On Purchasing Power, Cost Control, and Device Decisions

In response to the growing pressure to cut costs within hospitals, the Cleveland Clinic tasked vascular surgeon Sean P. Lyden, MD, to act as Medical Director of Supply Chain. He spoke with Endovascular Today about his responsibilities in this role, the forces affecting device innovation and education, and the Clinic's new group purchasing organization.

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COST CONTROL AND PURCHASING POWER

In 2010, you took on the position of Medical Director of Supply Chain throughout the Cleveland Clinic system while also continuing to work as a vascular surgeon. Why was this position necessary?

Dr. Lyden: Our health system realized there would be changes coming to health care and that if we weren't able to cut our costs, we would have a tough time competing in the future. I was unique in that I was working with Supply Chain to help control costs in vascular surgery and was pretty effective. They liked the idea of physicians helping to educate supply chain staff to better negotiate for what we do and don't need, so they created the position and asked me to take it.

What were the forces that led hospital systems like the Cleveland Clinic to take concentrated aim at cost control by way of increased purchase power?

Dr. Lyden: There were narrow networks starting to emerge, decreased reimbursement from Medicare, and the uncertainty of what was going to happen with the Affordable Care Act. At that time, the Affordable Care Act had just passed but had yet to be enacted, and every hospital was very concerned about what the legislation would mean for both access to care and reimbursement. If times were going to get tighter, the thought was that we should start working to be more efficient before it's an issue, because if you wait until it becomes one, it might be too late.

What were you personally tasked with at that time?

Dr. Lyden: When I got the role, they had also just hired a new Executive Director for Supply Chain, and unbeknownst to me, he had promised our CEO, Dr. Toby Cosgrove, that they would take $100 million out of our spending over 2 years, and everything we used was fair game. We needed to look to reduce what we spent on everything from our food vendors, our natural gas suppliers, and what we use for coronary stents, lower extremity stents, pacemakers, defibrillators, spine hardware, and orthopedic hardware.

My goal was to make sure that the appropriate caregivers had some say in the decision-making process. If we were looking at nursing products, we created nursing committees. If we were looking at hips and knees, I made sure we involved the orthopedic surgeons doing joint replacements. When we looked at coronary drug-eluting stents, I made sure that the interventional cardiologists were talking to the supply chain. When we renegotiated for our food vendor, I involved all the nutritionists, hospital presidents, everybody from dietetics, and pediatrics, because it also affected our food formulas for nutritional support.

When people didn't like what decisions were made, I was also the sounding board for complaints.

How has your position changed in the years since you took it?

Dr. Lyden: When I first started the position, which is funded by medical operations from the Clinic health system, I dedicated 20% of my time to it. As the need grew,

the amount of time it took also grew. I now spend 40% of my time doing it.

DEVICE DECISIONS

One possible tradeoff of keeping hospital-wide device costs down is that fewer options will be available to physicians. How is it determined which devices are commoditized such that individualized patient care is not adversely affected?

Dr. Lyden: We have analysts in Supply Chain who help with reviewing data on devices as well as a health technology manager who also helps with the analysis, but we rely heavily on the clinicians in this process. We ask our clinicians to help us develop a contracting strategy based on their knowledge of the disease processes involved, the options for treatment, and outcomes associated with each of them. We challenge evaluation in both blinded and unblinded fashions when appropriate. We ask whether they need all the options, and if they could live without a few of them if narrowing the options led to better pricing. At the Clinic, we are fortunate to be part of almost every trial for every device, so it is rare that a device comes to market and we have no experience with it.

As an example, over 6 months in 2013 to 2014, I got interventional cardiologists, radiologists, and vascular surgeons in our health system together to evaluate angioplasty balloons and stents. We asked questions like, "What are the specific needs we have for a balloon or stent when caring for our patients? What would the difference in outcomes be with one device versus another in the same class? What do we like or not like about each product? Are they really that different? What are the market dynamics, and what is going to change?"

