to retaining those clients and what you can invest in the new. We decided that we can take $150 million out of what's the existing spend and focus it on some of these key elements. Some of them are actually focused on clients, right, it is client -- focuses on modernizing the platform. It's focused on those elements on the revenue cycle. So it's a balance. I think as we evolve the operating model and get it in place, there should be some natural efficiencies that take place because there's certainly duplication across the organization that we will discover, if you will, when we get 12, 18 months into the new operating model. But today, our initial focus is we're going to reinvest that $150 million back into the business.

Rivka Regina Goldwasser - *Morgan Stanley, Research Division - MD*

Ricky Goldwasser from Morgan Stanley. So when we think about the growth strategy that you unveiled today, it's quite ambitious, right? We're talking about moving the organization on the core business to more of a customized model. Are we looking into expanding into the consumer interface, potentially looking at employers as an additional market opportunity? I mean it's a lot in your plate, and some of these areas are not necessarily areas where you have kind of the leading market share and expertise. So when we think about that and we think about the limiting factor, one thing that comes in mind is the human capital that's required to do all of that. So can you talk a little bit about kind of like your plan in terms of hiring? There is also a lot of -- the labor markets are tight, especially when it comes to health care IT. So how should we think about this progress over the next 2 to 3 years?

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Yes. Well, David, I think, is a human. So he joined us basically today. And his focus is on consumer. He spent a lot of time in Memorial Hermann as the Chief Strategy Officer, developing those concepts. So you're absolutely right. Do we have all the expertise inside Cerner that we think we need to go grow these businesses? The answer is no. I think Don is very actively looking at opportunities to go add additional talent into that pool because those are the new businesses that we really do need to go stock. And that's part of this reinvestment, how do I -- what I'm going to do with those funds? I'm going to go invest them in some of this senior-level talent that can walk into any health system in America credentialed as an expert in this area and really bring us to a level that we wouldn't be able to do if we just walked in the door with some of our existing people. Although they're very solid, they just don't have that credentialing element. So Don, I don't know if you want to add anything more to that or not?

Donald D. Trigg - *Cerner Corporation - EVP of Strategic Growth*

No, I mean I thought that was good. The other thing I would point out is you're sort of describing almost de novo activity. These are existing businesses. So growth equity is maybe a better lens for how we would think about it. We've been in the employer services space for almost a decade. We do benefits design. We do on-site clinics. We do wellness and incentive bundles. We have TPA services. Licensed in 21 states. So there's a real business there with real leverage. So there's full-stack capabilities, and the question is can we bring in a talent overlay, people like David, who can bring in expertise and focus? And can we structurally, within the operating model, set up a level of market segment orientation very similar to how we built the company at the early growth bell curve and go drive net new revenue? And I think, inarguably, we can. The market segments I laid out today have huge addressable market opportunities around them. And when we get into areas where we feel like there's a gap to talent, we'll either hire that talent or we'll look to acquisition strategies as a way to jump start not only our strategy within the segment but also our talent strategy within it. So I think it's achievable. And I think, to kind of echo what Marc said, I think we feel very comfortable both with the 25% CAGR assumptions inside pop health but also how we think about these 6 market segments relative to what ends up being about $600 million in growth over 5. And again, through a combination of organic, inorganic and partnership, I think that's an achievable goal. And my team will obviously be focused on trying to over attain against it.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Yes, I might just underscore that these are -- I mean we have a presence in each of these currently. So we're not starting from a clean sheet of paper. And so there's an opportunity to leverage the resources we have there, the businesses there, the relationships and add on, add skills, have the capabilities that we need to really scale to much bigger. But it's a great point because it's a little bit outside the core, but that's the purpose of creating a focus there. Thank you.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Thank you. Next question.

Steven J. James Valiquette - *Barclays Bank PLC, Research Division - Research Analyst*

Steve Valiquette at Barclays. Hey, just back on that Page 91 in that breakdown of the revenues. Historically, you had international as a category on that breakdown, I apologize if I missed your comments on that, but does that now gets strewn throughout all those categories as far as international? Or is that just in the core? It looks like from the commentary on that slide, you mentioned that growth in non-U. S. were partially offset, slow now in U.S. core. Should we read into this that, again, international will not fully offset what's happening on core EHR in the U.S.?

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Yes. That model basically, the global, having it as a separate bucket in the old approach was helpful, but it's being made up of all the elements that are broken out separately, pop health being a key element. As it gained a lot of traction globally that -- which bucket do you put it in? So we did make the decision as we rolled into this year that we're going to put global in the elements where it belongs. So to the extent that it's core, it will be in the core. To the extent it's pop health, it will be in pop health. To the extent it's in the Works businesses because we actually are getting traction globally in our Works businesses, it got to the point where trying to break that out as a separate element was going to not give a good view of what each of those other work streams look like. So I don't know that it makes a whole lot of difference because -- given the percent global is of total revenue today. But I think folding it into those lines of businesses or those activities makes more sense than trying to keep it as a separate item reflecting. We expect growth at global, but I think it's going to happen in each of those areas. But good catch. Yes, sir?

Eric R. Percher - *Nephron Research LLC - Research Analyst*

Eric Percher from Nephron Research. Brent, a question for you directly. We're now a year in, and we've been waiting to see what your impact on the story would be. And I think today, we see some pretty large changes in what you want to do to the organization and looking at 6% growth or thereabouts, 20% margins. As we look at what we have today, is this step 1? Or is this really enough here that this may take several years and there's -- and we need to get through this first? And as you looked at the organization and went through the process over the last year, was it evident to you that 6% and 20% margins was the right place to land? Was that very evident? Or did you consider 3% and 25% or other models based on all the opportunities and returns available?

