# Cardinal Health, Inc. Dublin Day

## June 1, 2017 10:00AM Eastern

**Lisa Capodici**

Good morning, everyone. I'm Lisa Capodici, Vice President, Investor Relations. On behalf of the Investor Relations and the Cardinal Health management team, we welcome you to our Dublin Day. Thank you to those joining us here in the room and those who are joining via webcast. Sally Curley couldn't be here today because she is taking a well-deserved vacation, although she does send her regards.

Many of you have participated in our past Dublin Day events. You know that this is largely a Q&A form. We try to keep it as informal as possible. We take the opportunity to place each year to highlight some of our stronger businesses. Those that you wouldn't necessarily get to hear much about, but that we're we decided to showcase.

Joining us in the room today are Chairman and CEO, George Barrett; Chief Financial Officer, Mike Kaufmann; Pharma segment CEO, Jon Giacomin; Medical segment CEO, Don Casey. We also have with us today Joe DePinto, President, Specialty Solutions. We have chosen to highlight the business today given the growth over the past couple of years and some of the exciting things we're doing in this area.

Before we get started, you should know that we will be making forward-looking statements. We need to remind you that the matter addressed in the statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected or implied. Please refer to the SEC filings and the forward-looking statements at the beginning of the slide presentation. For those of you who are on the web listening to us, you can access our presentation using our Investor page.

So, a few other housekeeping items before I go through the agenda. I'll be keeping us on track for the meeting, as the event is being webcast and we expect to end at noon. For those on the webcast or listening to slides in the room, you should also have access to the slides in the website through the webcast.

Let's just start with the agenda. We're going to start with George. After he makes some opening remarks, George will turn it over to Jon for a few remarks on the Pharma segment; and we will introduce Joe. Joe will cover our Specialty Solutions business, and then he'll take us through Q&A. We'll continue with additional Q&A on our Pharma segment and then turn the discussion over to Don Casey for Q&A on the Medical segment. Mike Kauffman is also available throughout the morning. For those of you in the room, we kindly ask that you wait for the microphone for asking questions so that those on the webcast can hear the questions. And I encourage those who are listening to the webcast to feel free to submit your questions as indicated on the webcast link. We hope to get to everyone's questions, but if we don't, feel free always to reach out to the Investor Relations team. And with that I'll turn it over to George.

**George Barrett**

Thanks, Lisa. Good morning, everyone. Thanks for being here and thanks to those of you calling in. As Lisa said, this is, really a chance by and large to give you guys a couple of opportunities to talk with us and to hear sometimes a bit more about the business we talk about less often, we've done that over the course of these meetings. As Lisa said, smaller but

not necessarily small businesses and those businesses not, it's not a small one, we'll talk about that as we get into that this morning.

Let me just give you some opening thoughts. Again, we're sort of closing in our year end as you know which ends in June, so we're not going to be covering anything, particularly about the quarter, nor are we going to really making any economic or guidance comments. We provided sort of an early outlook back in March and probably in August, we'll get a chance to update that. So, let me just sort of summarize a little bit about the year. As you guys well know it's been a tricky year for us, largely around pharmaceutical pricing, and that's sort of a broad statement, but that's just the reality of it. When I look at every other dynamic business and I look at where we are, it's been a pretty exciting year, but it has been a challenging one I'm sure, as it relates to pricing, we'll -I'm sure talk about that along the way.

It's also, though, been a year in which we've taken a lot of important steps and I just sort of want to highlight a couple and I'm sure we'll get to these in depth during the course of visit. One is, important major commitment over these last couple of years and this year was one of the key years as is next in terms of our investment in our infrastructure, where our business growing, demand continues to grow, we touch more of the health system every day and having an infrastructure it is – that can support that is critical to us, the big program that will be calling PMod is sort of well underway and going well.

But I want to tell it to you because this is an incredibly a complex business with a high level of transactional intensity and doing this at the highest level is important to our customers and we've committed to that. It's a year in which our Specialty group has continued to drive tremendous growth and if you look at what's happening in the Pharmaceuticals and the Pharmaceutical development, whether on Phase 2 and Phase 3 trials, you can see how important our positioning is here and Joe is going to talk about that as we go.

So, we've done really well. We have grown our medical portfolio in some really important ways. As you know, our Medical Surgical business continues to expand, largely driven by the strength of our Cardinal Health brands that continue to grow with every period. We had expanded our position in the home. We've done some very important work this year to integrate Cordis and make sure that we're able to provide value to our provider customers and their patients.

We have announced as you guys well know, the transaction to acquire the patient recovery business of Medtronic, which is really important in terms of our ability to create more value for our provider customers and for us in many ways right down the fairway. And we've developed our post-acute offerings in ways that I think are really novel, and I think leading edge and important for us and as important as anything, I think we've enhanced our ability broadly to offer solutions to assist and going through lots of changes and here is what I'd show, it's really important. We're going to be living for some time in the world in that fee-for-service model in the U.S. and it's emerging.

I'm going to call it pay-per-value, pay-per-outcome, call it what you will in the most blunt for us. One instrument for a capitation, but I really do think there is sort of movement that is not going to change regardless of some of the policy decision and I think that's the source. So, I think we will be living in this dual world and we think about our portfolio, always in the context of being able to compete and create value in either of those environments, and we feel very confident we can. So, our portfolio is strong. It has been really purposely designed.

We think that as the system continues to converge and integrate the solutions that we offer are even more value and we're starting to see that, as we look across our businesses. And you'll get a chance to hear from some of that, the leadership of this. Our team is strong and deep, and I'm really deeply committed to the work that we do. So with that I will thank you for being here. I know we'll get a chance to address your questions and some questions that are probably coming through the lines here.  And with that, I'll turn it over to Jon, he is going to get us started today.

**Jon Giacomin**

George, thanks. Thanks everyone. Good to being with you today. As George indicated, there is a lot really going well within our portfolios, businesses and, what I thought I'd do here in some opening remarks is just talk to you a little bit about the Pharmaceutical segment and then move to Specialty.

Let me first start with PD. You're all very, very familiar I think with the generic market challenges, and if you set that aside for a moment, what I can tell you is that the businesses are doing incredibly well, executing incredibly well and let me give you some insights regarding that.

First, our customer relationships I think have never been stronger as we look across different classes of trade, different channels, et cetera. I think we're doing a lot with our customers and we're serving them quite well. If you look at sort of our critical performance indicators and how we think about running our business on a day-to-day basis, our service levels have never been higher, our on-time deliveries have never been higher, we're driving efficiencies into the supply chain, and I think our customers are appreciating us for that.

We're also really tightly managing our working capital. We, believe it or not, have been able to increase service, while at the same time optimizing our working capital. We've been very focused on driving solutions to our customers, I would say scaled solutions that really allow the customer to drive efficiencies into their organizations, into their operations, that allow them to reduce cost and also then allow them the opportunity to focus more on patients. And so, we've been critically focused on driving those solutions probably across all of our different customer channels.

And I would say this is sort of in conjunction – as we think about the practice of pharmacy, which is continuing to evolve, one thing that I think we do know, as we move from a fee-for-service to ultimately a value-based care, the practice of pharmacy is evolving. It's becoming less and less about can you just dispense product and more about clinical opportunities to deliver services for pharmacists in a lower cost setting. And we've really been focused on delivering those solutions, because we think that's exactly where the puck is going.

Let me give you a couple of examples, some of which we've talked about in the past. Our OutcomesMTM Solution, Outcomes being a business we bought about three or four years ago, is focused on delivering Medication Therapy Management services, and most of that has been around Part D and Part D-eligible cases. But now, we're seeing an expansion of that.

There's more and more interest in delivering those. There's more and more interest in clinical services, with the idea being that the interaction with the pharmacist either face-to-face or telephonically is really going to have an impact on an outcome, and a successful outcome at that, lowering the cost of care. So, we continue to see our/the demand for those services continue to increase. And we've even expanded the capability now to include the compliance and adherence side, the capability that we think is going to take that platform to the next level.

Another outlet – another area is telepharmacy, and we have an application that we call TelePharm, whereby we're enabling pharmacists to actually run a pharmacy remotely. So, it's creating access to pharmacies in rural areas across the country and it's also freeing up pharmacists' time to interact with patients, so to deliver more consultative services, clinical services that will impact care. So, we're really excited about those things. We think there are ultimately more opportunities as this continues to grow and continues to expand.  And lastly, on PD here, we are working on preparaions for it right now for our 27th Annual Retail Business Conference. And this is the – we view it as the premier event within the industry, where we get all of our retail independent customers together, our suppliers, our employees, and we talk about what's going on in the industry, the latest trends, as well as opportunities to think about their businesses more deeply and the ways in which they can leverage our capabilities and even learn from their peers. So, we're excited about the 27th. We

expect it to be yet another record-breaking meeting for us here in July, and I think it'll be a great opportunity to start to share some best practices across our retail independent customer base.

So, that's sort of a teaser, if you will, and we'll get into, I'm sure, PD. But what I wanted to spend some time on and to turn it over to Joe is Specialty. As George pointed out, our Specialty business is continuing to grow. Last year, we're in excess of $10 billion. We've said we would deliver double-digit growth this year, and I think we're on track to do that. And so, we're really excited about the growth we're seeing in Specialty and excited about the capabilities that we've been building within Specialty.

So, without further ado, I'd like to introduce Joe DePinto. Joe DePinto is our President of our Specialty Solutions business. Joe's been with us – actually we're right around Joe's two-year anniversary, I believe. He has an extensive background and career within the pharmaceutical manufacturing side of the business. He's worked at a number of different organizations, mostly in sales and marketing roles and some general management. And so, we're delighted to have Joe on the team. He's done some incredible things in his short tenure with us, and we're very happy to have him. So, Joe, I'm going to turn it over to you.

**George Barrett**

Can I say just one quick thing...Just to follow-up on Jon before to come over to Joe. One of the things that has really been happening, which we feel really good about in terms of Pharmaceutical business, is right now our ability to serve any class of care is really, I think, a strength of ours. So, if you look across whether it's long-term care, acute care, highly integrated IDN, independent pharmacy, grocery, mail order, I think we have now, sort of, balanced a position that we really think is a - is a strength for us. So, I just want to make sure I highlight that. It's a business that we tend to, because of, I think, the characteristics of this we talk of specifically that we're in a subset of it. But I don't want people to sort of lose sight of the fact that we are serving across the system of that Pharmaceutical business, and it's a really-a really a great anchor. So, Joe, we're thrilled to have you here. So, I'll turn it to you.

**Joe DePinto**

Thanks, George. I want to first start out by thanking George, Mike and the IR team for the opportunity to present to you today. What I've put together is a high-level presentation deck on our capabilities in Specialty, how it continues to evolve, and a little bit about the marketplace. But to get started, the first thing we have to really do is define Specialty. And I think if you look around the room next to you and you think about – how I think about Specialty and how my competition thinks about Specialty may be a bit different. So, I think defining it is an important component.