Another example of the weight given to physician input is that we originally waited an extra year to limit our stent vendors because drug-eluting stents had just received approval, and we weren't sure how that would affect what our clinicians believed they should use in the periphery. We always ask clinicians about the data, but there are very little comparative data between device A and device B, so we are left with own personal data and experiences, or what our institution's data show us. That's why we try to get everyone who will use a particular device class to the table during this process, because they can each bring a different perspective. There are seven balloon vendors in the United States for peripheral interventions, and we went from stocking all seven to stocking two.

What other factors involving physician perspectives are included in the device decision-making process?

Dr. Lyden: The Clinic has a very well-defined conflict-of-interest policy that we put on our public website. We always make anyone who comes to discussions for products disclose any conflict they have, financial or otherwise. If they have a significant conflict, they are not allowed to vote on a device.

CHANGES IN THE PHYSICIAN-INDUSTRY RELATIONSHIP

How might the various levels of the physician-industry relationship change as a result of this sort of device-stocking model?

Dr. Lyden: The negotiations by large health systems directly with senior leadership in industry decreases the need for local sales support. The limitation of choice will lower the cost basis to health systems but will also lead to tighter margins for industry. The tighter margins on devices may lead to less support for education and meetings and can lead to consolidation of vendors in the market space. With decreased experience with competitive devices, physicians will not have as much expertise to assist on scientific advisory boards. These are all possible alterations we may see in the future between physicians and industry.

How do you see this potentially affecting device innovation overall, which in this field is often driven by physician-industry interaction?

Dr. Lyden: I don't think it will have much effect in the short term, but eventually, there could be an impact. The interaction of industry with physicians will clearly evolve, but I don't believe it will ever disappear. It is rare for industry to develop innovative device concepts without physician feedback and guidance. Most physicians who engage in device development with industry do so because it's a passion for something they are trying to create, not because it is something that could enrich them financially. Physicians are typically inspired to create a novel solution for a problem they deal with in the care of patients.

Do you see there being any possibility that device manufacturers will have less incentive to make smaller-scale, iterative advancements in their product lines if individual physicians have less ability to select one device over another on the day of a particular case?

Dr. Lyden: Profitability does affect research and development spend, but without innovation, companies will not survive in the future. Iterative changes keep a product on the market longer, but new ideas will eventually make current technologies obsolete. If you look at the business world, there are many examples of companies that have failed to innovate, and they eventually fail. George Eastman developed the plate-coating machine

and created the Kodak Corporation, which was an industry giant on photographic film products for almost 100 years. Unfortunately, they did not drive development of digital cameras, even though they invented the core technology, leading to Kodak filing for Chapter 11 bankruptcy in 2012.

The margin on many medical devices is currently in the 30% to 70% range, but we need to understand that public companies will not survive by selling products at a loss. When products are not financially viable, public companies will cease to produce them. The biggest controllable spend a device company has is its sales and marketing budget. If you reduce prices enough and regionalize the purchasing decisions, I would predict the number of sales representatives will decline, and there will be a reduction but not elimination of research budgets.

How will the current roles of reps potentially change, and how will education on specific device uses and clinical support need to change as a result?

Dr. Lyden: As hospitals continue to merge and get larger, combined with economic pressures, there will not be a need for local sales reps negotiating with a local hospital. The sales rep role will continue to mold into the clinical specialist, who can detail physicians on device attributes, usage, and outcomes. This change has happened in the pharmacology world already.

The US Food and Drug Administration commonly dictates that companies train physicians as part of the approval process but does not provide mechanisms to do that. The restrictions on industry make achieving these training requirements difficult. We are getting to the point that when we as physicians want to learn something new, we will have to pay for that out of our own wallets, whereas this was funded directly by industry in the past. In the same way that if you need to go back to school to get an advanced degree or skill, those courses are not free. I predict we will eventually see more societies and meetings involved with training practicing physicians on new devices and techniques.

EXCELERATE

When and how was the Cleveland Clinic's "Excelerate Strategic Health Sourcing" company conceived?