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Yes. Well, there's a whole series of questions there.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

I'd just make the point that 6% is the low end. We, certainly, are looking for 6% to 9%, with 7.5% being the midpoint. So I'd just point out that it's -- if you're going to use this, what we presented is more 7.5%, 20-plus percent operating margin would be a better summary.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Yes, great question. Thank you. So I'd say, this is the beginning. And we've done a lot of work to ground where we are. And I get teased for using this word a lot, but underpinning, I believe in underpinning the plan, steps to the plan that you can -- you know you can deliver on it. And what you're seeing is an underpinned plan. This is -- we've done the work. We've underpinned the thing. We know we can get there. So is there more we can do? Yes, there is. But this is -- we need to get the model started. We need to get out and get traction in these areas. So it's a key turning point for us. And the team is, I think, fully behind it. And it's -- and we go from here.

Eric R. Percher - *Nephron Research LLC - Research Analyst*

Was it evident? Or did you consider other opportunities...

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Well, sure, there's a range of options. And part of going through that is looking at what are the growth opportunities we have, what's the timing and I think, just to point here, leveraging things that we already have a footprint. That's part of the process, right, going through the portfolio is what do we have that can be scaled, can we buy the investment, putting the investment in now we can see the return in a fairly short time period. So that was the -- really, we spent a lot of time on that as a team going through the portfolio and really looking at those. So it became evident in the process of doing that, yes.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Next question.

Stephanie July Demko - *Citigroup Inc, Research Division - VP & Senior Analyst*

Stephanie Demko, Citi. As we think about the future of Cerner, especially on the leadership side, are you still looking to replace the open president role? And if you could give us an update on kind of your thoughts on internal versus external candidates, it would be very helpful.

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

I think we mentioned at the time that in the foreseeable future, I don't see replacing the president role. So we created this new position as Chief Client Officer and just using the resources differently. We're in a different point in time. So I think you can expect to see additional talent come into Cerner from the outside. You're seeing it today, as we speak. And that's important that we're refreshing and building a strong bench, and that's a very -- there's purposeful work going on there, both within Cerner of people who are coming up and ready to assume more responsibility and to bring in talent that we need for specific areas that are kind of outside our core or outside our skill set. So you'll continue to see both.

Stephanie July Demko - *Citigroup Inc, Research Division - VP & Senior Analyst*

A quick follow-up on that one. When we think about where you'd be hiring from as you try to build your talent base, is it going to be within the industry? Or are there certain industries that you look at as a good proxy for hiring?

David Brent Shafer - *Cerner Corporation - Chairman & CEO*

Well, I -- you look for health care industry experience, obviously, relevant experience to our position and where we are. And I think one of the things, we have a very strong presence in Kansas City. And we want to maintain that and build on that. But we're also aware that global talent is global talent, and it won't necessarily always reside in Kansas City. And so that's part of how we need to think about things going forward.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Thank you. Back row to the left there.

Jeffrey Robert Garro - *William Blair & Company L.L.C., Research Division - Research Analyst*

Jeff Garro from William Blair. I wanted to ask Marc about the margins maybe another way, understand that it's -- 20% isn't the end goal, and it's a nonlinear path. But maybe you could point us to a multiyear CAGR for expenses and maybe help point out what the variances are by line item, what might be growing a little bit faster and what might be growing a little bit slower.

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Yes, well, if we're not creating the path, let's say we're going to grow operating margins. Doing it by line item probably would be something I'm not going to do. But yes, I mean I think it's going to depend on each element. Obviously, when you look at the contribution margins and where you get the leverage, it's going to be in each of those businesses. The goal of these is to try to work on those contribution margins. But that's going to be in the SG&A area as well, right? And that's going to be the area where you look to say where are we getting efficiencies under this new operating model or where are there duplications. Those will impact both the contribution margins as you take it out of a specific business, but it will also impact its whole. So once again, today we're investing the $150 million that we're basically identifying as things that we're working on, that we're going to work on something else. In the future, when we do that exercise, that maybe we decide that we're going to move those to the bottom line depending on where we're at in the investment. So I can't give you a lot more specificity as to where that's going to drop from a line item perspective, but it's -- it is -- we're a big company. There's opportunities to create -- drive efficiencies. My point was we're investing those efficiencies in the 2020 -- 2019, 2020 time frame. But what we do with those in the future, that will be a decision we make as we look to increase our margins. We may harvest them then.

Jeffrey Robert Garro - *William Blair & Company L.L.C., Research Division - Research Analyst*

Maybe 1 quick follow-up to try to get a little bit of granularity out of you. If we look specifically at the R&D line, 5 years out to 2023, is that growing faster or slower than expected revenue growth?

Marc G. Naughton - *Cerner Corporation - Executive VP & CFO*

Yes. I think for our R&D, obviously, that's the lifeblood of the company. You're going to continue -- even if you just grow it at inflation and continue paying those people and bringing them in, there's going to be some increase in the dollars. But certainly, over time, you would look to be able to grow that as a -- relative to revenue at a slower percent than you're growing total revenue. It will depend a lot on the mix. It will depend a lot on the revenues, what the revenue levels are. But over time, that's clearly someplace where you could get additional leverage without decreasing the dollar amount that you're spending on it, which is key to us.

Hey, given the time, we're almost up at noon. I'm going to close the meeting at this point. Hey, appreciate all you guys making the trek all the way to Y. And we'll certainly look forward to talking to you soon. Thank you.