So, broad-based, when we think of Specialty, we think about it in four broad-based ways. One is sort of the disease type of individuals with rare or chronic diseases. These are sick debilitated patients. Typically, the medication costs are a bit more expensive. This isn't something that would be on a par value in a healthcare chain. And then, the complex treatments that go along with the specialty disease and the fact that there typically is monitoring and patient guidance or education that needs to play out there as well. And then, the third component would be, it typically requires specialized distribution or product availability has to be handled in a certain fashion. So, those are the four broad-based categories. And I would urge you, when we think about Specialty and you're looking at one company versus the other, not always is it an apples-to-apples, you know, correlation. And looking at it, you need to really understand how it's being defined.

So, the next slide basically is some high-level data over the last few years looking at the Specialty market and its significant growth, you know, more and more focused on the manufacturer side and the biopharmaceutical companies these around developing specialty product. That continues to grow. It's expected to continue to grow.

What I've highlighted towards the bottom are therapeutic classes sales from ‘16, as well as five-year CAGRs. And I've highlighted the areas where we've really focused on at Cardinal Specialty. Everything ranging from oncology through ophthalmology, very big market opportunities and good growth moving forward in the next five years. I'll talk a little bit more in depth about that, as we walk through the business. But I thought it'd be good to understand sort of where we've been, where we see the market going and the opportunity as it continues to evolve.

**Jon Giacomin**

They could start worth noting what's or not in that last slides just have to see. So, again this is another place where we probably have some definitional issues, that runs through our traditional channels and so Joe doesn't capture that in this slide, so just to give an example.

**George Barrett**

Yeah, but Jon mentioned that Specialty this year should exceed $10 billion; last year, you said it was greater than $8 billion; this year, we should exceed $10 billion. We're talking about just what's running through Joe’s business, not the Hep C drugs, and some of the other Specialty drugs that we we'll just go through. We do billions and billions of dollars of Specialty sales through our Pharma Distribution business.

**Joe DePinto**

Absolutely. So what I try to put together for you is, a look at our services and our lines of business, and I did it in the scope of a product lifecycle for a product, and we have two distinct components of the business. One we think of as upstream businesses, where the upstream businesses are customer base here and sort of the manufacturer and the biopharmaceutical company. A variety of core points within those companies and we'll talk a little bit about that. And then, the downstream, which is our healthcare providers, that will range from a variety of different channels, as George has talked about prior to this, and I'll continue to dive in a little bit deeply into that. So when you think about upstream, we really can be involved with the manufacturers of the biopharmaceutical companies as early as when the product is getting ready to be filed with the regulatory authorities worldwide.

We have an extensive regulatory science consulting group that will do everything from regulatory strategy consultant to the actual preparation of the file and actually filing through electronics records to the FDA. We've been involved in a large portion of NDAs, BLAs, and we've been very active recently in biosimilars as well and their filing. So, you are a very broad-based science group there that works early in the process. I sort of see this as a tip of the spear into the manufacturers. And as we continue to evolve through the product lifecycle on the upstream, we've really built out some health analytics capabilities, which is a hot topic.

I mean, today, I'm getting ready later on today to jump on a plane to go to the American Society of Clinical Oncology and I've been there for the last 20-plus years and I affectionately call it the Super Bowl of clinical data and oncology, right. I mean that's in essence what that meaning is around clinical data. And it's interesting to see three plenary sessions this year are planned in patient reported outcomes.

Our health analytics group does that kind of work with our manufacturing partners. We're able to use that type of work, health economics work to not only supply positive data in real data in theory journals for our manufacturer customers and for our provider customers downstream to utilize to optimize care. Our third-party logistics team La Vergne, Tennessee area, excellent work, state-of-the-art, brand new facility, really strong work for those small and mid-sized companies, where we do everything from order to cash to delivering their products and making sure that the product gets to their customers.

We have access and patient support through our Sonexus Hub, which was acquired several years ago, continues to be a really important component in the Specialty space. It's not enough to just get the drug to that patient with the wrap-around service, the reimbursement services that are quite prevalent in the Specialty space. We are well positioned with the hub to be able to provide that. And our marketing and communications team, we do everything from primary and secondary market research here to launch planning for emerging biotech companies.

So, what I'll try to do a little later in this presentation is give you some case studies on specific projects we've worked on, I've blinded those case studies to help you understand how we tackle the large to mid-size and the small emerging biotechs.

Moving to the downstream business and into more traditional distribution business, our Specialty distribution footprint has grown dramatically, and I have some data to share with you in that. We also have GPO footprint as well and we do some work in this. We have a Specialty pharmacy footprint that we're well positioned there for specific opportunities, especially in the orphan and rare disease area.

A lot of this growth has been done in the last few years, five to six years actually, and I know Mike and George have talked to you in the past about this, but we've done it two ways, we've done it through strategic acquisitions and through organic growth and looking at areas where we felt like we could fill a gap in where our Specialty was going and that's how we sort of built out this business in the last five to six years.

Let's – let's go on to the downstream, the distribution capabilities across therapeutic areas. So, in many specialties, you saw the data, the CAGRs are growing nicely, the base of business is strong, we're really well positioned to be able to deliver distribution care through a variety of different market segments.

Strong distribution in the acute side, where we deliver plasma and limited distribution drugs, specialty drugs to hospitals and long-term care facilities, alternate care sites. And on the clinic side, we have a vast distribution footprint, very strong in oncology and hematology. We also are very strong in RA rheumatology, gastroenterology, ophthalmology; I think in the past we've called it the "ologies," right.

So, we're strong in many of the "ologies" that we believe continue to be growth opportunities for us. We have that footprint with our Specialty distribution, assets at Cardinal Health, and the acquisition we made several years ago of Metro Medical that's been put into our distribution footprint quite nicely.
It seems to be getting a little bit ahead of me, but, when you look at the distribution footprint we also have our GPO services that go hand-in-hand. These are the services we would provide to manufacturers and to our provider clients. VitalSource and RainTree after combining a couple years back we had made the purchase of RainTree, and that really strengthened our position in the oncology and hematology space.

Our Renal Purchasing Group in nephrology really helps from a standpoint of the nephrology clinics and those dialysis clinics. The Cornerstone GPO really focuses on RA and gastroenterology which has been a really nice growth engine and a really interesting market because there's some competitive dynamics emerging there with biosimilars that we'll talk a little bit about as well, and Acuity, which is our newest GPO, that's really focused on the ophthalmology space.

So, we have this distribution footprint and we have the GPOs, but we really sort of look at how we also help our customers from a business solution standpoint. These business solutions really help manage the efficiencies and the complexity of delivering healthcare for our customers. Everything from technology driven consignment projects to RFID, radio frequency, our inventory delivery and looking at how we help clinics manage the business and the reimbursement and how they practice medicine. These technology tools are really important to differentiate us and to help our customers really manage some of the complexities and challenges that they face in healthcare.

I put together a brief heat map for you, just really outlining our distribution footprint. The red are acute facilities, that would be the hospital sites as well as long-term care or clinic sites and the blue would be more community-based practices. Now, caveat here the community-based practice sites would be more oncology, hematology, urology, nephrology and rheumatology. Again some of the stronger “ologies” that we've focused on. And you can see the number of facilities that we served in the last quarter, both on the acute side and on the community side. We have a nice reach, it’s geographically dispersed, and we built a nice base of the distribution business with a pretty significant reach across the United States here in Specialty.

One of the topics, that's been a hot topic in the last few years in the U.S. in the past – previous years before that - and it has really hit Europe was biosimilars. And we've laid out our distribution footprint here. And as you can see, we believe we're really strongly positioned to meet the needs of biosimilars as they need distribution in different market segments, whether that be the acute side or the clinic side.

On the services side, we believe biosimilars will need some of those wraparound services, including reimbursement programs, hub services typical. As you look at the early days of biosimilars in the U.S., we've had a couple of entries into that market, predominantly with care in RA space. And what we see is that these products are sort of being launched more typical like specialty drugs, but the key drivers of - of the biosimilar market are still evolving. We believe we're well-positioned. I'll walk through some of those drivers.

Interchangeability. So, the draft FDA guidance came out earlier in the year on interchangeability, that's in a comment period and we'll see how that continues to pan out through the year. Extrapolation is going to be another interesting driver of the market evolution here. When a product is approved that's an innovative product, it has clinical trials in a variety of different indications. In extrapolation, what will happen will be, maybe the biosimilar will do a clinical trial in one particular indication; and will it extrapolate to the other indications, will be yet to be seen.

Also, when you're talking about these biosimilar, not like the small molecules chemically from a manufacturing standpoint, there's complexities here that I think many of the innovator companies as well as the biosimilar companies are struggling with and working through. And to see what degree this immunogenicity become an issue and if that ever does occur, how will that be handled. So, the complexities of the manufacturing of that are still to be determined.

Pricing, mammoth competitors in each market are another core component as we can see of the evolution of the biosimilar market. You know, right now, you tend to have an innovator and one competitor in the market. As that evolves and multiple competitors enter the market, how will reimbursement be shaped, how will payers react, how will manufacturers handle discounts and rebates? All those are factors that need to be continually monitored in the marketplace. And between our distribution footprint downstream and our services upstream, at Cardinal Health Specialty,

we feel we're uniquely positioned to help both the providers and the manufacturers to navigate the complexities of biosimilar marketplace.

So I've walked through with a bit of the downstream, I'd like to talk to you a little bit about our upstream businesses and doing a format where we look at some of the problems that we help solve for the manufacturers of the biopharmaceutical companies. So early on, I talked about our regulatory science business. And when you think about that, there is a real complex and ever-changing regulatory environment, and getting drugs approved are never easy, getting commercially valuable drugs approved are even more difficult.

And what we do on our regulatory science consulting group is we get involved in helping companies because of our past experience and our expertise with ex-FDA folks at our regulatory science building getting involved in understanding how that file needs to be situated, what kind of data needs to be put in that, how do we write the file, how do we help them optimize their files, as they put them forward with regulatory authorities throughout the world. We also do maintenance of regulatory file docking for many customers as well. So we have an extensive regulatory science consulting group that helps bring these innovative products to market.

So there's been a lot of demand for cost-effective therapies and providing outcomes. That's been a group in our health analytics group that's grown nicely. We've grown that capability out quite nicely, quite frankly organically over the last few years. And - and when we look at that, not only patient-reported outcomes which I talked about, but health economic data. And as the FDA has given more and more guidance that if you do these studies early on, it could actually even be part of your label. So, there is an interconnection between what our regulatory science business does, what our health analytics business does, and it really helps to have an integrated offering that we can provide to our manufacturer customers.

I've talked a little bit about our GPOs and the services we provide not only service level from a programming standpoint, but also contractually in helping them manage some of our contracts in the market. We've talked about the 3PL and how that is situated to help mid-to-smaller companies, everything from order to cash to distribution of their drug, to making sure that their invoices go out appropriately.

One of the components that we've seen more and more demand for in the last few years is the pressure we see – increased pressure on reimbursement across all Specialty categories, and our hub services is well-positioned to be able to do that. Several years ago, we made an acquisition of Sonexus as our hub, and that organization has really been able to help small and large companies navigate some of the reimbursement, patient adherence and compliance challenges they have with their brands, and that – that business continues to build momentum.