Dr. Lyden: Many hospitals have asked, "We hear you have very good prices; how can we get the same rates?" We were probably better than many places at controlling spend on physician preference items. Beginning in the 1970s, hospitals in the United States joined group purchasing organizations (GPOs) to aggregate volume to help lower spend. They GPOs were very helpful for commodity items like linens, bed pans, gauze bandages, IV tubing, etc., but they were never very helpful for physician preference items. This is because the clinicians drive usage, and no GPO was able to achieve consolidation, leading to industry locally negotiating these contracts. So in May 2013, the Cleveland Clinic formed a new company called Excelerate Strategic Health Sourcing, a GPO and joint venture with VHA aimed at controlling physician preference spend. The Cleveland Clinic brought expertise in strategic outcomes-based sourcing from physician/clinician integration, and VHA brought expertise in analytics, market networks, and contracting.

In 1995, the Clinic began a cardiovascular affiliate program, which has grown into a clinically integrated network of hospitals and health care systems across the country that focuses on enhancing quality and value in health care by working peer-to-peer, physician-to-physician, and hospital-to-hospital. Those hospitals use our protocols for care pathways to monitor and improve outcomes. The affiliate hospitals began to ask how they could lower their spend like we do at the Cleveland Clinic. The creation of Excelerate Strategic Health Sourcing made a vehicle to have that happen.

What are some of the specifics involved in Excelerate's model?

Dr. Lyden: As opposed to GPOs in which participants can buy whatever they want, we have a committed model in which the hospitals have to agree ahead of time that they won't have everything. A member has to agree to move its products to our clinically vetted, limited portfolio. When it joins, it may have everything on the shelf, but over a period of time, it will increase savings as it consolidates spend to limited vendors.

For Excelerate to be successful, we need to engage clinicians at member hospitals. New members want to understand how decisions were made in choosing portfolio options. We are frequently asked, "Do the data support that decision?" Our decisions are very data-driven because clinicians respond to data. If it's proven superior, then we're going to have it.

We strive to be a provider-led GPO that looks at both outcomes and care pathways. The Cleveland Clinic outcomes are publicly reported, and we take pride in being the named top heart hospital and one of the top hospitals for all care areas in the United States. We have shown we can achieve high-quality outcomes while limiting access to physician preference devices.

We create understanding of the tight margins under which many hospitals live. We help the member educate its clinicians that the number one expenditure that a hospital has is manpower, and if a hospital does not

reduce its device expenditure, it will likely have to reduce its people. Physicians need to realize that patient care without enough nurses, technologists, and other ancillary staff will be more difficult, and outcomes and quality will drop.

At what stage of implementation is the program?

Dr. Lyden: The Cleveland Clinic was the first member. We then added Cadence Health in Chicago. They were part of a heart and vascular affiliate network, so there was a lot of synergy there to begin with. Our newest members are Riverview Hospital in Indiana, Alpena Hospital in Michigan, and Akron General here in Ohio. We are currently in final negotiations with many other hospitals.

In the beginning it's a little like, "What comes first, the chicken or the egg?" GPOs need contracts in order for health care systems to want to join them. But, when a GPO is just starting out, it is unlikely they will have any large breadth of contracts. For vendors to want to work with a GPO, they need to have strength in numbers of members, as increased volume allows for better pricing. The Clinic contracted most of its physician preference portfolio itself, so the first year was slow in moving those contracts to Excelerate. Our contract portfolio has continued to grow since formation, as well as our membership portfolio, with one element feeding the other.

A press release in mid-January indicated that the Cleveland Clinic and a handful of large hospital systems in Ohio would be working together as part of the Midwest Health Collaborative. What are the goals of this collaborative as you understand them?

Dr. Lyden: The CEO of the Clinic met with the CEOs from five other big health systems in Ohio (OhioHealth, Aultman Hospital, Premier Health, ProMedica, and TriHealth) to discuss the shared financial struggles and the opportunity for synergy to improve what we do. They formed a coalition designed to control health care costs and improve quality in response to growing pressure from insurers to meet goals in order to lower prices.

Excelerate provides a vehicle for the collaborative to work together to reduce their supply costs, and we are hopeful that all those health systems will join Excelerate. ■