Right down the road from here, I know that you probably heard from Mike and from George in the past about Fuse, our technology incubator. I like to think of Fuse as the place where technology and healthcare come together. And Specialty, we like to think of ourselves as part of Fuse and innovation. We're a very high user of that – of that organization and I like to think of them as part of Specialty.

And the reason we look at it is because technology helps differentiate us and it also helps us solve problems for both the provider, the downstream side of our business and the upstream side. So, adherence and persistence is a huge issue for our provider customers. So physicians, health systems, they want to make sure that the patients that get the product, get the best response for the product. And even in specialty drugs, the adherence and compliance rates are not as great as you would think they would be, especially for cancer or RA patients.

So we've developed tools to help those providers have patients assume that they get the right drug at the right time and make sure that they're treating their patients appropriately. That benefit goes over to the manufacturers and the biopharmaceutical customers as well, and the reason we do that way is – hey listen. These manufacturers are typically in

launch mode or making sure they're optimizing their brand. And they can grow that by getting new patients on therapy or they can make sure that the patient's that are on therapy optimize their therapy and duration of therapy because their per patient value will go up.

So, those type services on adherence and compliance, we wrap them nicely with our technology incubator at Fuse and our hub, and provide significant drug value both upstream and downstream. The last component on new technology side, not last but it's an important one is, analytics and data. You know, um, there's not a day that goes by that I don't talk to somebody in the Specialty space that we talk about the importance of data. And one recent executive at a manufacturer said, “I have enough data to choke a large animal,” but what does it all mean.

And I think what we do with the data and what we've been able to do at Fuse is, make the data we have, not only at Cardinal and other datasets and triangulate it and make it actionable for our manufacturer customers. Really make them have a dataset through a dashboard that helps them make good decisions on the futures of their brand and optimize using it especially in an environment where moving from fee-for-service to value-based services, a value-based care, that's really important to make sure that that data tells the story and helps them understand the dynamics in those challenging marketplaces. So we're really proud of the work we do at Fuse. And like I said, it's literally down the road here in Dublin and it’s – it truly is to me an offshoot of our Specialty group.

Over the last few years, we've made a conscious effort to build our clinical and thought leadership expertise, and this is, uh, something that I see coming from the manufacturer side of the business that's really important for us to continue to evolve. We've done it in a variety of different ways. I look at it three ways. One is the clinical staff. Are we deployed appropriately in different therapeutic areas with MDs, PhDs? Do we understand the clinical components of the marketplace and how we provide value to our health systems, our providers, as well as how we do that for manufacturers, because we are the unique third party. Especially when you look at health economics and patient reported outcomes, we don't sort of have a vested interest in one particular product than another.

So we can be that third party to help how we see the market from the disease burden, from patient reported outcome studies. I'm really proud of the research abstracts and posters we've been able to put forward through the clinical team over the last few years. In some pretty prestigious conferences like the International Society of patient reported outcomes, which was just earlier this month – actually, last month, it was May in, um, Boston. We have 13 abstracts and posters being presented there. I've put a couple in the slides so you could take a look at the one in rheumatoid arthritis.

But the interesting component there is, we had a symposia in the morning that had over 400 people, standing room only, to listen to our Chief Medical Officer and a panel of executives from different companies talking about the importance of patient reported outcomes and health economics data in a value-based care environment. That's the kind of thought leadership we want to be associated with and we want to continue to derive as Cardinal Specialty continues to evolve.

And then peer-reviewed manuscripts, and we're talking about evolving therapeutic areas that are really exciting in science. You know, ASCO is always a big meeting, and it's always a – a data dump of significant data that really shapes the future of oncology and looking at some of the published work we've done through our Chief Medical Officers in the immuno-oncology space specifically has been really exciting.
So, I'm really proud of what we've been able to build over the last few years in this area, and I think it differentiates us, as we look to position ourselves with both our healthcare systems and providers as well as our manufacturers. So, everything we try to do, we try to see how it impacts both the upstream and the downstream parts of our business.

What I did is for this one slide is, I tried to blind three case studies because as you know, we started back up in specialty about six years ago. And six years ago when we started out, it was interestingly, you talk to people they often say, “Well, what kind of customers do you deal with?” I would say mostly small and mid-sized customers, but that's not actual reality.

Reality is we service a wide spectrum of manufacturer customers, everything from top five pharma through emerging biotechs.

So, if I can walk through for you these case studies, it would be interesting for you to see how it works out. So in a top five pharmaceutical company, we handle regulatory post-approval dossiers and maintenance of those dossiers worldwide. That's an example of a regulatory science business, not only getting involved early with a BLA or an NDA, but also the regulatory documentation and compliance of that.

Our hub service is used there for another brand in another disease area within a large biotech. So in a large pharmaceutical company, it's important that you're not only dealing with one area or a call point within there, but that we're expanding out to different therapeutic areas, because coming from large pharmaceutical companies, sometimes they can be structured differently where not each of the groups work together on a day-to-day basis. So there's different call points for our teams.

In our hub service, does benefit their application. We've also done everything from adherence and compliance programs. And then on the health analytic side, we've done everything from market research to help economic studies for a large top five pharma company.

On the mid-sized pharma company, we tend to see those folks use more of our 3PL services, and we've expanded that 3PL service, this particular case study with a customer we've had for seven years. So, we've done a good job with them on the 3PL side that they've expanded out to sample management for them. So, we actually send their samples directly to customers as they are requested. And we're also doing a free drug program through our Sonexus hub in the specialty pharmacy we have at our Sonexus hub, and we're then involved in adherence and compliance programs, that's more for the mid-size or mid-cap pharmaceutical company.

Emerging biotechs – oh gosh – we could really be the one-stop shopping for an emerging biotech. We do everything there from regulatory science group will help them with their state licensing, because that tends to be timely and complex. They could turn that over to us, and we can do all the regul… - state licensing work.

Our reimbursement support program for the hub are really important to specialty, especially as those specialty emerging biotechs go into high-touch oncology, rheumatology markets. Our 3PL allows them not to build out that infrastructure. We will do everything from answering the phone to order the cash, to their billing, and it really allows them the opportunity to be a – us to be a trusted partner for them.
And then the third would be our health analytics group where we've been involved in everything from helping them plan, hopefully as early as possible, so that the data could be part of their label, some of the health economics and future reported outcome studies that they do through the work of our PhDs, our pharmacoeconomists as well as our medical directors.

And then one of the other component that we always love to get involved with is the commercial launch plan. We love to – to get there as early as possible, so we can help those customers optimize their launch process. And we all know the importance of that trajectory of the launch, right? You can never go back after you launch. Those first six to eight quarters are critically important, and we love to get involved with small emerging biotechs to help them, uh, to make sure they're optimizing those launches.

So what I try to do today is put together a high-level deck that hopefully shares with you some of our capabilities that we built out, some of the capabilities we've acquired. The specialty market is a dynamic market. It's an exciting market; it's never dull; it's always changing. But we believe what we built over the last five to six years positions us well to continue to

provide value to our upstream manufacturer and biopharmaceutical clients, as well as the downstream providers. That footprint is really important to us to leverage with the upstream manufacturers.

So, I hope you found this helpful. I'm gibing you sort of a brief glimpse into the specialty organization, and I thank you for your time.

**George Barrett**

Let me, Joe, thanks. Let me do this, let's – a couple of quick comments, and then – and then we'll throw it open for questions, certainly for Joe, would love to take any questions on the segment broadly. As you guys remember, in the segment, we have Specialty, we have Pharmaceutical Distribution, we have our Nuclear business.

Couple of quick observations to think about. We are really proud of the work that we do in supply chain logistics. It's deeply embedded in our DNA; it's something that we've been doing long before my arrival and I think at world-class level. What people sometimes don't see as how important having the clinical jobs is, having the clinical capabilities; and we're seeing it across both of our segments and throughout our businesses.

I think today, we've got a couple of thousand clinicians that are part of our organization. And I think this is, again, something we're going to be seeing generally, that ability to be a thought leader, to speak the language of the clinical area being addressed is important across our business and especially as we start thinking, again, it's the notion of outcomes, you have to be able to speak fluently, in – in the language. So I think our Specialty group is one of the areas, probably one of the early areas we had to move more aggressively, but you are going to see this across – across our business.

And the other thing I think we should watch for – and the current administration is, again, you've heard Dr. Gottlieb, the new commissioner of the FDA talk about some of his priorities, leaning out at the FDA, trying to be faster and more, agile and that – that he's spoken about that both in the generic world and the biotech world. So I think this is an area that is going to continue to be very important for us and for you as our investors, but, um, one where we, I think, are developing just continued momentum.

So with that, we'll ask – make sure that you're speaking into a microphone for those who are dialing in and, we'll see you guys.

**Lisa Capodici**

Thank you very much, ladies and gentleman for attending our session today. For those of you who are in the room for – again, I'll bring the microphone to you. And we also want to encourage those who are listening in on the webcast to please type in your questions.

**Question**

Great. Bob Jones, Goldman Sachs, Questions on details about the Specialty business, you know if you think about the growth in the second period there over the last few years I think over 25% growth, could you maybe just break down a little bit more for us why are you seeing that growth? You highlighted some upstream solutions, any more detail on where the bulk of that growth is coming from? And again along those lines any M&A that might also contribute to that year to year growth.

**Joe DePinto**

Yeah, certainly, I can do that. So when you think about the growth, we've stated publicly we've had double-digit growth in this business. And, um, our distribution side of our business, the downstream business is quite large, it's larger than our services or our manufacturer or services side of the business, the upstream business. We've seen top-line growth in both of these businesses in double digit.

We continue to be focused on making sure that we're leveraging that big part of our business, the distribution side, because remember that gives us the opportunity to play with the manufacturers upstream. We have to have a strong distribution footprint because that is sort of the – sort of – that's the ante to play in the game. And we've been able to grow both businesses by focusing our organization with upstream capabilities, downstream capabilities and how do they match up with each other, how do they – how do they, um, complement each other. So we've seen growth in both, top line. We've seen, again, the larger side is more of the distribution, the downstream business. You know, the…

**George Barrett**

Yeah. On the revenue side, there's no question that you see a higher rate on the downstream. The margin rates on the upstream tend to be – tend to be higher. As you'd imagine, those were heavily service-oriented businesses and very sort of custom-driven to that customer.

But the good news is we're seeing growth in both. And – And uh – And I think really the point that Joe made is actually important broadly, I think, for us as a business, which is the work that we do downstream with our customers, almost across our business is what connects us more deeply to our upstream partners and that's – we're basically a bridge for services and tools and I think that we can – that creates value for them. So it's a really important enabler and I think that's right. One of our challenges if you went back, let's say, six years, our goal was that our downstream footprint was just not broad enough and deep enough and that actually limited us. So being able to expand our business in oncology and rheumatology and derm and some of these critical areas, urology, has, um, really enabled us to be a more attractive partner as you look at services.

**Question**

Maybe for, Jon, as you, you know, think about where this business has been over the last sort of 12 months relative to the last 10 or 15 years of – of Pharma Distribution, obviously, there's been a lot of events that have occurred, you know, over the last 12 to 24 months that are sort of unusual in nature. And so as you try to put that in context and be reflective of,

you know, that last period versus what this business, what you've noticed will be over long periods of time, what are the things you're looking at, what are the things you're thinking about in terms of go forward as you sort of jump into '18 and beyond that you're trying to get your arms around and trying to figure out how many of the events that have occurred are truly unique and temporal and one-off versus what's structural versus, you know, what have you been preparing for and while the market, you know – we may have been surprised by it, these are all elements that you've been planning for and you sort of understand where – kind of where the business was going over time. Just help us with the historical context.

**Jon Giacomin**

I think a couple things. Despite the challenges that I sort of referenced early on, I think we're still incredibly excited about our Pharmaceutical Distribution business, as I'm sure you're alluding to. You know, to your point, the business has had a terrific track record. We've seen some challenges here, we have some, sure. But we're also incredibly excited about where we're positioned relative to that, and we think that based on our positioning, we're going to be able to not only survive, but thrive.

I think some of the things that we look at ultimately as George just pointed out, everything starts with the customer. Are you adding value to the customer, are those relationships strong? As healthcares continue to evolve, the needs of our customers have continued to evolve. So how are we helping to satisfy those needs, which I alluded to earlier, we're looking at delivering those scale solutions to our customers that makes them more efficient, more cost-effective in how they deliver care and ultimately allow them to focus on patients because we know that's where it's going, it's going to outcomes and value-based care.

At the same time, we have to ensure that we're well-positioned in terms of what does our operating structure look like, our operating expense. We have to operate very efficiently, and so we constantly are looking at our network, looking at optimizing our network. And obviously, what's also very critically important is sourcing. We can't be out of position on the sourcing side of our business and how we source products, particularly generics. And you're all very, very familiar with our relationship with CVS and Red Oak.

So I think as we certainly looked at it, there's been some challenges. We think these are somewhat cyclical in nature, and we've been focused on ensuring we're positioned in those critical areas that I mentioned to surviving the challenges and thriving in the future.

**George Barrett**

Mike - between Jon and Mike, we have a lot of years of doing this, and then maybe I'll go on afterwards. This is one broad question. Maybe touch base upon, and then I've got a couple of thoughts on that Ross.

**Mike Kaufmann**

Yeah, a couple of things – some thoughts in my head in addition to what Jon said, I think some of the things that we're seeing, um, customers are still completely committed to the model of the distributor. And this ideas of customers wanting to go around and buy direct and all that, we saw a little bit of that pop up a couple of years ago, I really don't hear that.

They understand that for them to run we need pharmacies both in terms of SG&A and inventory, they need us. And so they need that, you know, five or six day a week delivery. They need to be able to know that it's at 99% or higher service levels that we have, not only are adjusted, but our raw service levels are higher than they've ever been in the history of my 27 years with Cardinal with what the team has been able to do and the fact that manufacturers are by themselves.

Commitment downstream from the customers, I think, is strong or stronger than I've ever seen it. So the idea of wanting to go around the distributors, so I think that is really, really well. I think I would flip it to the other side to the commitment from manufacturers to the model also has been very, very strong. As you could imagine, knowing that we've had this branded inflation coming down from a low double into that 7% to 9% range, um, and we've had to go back and talk to some of the manufacturers that had that, you know, 15% component that was contingent to inflation. There's nothing about those talks that are whether or not committed to the model and wanting to stay in it.

Clearly, we're having debates around the value and our transition from a little bit of contingent risk to less contingent risk. And as I've said before, I do believe that by the end '18, the CSP at 90% or greater non-contingent. But the dedication and commitment from manufacturers to go through distributors and work both on the Specialty side and on the Pharma side, I think is as strong as, um, it's ever been.

That doesn't mean they periodically don't have McKinsey do a study to see what the value and cost should be. They do and they do those things and then, I think they come back and go. This is a pretty good – a pretty good model. So I think their commitment upstream and downstream has been excellent. I think the focus that Jon and team have had on the balance sheet managing our cash flow and, you know, working capital particularly has been strong as well as SG&A, so that's good.

Red Oak is performing at or better than we've expected since the beginning, and I see no reason – you know, I've just had a board meeting a couple of weeks ago, was up there with the team. I love what their team is doing. They're taking the game to completely different levels when it comes to data and analytics and understand what's happening in the marketplace and which manufacturers to partner with, and, you know, where all of the market is moving, who is going to launch.

And I can't talk about some of it in detail because it's – it's in my opinion a tremendous competitive advantage. But the investment we've made and the team up there and data analytics is second to none and when I compare the – you know, the other day we were talking to some of the folks, we probably have more than – we know we have more than 40 years of generic buying experience through Red Oak and I don't think any other of the buying groups probably have more than 10.

So when you look at, the length of time that people are spending on it, there's a lot of really strong folks there. And I think our prediction and expectation of launches have been different. So some of the things we've been building into the model over the year, I think is that we needed this transition of Red Oak being great for getting – always being a benefit to – you know, going down a little bit year-over-year. The launches been different, going down year-over-year. We've known for a while we've got to change our pricing model, and how we, you know, price the customers and think about the fact that we're not going to be able to get as big as branded rebates. We're going to have to split specialty and brand, so that we charge a premium for specialty drugs because we make less margin on them.

I think what has just happened quicker than we, you know, we expected was this competitive issue related to, um, the generic market itself, just deflating, um, more than we expected this year and it honestly obviously happened faster than we expected it to be. But other than that one component and that competitive advantage from last summer and the lingering impact of that, I don't think we've missed the trends there, and I don't think we're on the wrong side of getting after the right things. And we're going to have to adjust through that, and we will by continuing to change that pricing

model. We'll charge more for brand, require more generic compliance bioTCH products, ORTCH products from us, so we can change that mixed offset that over the next couple of years.

**George Barrett**

Yeah. I'll just finish it up. I wanted to, in essence, finish where you started. I think we do and have done really good planning, but again, I didn't want to miss the chance to say, the challenge we had this year was unsure for us. And certain of these dynamics we were able to model pretty effectively. And, you know, when you miss that one by a couple of points, it matters and I think that's been for us this year. Then as we said, it's sort of really harkened back to sort of August-September of last year, where I think in particularly we started to feel it.

But by and large, the rest of what we're seeing in the model is – is, has been playing out. And, um, you know, Mike makes one important point. Our guys, our teams are really focused on our customers. We're already – yesterday in our committee meeting – we're already talking about how are we prepared for the July 4th holiday knowing where it falls and that customers are going to be down to make sure that they've got everything they need and attestation of that. We're doing that with the incoming storms. I mean our organization is incredibly attentive toward the needs of our customers and it's been an interesting thing watching as you guys know in some other industries, maybe there has been some commentary about our customer service and whether or not companies are focused on the customers.

If you walked around our building, it is palpable. Our people are completely connected to the mission of what we do and that serves us well. So, and especially in moments where there's some transition occurring, our customers need to know that we're there. In a time of great change actually, think about it in your own world. You want to be with, partners who you can trust during moments of some turbulence or transition, I think that's maybe what we demonstrate for our customers that.

**Question**

Thank you - a quick question, there were stories a month ago something about Amazon coming in and disrupting the chain. Is there a place for an Amazon kind of structure to come in and where would it come in, but there is always a weak spot in the chain that people can expose, where do you see it?

**George Barrett**

Let me try and explain it and then I'll let my colleagues here. I hope you guys know us, we never be dismissive of any competitor, that is usually a recipe for disappointment and we don't – we don't dismiss anyone. Amazon is an incredible company; we have a lot of admiration for them. What we do, um, which is noteworthy, is operate in an intensely regulated business where the stakes are extremely high where a failure to deliver means a missed surgery, where the failure to comply means a huge miss. And so, we always look at any player who participates in supply chain activities and whether or not they could function. Amazon has been out there a long time. They've been in and around healthcare for some time and no doubt will continue to see this as an interesting area. And so we've built our strategies with an awareness that they're there, I'm not able to necessarily share with you.

But, I think what's really critical about what we do is the way we're connecting with our customers. If we're supplying filling in the blank of a major integrated delivery system, um, that system – that pharmacy department is completely connected to what we do. These are not buying supplies and I think if you look at the – the, you know, things that don't require a regulatory interface or a clinical connection, those are areas that – that you have to look at differently. But for us, the key, and I won't call it a defense – because it's the heart of our business strategy is being this partner on the clinical regulatory side or customer base that all of them operate on a regulating system.
There is not a lot of inefficiency. And if you look at our operating model, and, I mean, if you look at some of our margin rates in the traditional distribution business, we're operating incredibly efficiently. And we have done partnerships with companies and we're sort of open to that. But we also want to make sure that where there are partnerships, those are balanced partnerships, they create value for both parties, et cetera, et cetera. So, we – we rarely close off ideas. I think as a team we're a pretty open-minded group about how to compete and create value in the market. Whether or not Amazon is a potential partner would be a – you know is an interesting question, but there are complexities there that we would consider.

**Jon Giacomin**

I'll just maybe add, Mike, and then you could chime in. I think – sorry, just color a little more color on George's regulatory. If you think about what we do, if we were in a, to his last point, credibly efficient supply chain that comes with security, integrity of product, et cetera, and integrity is not just authentic products, but it's also maintaining storage conditions along the way. So whether it's refrigerated or frozen, whatever those conditions are, we're making those conditions throughout the entire process from the time it leaves our distribution center and lands in the hands of our customers.

So there are some of those things, and there are controlled substances. And as you think about controlled substances, the licensing that is required for that, the security that's required for that, and also knowing who you're ultimately selling to. You have to not only know that the customer has a license – has the appropriate licensing. But you need to know the customer, you need to understand their business, you need to understand how things are working within their business. So there are some – there are some significant regulatory hurdles.

The other thing is, on the supply chain side, I know we tend to focus there first because it is what Amazon is mostly engaged in. But to George's other point is the clinical services aspect. As I was alluding to earlier in my earlier comments was, we're – we're helping to enable our customers with these solutions to deliver clinical services to their customers/patients. And just sending drugs and having them arrive at a pharmacy doesn't necessarily come with those types of solutions.

So, we're investing those things that we think are going to allow our customers to deliver those clinical services which we think are going to be very important to driving outcomes and where actually healthcare is going. So we think that's an important connection for our customers and their businesses as healthcare evolves. And so, I don't – I would just sort of say, we never take anything for granted and we think about it constantly. But we see those as two key areas that would have to be satisfied. Did you want something to add?

**Mike Kaufmann**

Probably the only thing I would add is, you know, if we get to the end of the business, say, being a pharmacy then they're going to have to get in the networks too. And so, what is the value prop that they bring? So if they're just mail-order,

because it's hard for them to do same-day delivery. I know they do it in certain markets, but to be able to do that for pharmaceuticals on a patient who needs an acute med to go, to get it to Amazon and then, you know, go pick up their pain med or pick up something new, that gets complicated.

And so, what is the value they would bring to a network that people would want to allow them in. Because if they don't then we're just going after cash customers which has a lot of other options, over there – plus the margin rates generally are low in the industry which has not been an area I think they focused on as much when you add up all of the regulatory.

So I think there's business reasons, there's regulatory reasons, there's a host of other stuff to me that seems like there's other things that it would make more worthwhile for them to pursue their efforts on. But again, I agree with these guys, we talk about it quite often and evaluate their, you know, the situation.

**George Barrett**

To sort of, to close this off. We've made a habit as a team of taking every potential player seriously, and obviously with Amazon we certainly dismiss them at peril. So we don't do that. But I do think that there are some very distinctive things about being in this business. And one of the things we talked about network this time, one of the enormous values that we provide for our – let's take again the independent customer, um, what are the things that they – they think about?

Obviously, position themselves in their community, um, having the right access in terms of cost of goods, making sure that they're part of a network, like that – that is a very important issue for them is networking solution. We have as strong a network that we built and negotiate on their behalf and with them to make sure that they're included in network. These are distinctive parts of the model of what we do that we think about as part of the supply chain, but they're really extensions of that.

And so, again, we'll continue to regard every potential player as someone who could be a threat or a partner. I mean, we've – we've done that. CVS was a customer for many years and is now a partner on generics. And I think we have to use our imagination and we have to be open-minded about how we see the evolution of care and so we're trying to do that.

**Question**

Okay. We have a couple here on Specialty, so I'd like to get them in while we have time and probably have Joe. In terms of upstream, downstream. I mean the majority of downstream, but how should we think about the opportunities for sponsored? That's one.

And second of all, the relationship with the manufacturers, is that the same contract person, the conversation about reinvestment versus the person that you have conversation about sales team. And when you think about the contract, because all of the evolution of the relationship between care contracts only, i.e. reimbursements?

**Joe Depinto**

Yeah. Sure. Great question. So first, I think we – we when you think about the size of the businesses, and I think George mentioned that the margins on the upstream services are sort of larger than the downstream side from the shear percentage of what you make, because these services are obviously knowledge-based – it's a different piece, let's say.

**George Barrett**

Again you realize there is an entire spectrum, but...

**Joe DePinto**

Right, yeah. Because there's nine different components, on some you can think of it as consulting; and on some, it's more project-based. So, it will vary. But you're right on the money where the fact that the call points at the different manufacturers and the size of the manufacturer will all vary. There's not one sort of cookie-cutter approach depending upon a couple of factors. One being what services are we positioning. We're not obviously going to the people outsourcing to sell our regulatory science consulting. That call point that in the manufacture typically is the head of regulatory, the head of CNC, those are the type of call points for regulatory science. Whereon the channel management side and the 3PL, it could be the trade group and national accounts.

On the health economics component, we're seeing more and more in-patient, because it's more than medical side of the house. So we like to think of ourselves as embedded fully into our upstream customers in all different aspects of that. And where we've been successful on the services side with companies that have utilized multiple services for us we had put master services agreements together with those manufacturers, so that they can utilize our regulatory group, they could utilize our 3PL, they could utilize health economics on our health analytics side and we put it all together in one master service agreement. So it's not going through the contractual process as we plan to start a new project, because typically a good work on one project will lead to other work within that manufacturer.

**Jon Giacomin**

The only other thing I would add is, we leverage the relationships we have within our pharmaceutical distribution business as well. So Joe's got it exactly right. But we're let's say, we're looking into a particular manufacturer with our services on the specialty side, we will leverage relationships we already have within our pharmaceutical distribution business.

**Question**

For competitors are building capabilities that allow them to influence, physicians and patients as related to strengthening the upstream capabilities. Is this an area that you are looking at interested in expanding, because when I think about the stuff on your slide.. that continues to be…

**Joe DePinto**

From a services side, when we look at it, there absolutely are some gaps in where we have and we look obviously at being opportunistic from acquisition standpoint and from building out. But one area, to answer your question, I think we've been involved in is the adherence and compliance work we do technology wise with our partners at Fuse in making sure that from a patient perspective that they are optimizing their therapeutic care through reminders and through technology at our hub, where we make sure that – not only do we do the prior authorization but we have a call center with nurses that will make sure that that patient understands that the medication needs to be taken at a certain time in a certain way.

So we have touched on those areas, not an area that I would consider us to have a sort of towering strength at this point, but we understand that area and we are starting to engage in that area and do more and more programs. But, you know, I've always – you know, the two years I've been here, George, Mike, Jon and their team have been very open in looking at our strengths as an organization and where we need to continue to look at to position ourselves better.

**George Barrett**

I think the other thing, Ricky, which we are doing in places, and probably it's not really seen is, we're helping places build formularies. So that formulary management – we are – our clinical pharmacy chains are going to be consulted on – on that kind of work. And so that as an area I think is a particular strength, I would say is clinical pharmacy, and so we're sort of active behind the scenes in ways that are probably not probably visible. Largely where you see it is the big IDNs. We're sort of looking at optimizing their network to design.

**Question**

Joe, I think if you were to speculate a little bit, what is your sort of five year vision for where Specialty is going? How fast do you think it'll grow as you define it over the next five years and if you – my sense is there's a number of different entities that want to get part of the action here. Do you think the hospitals will be a bigger part of Specialty over the next several years versus physician offices versus specialty pharmacy, just how do you guys think this will – will play out over time?

**Joe DePinto**

Yeah, great question, thanks for it. The next five years as you can see from the data I presented that we recently had on the CAGRs for years in Specialty, it seems to be quite robust. So the more and more manufacturers are getting involved in specialty. I believe that when we look at our work that we've done, we've made good progress and I'm really proud of the team of hundreds of people that work within specialty.

And I'm really appreciative of all the work they do from the manufacturer side, all the way to the downstream side. We need to continue to maximize our footprint on the distribution side. We need to continue to make sure that we are in the "ologies" that continue to make a difference in patient care and continue to have investment and growth. We also need to make sure that as we look at the pie and the mix that we're making sure that those wraparound services on the service

side that we are a major player there, that we continue to make sure that we provide this ancillary services to patients and to manufacturers and providers that really make a difference in patient care.

Specialty is not just deliver the drug to the patient and making everything hunky-dory, that's just not how it works. There is complexities and reimbursement, there's complexity and compliance and adherence, and we need to help our customers manage that complexity. We need to be the problem solvers there. I see that area as an area of growth. If we can get both of those to continue to grow at a nice rate and our pie continues to be more balanced, I'd love to see that as we move forward.

I look at Specialty as an opportunity here. You know, I'm biased. I've worked for 28 years in the specialty space, that's sort of what I do. Um, and, um, you know, it's really new challenging environment, well and specifically let's take oncology, we've made some great strides clinically over the last few years in genetic mutation, in immuno-oncology, in looking at going from chemotherapy to biologics to immuno-oncology. And we want to make sure that clinically and from a thought leadership, we have the clinical shops built to continue to be the partner of choice for both the providers, as well as the manufacturers to help them navigate the challenges that may be coming forward with value based care if that shift continues.

**George Barrett**

Let me add to this because at one point you touched on the channel dynamic and this is where having the portfolio across the channels matters. So, you know, if you think about the evolution as hospitals became integrated health systems, and now we're dealing with more than just critical care drugs, they were dealing with specialty drugs in their extended network of oncology practices. That has changed the dynamic in some ways and in some ways that's probably a change that's sort of moving towards our strength across channels.

So we have seen some, and we're going to have – this is one of these things that's sort of – its sounds like an accordian; it comes in and out. We've seen before sort of movement of physicians to sort of affiliate and then over time they sort of un-affiliate and they come back and affiliate and I tell you this is a sort of dynamic we've seen before. But I do think over the last couple of years, we've seen much more integrated systems and these affiliations are important, and I think this is where our touch knowing that we're already a major player in this hospital health system is helpful to us.

And I think, we're seeing better though these conversations are and often we're sitting with the hospital health system, we want to talk about specialty drugs, which a few years ago was barely a conversation, because they just – it wasn't in their portfolio as much.

**Mike Kaufmann**

Just a couple of quick comments. Kind of with both of the last two questions, couple of things come to my mind. I think the ownership of doctors directly by us, probably not a likely spot for us to be, but continuing as Joe has talked about it growing our clinical shops and growing our GPO and influencing the formulary and the selection of the products influencing those drugs, we have other ways to do that without having to, um, directly own the doc. So, I do think that over the next five years, our clinical shops and our GPO strength will continue to grow, and it's very good now.

Scale, I just want to make sure we're at scale. Some people ask, do you think you need to have more scale to compete effectively? My answer would be unequivocally, no. We have the scale, we need – I don't worry at all today. Did I worry

three to five years ago? Absolutely. When we first started getting in Specialty, it was a problem. We didn't have the scale and trying to convince manufacturers to come aboard was difficult.

We don't have that discussion anymore. And so, when you look at our access to drugs and our capabilities, where we need to be, we don't have – we have access to all the, you know, major drugs, every once in a while - but any of the major stuff we're at scale. So, I don't think scale is something that necessarily we have to grow over the next five years, it will, because we'll compete effectively and win.

I do think, as Joe mentioned earlier, as price become something less and less that manufacturers can take, they're going to have to focus on this value per patient and compliance and persistency are going to be an important adherence. And I think that from a five-year look is going to be an area where you're going to see us be where we are today, be much more important in that area and deliver much more value to manufacturers.

And the last thing I would say is, kind of emphasizes what George has said is, people come to us for thought leadership and one of the reasons they come to us for thought leadership is because we can touch everything. So, a lot of times manufacturers have come to us and say, how should I go to market? Should I be specialty only? Should I be broad? Should I go through your PV and Specialty? We have a lot of discussions and the nice thing is we can do it all from specifically just the pharmacy services to specialty distribution from one distribution center to 20 DCs delivering at 99% service level next day. We can have intelligent conversations around all of those and we help them understand the best way for the supply chain to work.

**Joe DePinto**

And that really hits your market segment question, especially when you think of different therapeutic areas. Some of the therapeutic areas is just the way that the clinical trials were done, the way the value of that product is delivered to the patient and maybe in more of a unique setting. That's why I put the map up to show you this, the sheer amount of customers we have on both sides of the market segments. We want to ultimately make sure that the patient can get care that’s most convenient and most appropriate for them, and we have the ability to make sure we can deliver that for the manufacturer and there'll be therapeutic area defined based on what those trials are.

**Question**

Great. Thanks. I'm going to ask one specialty question and then one non-specialty, if that's okay. On the biosimilar side, you talked a lot about preparing yourselves for biosimilars. How you think about investing in terms of building infrastructure biosimilars when regulatory hurdles and landscapes are still a moving target?

**Joe DePinto**

Yeah. So, I look at it as we have a – with our infrastructure on the services side, we're well positioned on the biosimilars side from a services standpoint. I think a lot of the work we do at our hub, we would absolutely have to customize for a specific customer and we do that to some extent. But some of the work that we already have laid out as the foundational work is there available, especially from the services side.

From the distribution side, you've seen the maps and you've seen the ability if the biosimilar manufacturer decides distribution wise, they want to go through the Specialty route and they're going to seek the majority of their uptake in the market segment that's acute or hospital based, we'll provide that for them. If it's going to be clinic based, we can do that as well.

The manufacturers will ultimately would tell us where they want to go in that route, but I like where we're positioned now. I think some of what we have to look at in biosimilars is, it would be really interesting to see how it evolves as multiple competitors enter the marketplace and how can they use resources like our GPOs to help them in the marketplace and help them help their provider customers in the marketplace. With one competitor in each, it may be very different than when we have five biosimilars and one innovator in a specific area. That, I think the dynamics of that market will be quite different. So, that's how I look at – we'll have to tweak what we have to meet their needs. I don't think it's a full infrastructure build. I think we have a lot of the components already there.

**Jon Giacomin**

Yeah. I think we have *all* of the components already. I think, there's really not a question that the Specialty Solutions side of the business, our ability to handle and deliver those services to Joe's point, we might have to alter them slightly, customize a few things here or there, but we have more than, uh, the appropriate capabilities and infrastructure to handle all that, whether it's on the manufacturer services side or the distribution side or, uh, contracting, whatever the case may be, I would say, by and large, we have that available to them.

**George Barrett**

I know you got second part of the question, so before you get to that, let me just one quick comment on this one. In the absence of interchangeability, because again, we got to sort of divide the world. So, in the absence of interchangeability, we still think that each of these products has a clinical – it has certain characteristics and there's certain need that the patient has and we have to add the – and pharma company has, and we need to be able to support those. And I think we're positioned to do that just as Jon said.

The interesting question for all of us is going to be how aggressive will the FDA be now to push interchangeability, and I think that would change dynamic in a lot of ways in terms of the mechanics of how a product is closer to the system. So today, it looks much more like a specialty pharmaceutical product, but interchangeability could change the game a bit. So, we'll – I think all of us should be watching that very carefully.  You had a second part to the question?

**Question**

I did. This is more, I guess, targeted to Jon, but I'm sure other people are fine. Well, on the independent competition side, the level of 19 kind of caught everyone by surprise. As you think about moving towards a during homeostasis, more qualitatively I guess than quantitatively, what the independent customers wanted to see from you so that this level of pricing competition and essentially all out battle that occurred over the last few months doesn't happen again?

**Jon Giacomin**

Yeah. I don't think you'd say we're going to hear a lot of this in about four or five weeks, I think at our Retail Business Conference that I referenced earlier, if you ask, what's on the minds of retail independent customers, I think it's a couple of things. First and foremost is reimbursement. And I think you're probably all quite well aware of what's going on with respect to reimbursement pressures, the pressures on their margins, et cetera. And so, they're looking to us to provide those scaled solutions that will help, up to and including George referenced it earlier, we do the contracting for the third-party contracting, they approve all of those contracts in the end. But, we also provide a number of different solutions relative to maximizing the reimbursement that they get for services rendered, looking at their front-end, having them have a more robust front-end, where they can see a greater sales on their front-end, managing their expenses, allowing them to be more productive and inventory management solutions to manage their working capital better.

So, all of those things are going to be at play. And I would say that's the current sort of everyday battle that – that they're in. But at the same time, there's opportunity, and that gets to a little bit around the evolving practice of pharmacy and the changes that are occurring. And so, while reimbursement continues to be frustrating for many, there are opportunities that are opening up to deliver more clinical services, whether that's around adherence, compliance, whether that's around doing some rather basic lab testing within the pharmacy, whether that's around prescribers status, whether that's around a collaborative practice agreements. There are a host of other things that I think retail independent pharmacists can get involved in that really will pivot their business in another way. And it might even more closely align it with many of the things that they went to pharmacy school for, rather than just pouring, counting, dispensing type of activities, but really delivering clinical services. And so, we've been – we've sort of been – we've been supporting on that front relative to reimbursement and really driving their businesses, but also at the same time to add more solutions that will enable them in a new healthcare environment, where the pharmacists have growing opportunities to deliver clinical services and effect outcomes. So hopefully that helps.

**Question**

David Larsen from Leerink Partners. Joe, can you talk a little bit about value-based care? And where you see the most demand for these types of services that you provide? Express Scripts, obviously has their SafeGuardRx program. We've been hearing that some retraction in this trying to compare more actual risk based on whether or not the drug actually works and then agreements with advancing risk. I think CBS has some key programs like the SafeGuardRx program. So, who are you selling these programs to? Is it the retail chains or is it the manufacturers or is it all the above? Can you just give a little bit more detail on that?

**Joe DePinto**

Yeah. Thanks for the question. As regard to that Healthcare and Specialty, I think what you're seeing is an evolution, right. You're seeing a fee-based system moving to more of a value-based system. Where we're seeing a lot of questions, a lot of opportunities to work on projects is on the manufacturer side. And they're asking us for data regarding health economics, burden of the illness, chart reviews. Looking at how they can get intimately into the value their product delivers for that patient population, for that class trade, for that market segment. So then, they can not only leverage it with providers and they can also leverage it with the payers. So, we're seeing a lot of activity where people coming to us, we're having very good conversations. I'm looking forward to having some really good conversations in the next couple of days at ASCO with some of them, our manufacturer partners as we continue to look for that knowledge-based sort of

evidence, so that it helps physicians brand that way. And I think more and more of our manufacturer customers, this is top of mind to them.

**George Barrett**

But we aren't used to that which is sort of another distinct dynamic at work, which is historically, again, I'm thinking about how this is changing and integrating. You know, many of the manufacturers had very limited interface with the hospital system. There were certain companies who had a very strong critical care portfolio, that's changing. And so what we're often hearing now is that hospitals coming to us and say, "Look, we're trying to think about value-based model?" – but we don't really have a connection there and the manufacturers saying to us, "Can you help us think about designing something for this hospital system?"

So, there is sort of a matching that hasn't yet taken place. It's one that – so, and as you guys know, this is going to be on certain kinds of therapies very hard and on others easier. So, where you have a product where the clinical outcome is – the answer is complex, it's their co-morbidities, their – person is on multiple drugs and there is a long-time horizon, it's more challenging. On some – other extreme would be, Hep C would have been yet other extreme, right, which is you have a very clear clinical endpoint as a term of care that's very clear and discrete. So, I think, there is really opportunity for us to sort of because of our history with the hospital world and now our experience upstream, during some of these services, I think, we're sort of in a bit of a unique spot.

**Jon Giacomin**

I think, some of that you're seeing and its very early days, but they're playing with some models particularly in the staffing space, where they've got formularies and their escalations of treatments and some of that is, with some expensive drugs on the high-end of that. I think, some experiments are being done related to that.

**Lisa Capodici**

And we're going to take one more question on Pharma, before we move on to Medical.

**Question**

Hey Jon. Can you talk a little bit about the buy side environment for generics and kind of how – and we hear a lot about weakness in pricing from the generic manufacturers themselves. Can you talk about how you see that resolving itself is the right word maybe stabilizing and the impact of that environment on your business and you know if sell side stabilizes, is there opportunity there to create spread again and kind of how you think about that going forward?

**Jon Giacomin**

Yeah. I think I'll start then Mike should chime in. I would say, right now, as you think about it, everything is sort of competition based. So, if you have more items, and it's almost item specific. So, more manufacturers, more items, more competition, certainly competition creates, um, pricing opportunities – royal price opportunities. But I guess is a little bit also a function of what the FDA does, as George alluded to. Dr. Gottlieb is now the FDA commissioner. I think he has been quite vocal on making sure there is competition. And so, I think a seed in the approval process, more approvals being done. I think that's a little bit of a double-edged sword too because you can have more of a particular item that can lower the overall price, but then potentially some entrants leave a particular item. And so, I think, in general competition is going to lower price.

Where it settles out, I guess, it remains to be seen. I would say though, it's a little bit, probably cyclic in nature just like any type of commodity that – that you would have experienced as well, where you have people coming in, coming out of the market, prices going higher, margins going higher, people getting in et cetera, et cetera. So, uh, that was sort of my two cents given where I think where the FDA is headed, which is really enabling more competition in the generic market space.

**Mike Kaufmann**

The only thing I would add is, I think, you said it really well with your – your kind of ending comment there is, this competition I see there is an opportunity to potentially extend your margins, right. You have to manage two things. Generics business is, um, a lot like many businesses. You manage your costs and you manage your sell, really, well if you manage both of those really well, get the best cost you can and sell at the highest price you can by managing all of your needs for, you know, customers and volumes and all of those things and you maximize your overall margins.

I think what we've done really well is – is go at the cost side, really well. Clearly Red Oak has been performing above our expectations. And so, going back to your – and it's the sell side that is – as we've said multiple times, it's been the struggle here. So, a couple of things to think about. Again, I just was up at Red Oak, and every time I go, I go with this lens is there anything about Red Oak where we're getting out of position, do we need to have different type of scale or scale more global or are we not attracting the right talent, because the first thing I got to focus on is the cost side and are we getting it and maximizing it right.

And I think these things that are happening at the FDA, what's going with the manufacturers, they're all helping us on the cost side. When I look at the quality team, they're helping us on the cost side. I don't see a need – at this point in time, I still don't see a need for a global presence to get any better pricing on Red Oak. And, you know, with some of the other moves that other players are making, I constantly look and reevaluate, and I keep thinking our model clearly is the best from listening to the manufacturers and going through the process of our speed and our transparency, simple, you know, a manufacturer could fly to Foxboro and meet with one person and get a decision made in minutes and move. And when you have a fast-moving environment with approvals that change overnight and competitors change overnight, I do think speed adds – adds a lot of value.

So, I feel really good about the cost side and our ability to continue to capture what you were just talking about there with the FDA approvals and things. So, really, it's come down to maximizing appropriately the sell side. And I think that, you know, some of the things that we've done to invest more resources in our pricing team, I think, is going to pay off for us. I think the firewall that we've built between our costing and our sell side has been important that the sell side informs the cost side, but we never let the cost side inform the sell side of what pricing is. So, when we go get a better cost, that does

not ever get explained or passed through to the sell side, because we're telling them, you'll need to price to what's going on in the market and what's appropriate.  And so, I think we're doing all things we need to do to – to maximize it and I do think the share has not moved in the marketplace, which hopefully – as people think through their strategies and thoughts, you know, we think we're making the right investments to get to the right spot. So, those would be just some of the things I would add.

**George Barrett**

Let me close this off by just sort of commenting a little bit on sort of the – again, we don't speak for the manufactures. But I do think one of the things that – again, a little bit of – I guess I'll either call it age, history, or context, you can – you can pick your choice. Each of these products is a market basically, and what happens is the market changes.

So, for example, new player enters the market. It changes the competitive dynamics. You'll probably have some players say, I'm going to drop out of that market, it's not a good use of my resource, I'm going to redeploy it elsewhere. And that's – if I go back in history and I think about what happens with each of these markets, that is a dynamic that I wouldn't be surprised to see. You'll get new entrants. The dynamic will reset. Some markets will – and some players will leave that market, which again causes the market to reset again. And so, I think that's sort of this constant replenishment in that side. So, that's why it's so tricky when we're talking about the generic market. They're individual products.

Even when you look at manufacturers and they talk about – and I know we've been following this, and they talk about their rates of deflation or whatever it is, how incredibly varied they are. It's because of their portfolios. So, then they have a product that was in a semi-exclusive period carrying a lot of weight and then it gets more competitive and their numbers look more draconian. But in fact, it's probably just one or two products. So, this is sort of the dynamic. And you have to just – when you're thinking about generic, think about each product as a market, so.

**Lisa Capodici**

Thank you, George. So, with the remaining time that we have, I'm sure you'd love to take advantage of having Don Casey here. So, we'd like to take questions on the Medical segment.

**George Barrett**

I have to do this every time we talk about our segments. We'll do it – we report a segment, but please remember that it is so important for us, that part of what we are doing all the time with our customers is -- the enterprise. But obviously, it's important for us to be able to sort of break these out.

**Don Casey**

And by the way, we're quite used to announcements that immediately go from Medical to questions about PD. So, we're quite used to this.

**Question**

So, obviously, with the Covidien transaction, a major event for the business and it really changes your bundle and your ability to go-to-market and sort of how you're able to look at the procurement department of a hospital and say, we can really sort of change the way you guys source certain types to supplies. But obviously, this isn't a vacuum.

We also saw Becton and Bard get together, which was kind of interesting. And you see even Medtronic and talk about value-based care and kind of some of the shifts in the market. And so, how do you feel like your strategies kind of evolved over time? And you said this was sort of the perfect asset for the business, I think, George. But clearly, it seems like a very broad set of solutions for you to now provide in the hospital. Has it really changed the conversation point and given what some of the other competitors are doing? So, how do you really see this market kind of shifting after having been a fairly stagnant, boring market for many years?

**Don Casey**

I'll speak for all my people. I'll speak for all my people in saying, we don't think we're boring. (Laughter.) It's really interesting, and George used the word, is it context, is it age, is it whatever, you know, having done this for a long period of time. The amount of consolidation that's going on in this space, whether it's commodity and medical devices, has been accelerating. And that's really reflective of what the customer base is. If you go back 10 years and looked at the top 100 hospitals, they might represent 20% of your business. That's beginning to look like any other industry where your large hospitals are now moving more to like 40 and 50%.

And basically, it's really interesting, and we're spending a lot of time with the Covidien guys right now and we're all talking about their perspective back in the day and we'll talk hospitals down the street here. Dublin used to be a single hospital. Now, it's part of OhioHealth. OhioHealth is now 13 or 14 hospitals. And as the evolution of our customers has gone from a single box to now its multiple boxes, where they used to think about an acute event – George said this earlier, an acute event called a surgery and not have to manage patients across a continuum.

We keep saying our strategy has to focus on scale. We have to focus on the ability to manage across the continuum of care and we have fee-for-value. So, I think when you look at the Bards and BDs – and I don't think these are done by any stretch of the imagination. I think what we're all doing is basically looking at an evolving customer base and say how do we best serve that customer base.

In our case, I – I distinguish us from a classic kind of med device company, because it's interesting, if you're at a Medtronic or J&J, Boston Scientific, take your pick of the name, they tend to be very focused on – on product to doctor. And I think we approach things as solution to hospital and that's anywhere in the acute market, and that's pretty different. Where at a company – med device company XYZ, you'll focus on, okay, this is my pipeline, and this is my next 510(k) or PMA approval basis. And we can just sit there and say to the Cleveland Clinic, who is a large customer, all right, what are the three things you're focused on and how do we assemble assets. So, whether it was buying AssuraMed or buying naviHealth, that wouldn't be a conventional move for a med device manufacturer.

So, I feel first, look, our product bundle from what we did in – you know, kind of – and the base business expanding that out, adding stuff like Cordis, AccessClosure, and now, we're going to add the Patient Recovery business, we feel really, really good about our bundle. I think what distinguishes us, our bundle isn't just a product-based bundle. It's going to be riding on our super-efficient rails. It's going to be, you know, how do we look at our products and how that fits into a post-acute discharge world. We're going to sit there and say – and one of the – it's really interesting when you buy companies.

The first thing the patient recovery guys want to do, is we're really excited about the Cardinal Health at Home guys. We haven't penetrated that. And we said, yeah, that's going to work really well. We didn't realize that this was something that they've been really, really excited about.  So, I feel very, very good that – Mike was asked a question, do we have scale. Yeah, we feel really good about our scale right now. I actually feel our competitive position in an acute environment today, because we do – Joe was talking about, hey, the market is evolving into the hospital. But when we're sitting in a hospital now, we're talking to the Pharmacy Manager, Chief Medical Officer across the board, and because we have so many solutions, I love where we are versus where I would have been if I was just buying the Patient Recovery business to add to like an AccessClosure business.

**George Barrett**

So, one of the things that I'd add to what Don said is because of these customers are getting – they're not just getting bigger, they're more complex. And so, what they're looking for are anything that moves the needle...

**Don Casey**

Yeah.

**George Barrett**

That's a really big deal. And so, Don's organization accompanied with Jon's can walk in and say we have set the solutions that have enough impact to move the needle for you. That's a really big deal. It's one thing if you're a small independent community hospital, your needs are different than if you're a highly complex system with an academic medical center and 12 community hospitals and seven oncology clinics and 14 surgery centers and a bariatric center, those require a big scaled solution, I use that term, it's a really important one, because that's essentially what we need.

**Don Casey**

We had an academic medical center, large, come up to us the other day and say, hey, our board gave us a $500 million bogie over the next five years. So, they got to get to the point where, how are we going to save $100 million across the network. And the interesting issue is, we got called to the table literally because we think we are out of whack on post-acute discharge. We have no idea how we're supposed to be managing things to the home and then – oh, by the way, we think you're, particularly with the space recovery business, you're going to be a covering a much bigger percentage of my landscape, so we like that.

**Question**

So, sorry apologies. The idea where if we see this sort of new model evolve that there – the large complex IDNs, and then it sort of will get pushed down to kind of the smaller and mid-sized hospitals over time, as it becomes clear that the value

proposition allows sort of a level of efficiency and savings that kind of saves these hospitals who are in many cases, as they get smaller on the brink of bankruptcy or failure to allow them to continue to do what they do best, which is to deliver clinical care.

**Don Casey**

And Ross, it's an interesting segmentation, if you really begin to look typically in say size, and actually it's financial wherewithal is, in a lot of cases distinguishes how relevant you are to it, because obviously if you are a financially challenged local, that doesn't have the ability to scale, somebody often shows up with 27 scaled solutions that can bundle that at all together becomes much more relevant.

So, the analogs across, you know, the total Cardinal business where the relationships with like Red Oak translate and benefit to the independent pharmacy similar here, we sit there, say boy, if we do really well with Kaiser that gives us scale that – that makes us more relevant, if we're going to try and compete across the broader landscape with the smaller institution.

**George Barrett**

And I wouldn't even – so two things you highlight, one is that that, there is a really interesting segmentation, they're going to be very different kinds of institutions out there and it's our job to know that. Um, the other thing is that, we've been focused right now, which is primarily the target on the big IDN certainly in the future, but actually there's opportunity in retail and long-term care. So, if you think about the product lines that we have, they are used in retail now, you got patient recovery, those are – those are products that are used in retail settings, those are products that are used in long-term care. So we see this as also being able to take advantage of the channel footprint that has really got great reach.

**Question**

I guess, Don, just to follow what Bob said a step further, you guys have obviously been focusing on the product side of Rx portfolios service side – acute side before that, how do you think about swinging further downstream, as we think about the infrastructure changing and IDN get bigger, the clinicals within an ecosystem get deeper and deeper towards primary care with the footprint and capabilities that you have need to change along with that.

And then going back to, I think the previous Analyst Day, there used to be a long-term target on margins out there in the Medical business of 575 basis points a lot has changed obviously over the last two years, is there is a long-term target we should aim at as we think about where the profitability could go in the Medical segment?

**Don Casey**

A few questions there, Bob. So, you know on the first, do we feel that our footprint needs to change to reflect the technicals moving further out. One of the answers we are feel pretty comfortable with what we – where we are today. One of the capabilities we do pick up with patient recovery business is actually long-term care, so that was a really nice piece for us.

What we tend to exceed these technicals going out five years ago, it used to be a much looser association where they would go buy the – Dr. Bob and they would come in and Dr. Bob would operate the same way, he used to operate, not as much anymore, you're really starting to see the larger institutions enforce like a formulary of product out there, and actually comes out of the core now. So whereas before we may have been, geez, we have to think really long and hard about how we're going to touch a 100,000, you know, primary care. We don't look at it that way anymore.

The second issue is on the margins and those questions we get a fair amount. I think, when three years ago, we put out the 575 basis points, we felt looking at the path of our combination of products and services we get there, and we feel that we will get there and we will surpass that. I mean – so, in direct speak, yes, we're affirming the 575. And look, we continue to believe that our particular mix of services, products, and how we're delivering them right now, it should be marginally accretive to what our base business is.

**George Barrett**

Yeah. But I mean, it is important. We've not updated that. So, this again, on public settings, we've not done any updating on that. So, you can, I think, see that given the mix of our business, obviously, as we pick up some of these product businesses its – those are accretive to our firm margins so – and we feel good about them.

**Question**

I think, this is mainly for Don and then might be for Jon also, you – it seems like we work in the U.S. on a relatively high utilization environment, sort of up to the recession, you had all those scary trend lines that healthcare was going to consume the federal budget, and it seems like, since the recession, we've been at very low utilization environment. What do you think we'll pursue 5 years or 10 years out? And does it matter for how you built the business?

**Don Casey**

I'll start and then forward to Jon. Look, if you look at where we are from a demographic and a quantity perspective, demand is going to continue to go up. I think, the most interesting question that we have to deal with is how they're going to pay for that level of increased demand and kind of as we look at the next 5 years to 10 years, we're probably going to see increased demand on a unit basis and there might not be a corresponding lift in terms of the aggregate amount of GDP goes from 17% to 27%, which is where I think you're going.

How we've built our business and our offerings are – we want to be able to bring scaled solutions where you might have institutions that are going to be looking at a population health management basis, looking at – you know, we're going to see a fair amount of demand without a corresponding lift in revenue, so they're going to have to sit there and deliver a more efficient – they're going to have to deliver healthcare in a more efficient manner, so almost on a per capita patient basis, so it kind of goes down.

So, we look at that and that's how we literally constructed our business to sit there and say, if that's going to be the case that the dominant trends over the next 5 years to 10 years, how do we stay relevant? So, that's where you hear us and it would have been a good course and how many times did we say the world scale today.

We keep driving its scale because if you don't have the scale, you're not going to be able to thrive in that environment and one of the questions we get from you guys frequently is to achieve global and how is that relevant? Well, the interesting issue is if you're going to try and deliver scale in any market whether you're trying to deliver that in Germany, deliver it in U.S., or deliver it in China, you're now going to have to bring global footprint to that because you're now going to be competing against people that are going to bring scale from all over the world.

So, the example we use is exam gloves all the time. I mean, you are a much more interesting manufacturer or sourcer of gloves, if you're at 15 billion gloves versus 5 billion gloves and also if you're sourcing those things for a global infrastructure that's the kind of conversation we're having. It's almost exactly the same as you've seen generics in terms of the U.S. market, the more you source the better you are. I don't know, Jon, if you want to add.

**Jon Giacomin**

Yeah. I think, you touched on it earlier, the demographic shift would suggest that, you know, we got people getting older, the baby boomers are the 10,000 per day, 65, but, not only that, they are living longer and longer with chronic admissions and so we know they're going to be utilizing more and more medications relative to that as we're probably faced a higher percentage of 70 year old's – well, 70s and into 80s with chronic disease treatment. The other thing is kind of interesting when you think about this is, we start to evolve from fee-for-service then to value-based care and adherence and compliance are going to mean a lot more.

Today, the – the rough number, the average number is roughly in the mid-60s around adherence and compliance and so if that needle can move in addition to that, uh, greater demand, utilization then it would seem that we – we should expect to see more and more utilization in Pharmaceuticals, which turn out to be, I think, in the overall cost of care a lower alternative as opposed to acute care settings.

**George Barrett**

So, if I can, just one piece to this. I think there are two dynamics at work. We talked about sort of the trend line in doing this and then sort of slowing down on utilization. Two dynamics, one is the recession; the other is, our first real experimentation as our system was benefited. And so, if you look – so we're sort of in this period of transition where as we've been tinkering with benefit design, we've been altering I would say the curves, right if you just step back and look at demographics, the trends are inescapable and there is one – there are things we can do about public health issues, particularly take a generation to get it right. So, we got some public health issues that we're wrestling with as a society. Demographics, the super users in the system are not 65, they are 78. That wave has not yet really fully hit us. We're going to have – I think I have told this number, 20 million people over the age of 80 in the next five years. It's an incredible number with all those super users in the system. So, I think the challenge for the system is, so how do you manage per capita utilization, because the number of people demanding care is going to be very high.

**Question**

Great. Thanks. So, I'm thinking about the prepared dynamics of the distribution market on the hospital product side, you have three major players. You guys have gone down a very focused, complex route, Medline, Google, Amazon and

there's a whole lot of others in terms of how they're thinking of getting in the market - you have Owens Minor, which is trying to encroach some your turf with some of the at-home distribution sides, particularly as you go down more for products, Cardinal branded products pathway, how has that changed the dynamics of your inter workings with relative players in the market, particularly since, you guys are all coalescing around, some similar themes, and it seems like, at least from what I can see, that Cardinal's the furthest along, in terms of some of the private label development particularly around the acute set of care?

**Don Casey**

Well, there is first, OMI is an example of a great customer of ours, and we look forward to them becoming a continued grade, even bigger customer as we bring on the patient recovery business. So, if you start, I always start with the customer centricity and even start with hospital X, Y and Z once their products coming in on one truck, by virtue of the fact that, they may be sourcing some of those products from Cardinal, they may be sourcing some of Medline, some from J&J and some from Halyard, they want that coming in one truck. So, it's really not in any of the distributors interest to try and elbow out on a product basis, because that's not relevant to what your customer wants, your customer wants all of it coming in on one truck, so I think that's where we all kind of start.

And then, you know, the – the follow-on question to that is like, does it change your relationship with the national brands, and it goes, I think Mike said it really well, a little bit earlier, we're still the most efficient. We believe, we're the most efficient way of getting – you know, if you think about the commodity-oriented or even the product-oriented distribution – medical distribution business, and if you look at GHS categories, there are 1,000 categories. You know, you want – of those 1,000 categories, you – we believe that it's really efficient for Johnson & Johnson, Medtronic, and Abbott, all these people to run though a shared distribution model, because it's one truck that's 95% full versus, you know, 95 vans that are coming in with one FedEx box. So, we continue to look at ourselves as a really efficient way and by the way now we have a product business that we can look at. We know it's a much more efficient way of doing business when you're running these things through the distributors than it is to try and run it through the individual. If we were trying to go around the other distributors.

**George Barrett**

You'll see, and we see the world dividing there. There are – the customers drive the need, so they certainly want some flexibility. So, they – they want to spend all day receiving and unloading trucks. Um, and they also dictate whether or not a product is really sourced-based on its features and benefits, it's clinical features and benefits whether it's sourced-based, and sort of, more economic to buy. And so, we'll see is this dividing line to some extent between products that really are seeing evidence-based clinically differentiated and those products will compete one way, and products that have more of an economic attribute, they're not seen as highly differentiated in a clinical sense. And so, again it's important for us to be able to sort of play in each of those worlds, and I think Don and his team has done that very well.

**Question**

So, two questions. One is Specialty and then I have one back on Generics. So, Don, you talked about these super users, you talk and all of that this will drop. You talked about super users being older than 78. You know the so-called users are

also about using near the Specialty patients, which I don't think Specialty patients stuff. So, for Don and Joe, how do you work together; do you work together; and how do you think about these opportunities, to take what you have in Specialty, when you think about it that the Specialty Patients, talking about the crossover between Medical and Pharmacy, different on your end, but do you see that opportunity as well and – and are you already, thinking, about each other?

**Don Casey**

I would say, yes. Actually, we about three years ago, created a one unified executive -- designed to sit there and say let's go into the very top of the house and have a conservation about what solutions can Cardinal bring, whether it's something in Joe's world, something in Jon's world and actually how do we put that together from a Cardinal perspective, so you deliver it seamlessly. So, we – I think, it's a competitive advantage, I think it will become a bigger differentiator over time and it's something we're taking advantage of. It's not something that we do nearly as much as we'd like to, but if we look at the amount we do today versus what we did a year ago, or two years ago, it's, you know, kind of a logarithmic curve as opposed to arithmetic curve, Joe?

**Joe DePinto**

Yeah and those folks are part of our integrated business planning process and we look at targeting, we look at where the best opportunities are. So, I see them as hand and glove – and you're right out of the money those – as those patients age, they will continue to absorb a lot of that Specialty Healthcare, they will need that continuous demand for the product. That's why we're excited about the opportunity, but that organization that Don spoke about is – is part of our integrated business process as we move forward.

**George Barrett**

So, think about it again, I think we're one of the very few companies just think – sort of think about this one, who actually touch the Medical and the Pharmaceutical side, which is a – which is a really powerful thing. And so again just to think about post-acute. So what does naviHealth do? NaviHealth is helping at this chart direct certain populations to optimal side of care. What do those patients need? They are going to need Pharmacy benefit – excuse me pharmacy medication therapy management that comes out of Jon's teams. So, there is a real connection here, and the more an integrated system has responsibility for that life, they're not necessarily thinking about Pharmaceutical and Medical. So, our ability to touch the Pharma and the Medical spend, I think is actually for our – for our positioning.

**Jon Giacomin**

And just one more thing real fast on that. I think if you look a little deeper on George's drilling down, we touched so many points. We touch the inpatient pharmacy, we touch the retail outpatient pharmacy, we touch retail pharmacy. We have Joe's business that's distributing into physician offices. We're handling services – wrap around services relative to that for manufacturers. I would see with the lines sort of bring, all over the place and more and more focus being around the

patient and outcomes with that patient, I think many of these services are going to coalesce around the patient. So, we feel like given all the touch points, given the capabilities, we'll be there to support the delivery of care to the patients.

**Question**

The question on demand is a two-parted question. So, on the sell side, I think that's one of the key questions that we always get. In terms of the question, that you guys are consolidating – that you guys consolidated us getting really into generic manufacturing side, so what's the point of diminishing return? So, is there a point where there has been 20 to 15 do you think for that?

**George Barrett**

Well, I'll try but we've got a bunch of folks here with – I mean so just...

**Mike Kaufmann**

Yeah. The only thing to start with that makes it – I think it's a lot harder that, for instance, for retail independent GPOs to merge is really difficult where you've actually seen them it's been the really tiny ones affiliating really with some of the larger ones than you have seen, um, recently, any really large ones get together. And the reason being is, is that if they are both with the same distributor, then it's a little bit easier, but if you actually with two distributors, if you surveyed retail independence, I would tell you, I don't know the percentage. It's probably in the 50-50 range, some are way more loyal to their distributor than they are to their GPO, and some might be more loyal to distributor – GPO than the distributor.

So, if you merge and you don't then allow both distributors to stay in, there is a high likelihood that a lot of your customers leave. And so, there is this kind of reverse incentive to actually want to do mergers. So, it's not – it's not like automatically 3,000, 3,000 go together, and there are 6,000. There is likely – highly likely to be a huge breakage of customers that leave, which means fees paid to the GPOs go down. And so, it's actually much more complicated than – than you would think or they end up having to agree to have two distributors being part of their program. We think kind of the de-levers their ability to negotiate. So, I don't know.

**Jon Giacomin**

I think that's right, and I would add the following. Mix matters as well and so when you think about this, uh, with these entities coming together. I think Mike talked about some obstacles, I think mix is another obstacle. There are a lot of Specialty pharmacies that are banded together than going together with say a more traditional retail, create some talent as well as to merging. The other thing is, in the PSAO, which is a third-party contracting piece, some of them have their own, some of them don't, some of them are affiliated with different loans. So, there are some service implications relative to trying to bring those organizations together as well. There are a few large ones out there already and already in existence. I'm not sure adding a few more around the fringes makes much of a difference either. So, I think those are probably, two-three, four things that probably impacts some of that as well.

**George Barrett**

I will just offer this Ricky – again, we try this – these are customers of ours. So, we try to support whatever sort of a base line out, sort of take the pitch. Having said that, in a sense we are the GPO. I mean, I do think that the benefit they gain from leveraging our scale is really the most important thing that can happen. You know, for them to combine to go from 20 to 40 is not really the same as our being able to say, look we're sourcing for 10,000 and you'll benefit from that or we can include you in a network we're negotiating for with the payer view.

So, we have to be understanding of the pressures we're under and we work with them and whatever they need to do on their side, we'll try to support. But fundamentally, I think the value that we do create is from our ability to draw on the fact that we already service whatever the number is 9 or 10 thousand pharmacies, independent pharmacies in addition about the chain pharmacies and hospital pharmacies and everybody else. And that's where we think, that's where the big value comes in.

**Lisa Capodici**

We've actually gone over time. So, I'm going to turn it over to George for some closing comments.

**George Barrett**

So, I'll thank you. I know that, lots of questions. We'll try to stay around for a couple of more minutes, but we want to respectful to those who are calling in. So, thank you all for your questions. We will probably be seeing a number of you at various events over the coming weeks and months and we appreciate your support and your good questions and hopefully we're being able to respond to each of them and give you a sense of where we're going. So, thanks for the time and thanks for being here.