

# The Evolving Role of Surgeons in Medical Device Evaluation and Selection

Results from The Advisory Board Company's 2015 Proceduralist Survey

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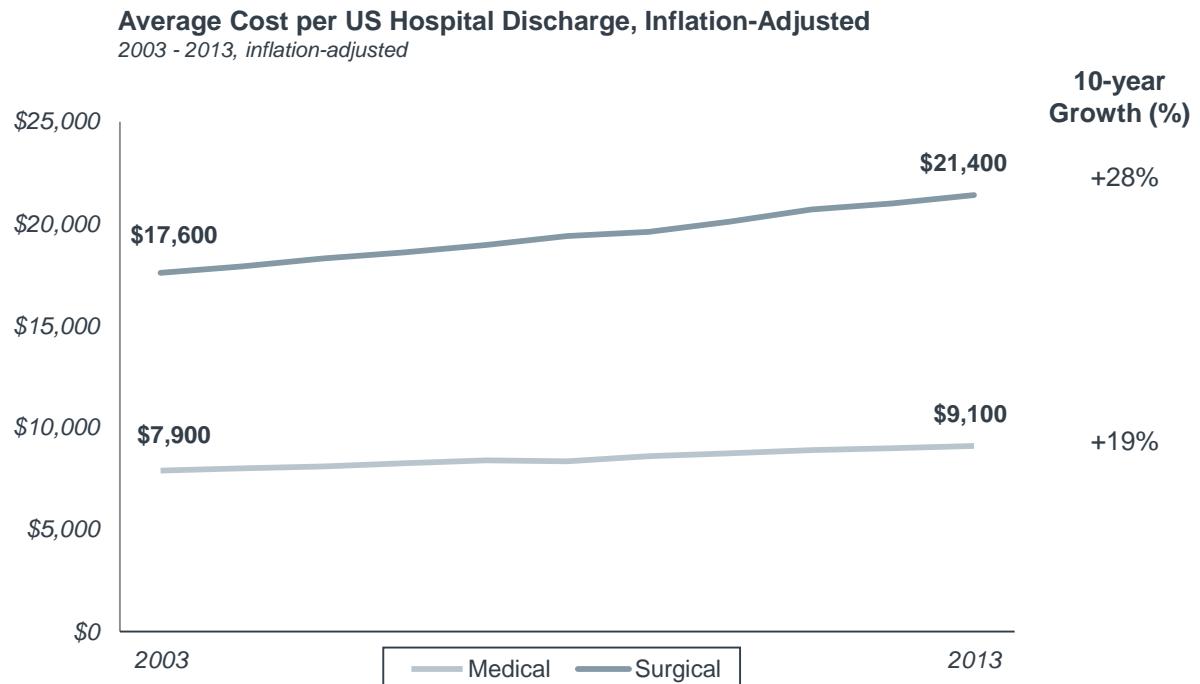
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# A Growing Cost Containment Mandate

Hospitals' need to control costs is not exactly "new" news. But ever since 2012, when year-over-year hospital cost growth surpassed year-over-year revenue growth, the pressure to contain costs has intensified. In fact, hospital and health system CEOs identified cost reduction as their top priority in a 2014 Advisory Board survey. Complicating financial matters further, hospitals' surgical case costs have been growing far faster than their medical case costs—eroding precious surgical margins that have been the mainstay of hospitals' financial livelihood for decades.

Anticipating even more reimbursement cuts ahead, hospital leaders – from CEOs to supply chain executives to service line administrators – have been aggressively pursuing a variety of tactics to abate, if not reverse, this procedural cost growth trend.

## Surgical Case Cost Growth Outstripping Medical Case Cost Growth



### Cost Reduction a Top Target

**#1**

Hospital and health system CEOs identified cost reduction as their #1 strategic priority in our 2014 Health Care Advisory Board executive survey

Source: Weiss, A., "HCUP Statistical Brief #175: Trends and Projections in Inpatient Hospital Costs and Utilization, 2003-2013." AHRQ Healthcare Cost and Utilization Project, July 2014, available at: <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb175-Hospital-Cost-Utilization-Projections-2013.jsp>; Advisory Board interviews and analysis.

# Increased Pressure on Device Costs

Although many factors have historically influenced procedure costs, few capture hospital administrators' attention as readily as implantable surgical devices.

In the 1990s and early 2000s, hospital administrators had little ability to rein in device costs for fear their surgeons would revolt and shift volumes to a competitor. But, in the past few years, they have dramatically expanded their arsenal of tactics to lower device costs. Through better hospital-physician collaboration and more sophisticated purchasing processes, they have stabilized or lowered prices in many significant device categories.

Emboldened by recent success and continued pressure to further reduce per-case costs, many supply chain leaders are pushing ahead with expanded efforts to influence (if not dictate) physicians' product preferences and use.

And that influence begins with basic education. In a recent survey, nearly 80% of orthopedists could not estimate their actual device costs within a 20% margin of error. When presented with objective, comparative data on price, utilization, and performance, many physicians willingly shift clinical habits, allowing hospital leaders to more readily consolidate products and vendors without risking their volumes.

## Devices Already Showing Signs of Price Declines

Rank <sup>1</sup>	Device Name	Primary Service Line	Average Price	12 Month Price Change (June 14-15)
1	Implantable Pacemaker	Cardiovascular	\$4,104	+2.1%
2	CRT-P	Cardiovascular	\$6,839	+0.4%
3	Biological Heart Valve	Cardiovascular	\$5,604	-1.8%
4	IVD End Plate	Spine	\$5,322	+7.5%
5	Hip Implant - acetabular shell	Orthopedics	\$1,145	-15.8%
6	Knee Implant - femoral	Orthopedics	\$1,999	-7.9%
7	Shoulder Implant - humeral	Orthopedics	\$2,253	-10.4%
8	Drug-eluting Stents	Cardiovascular	\$1,294	-5.9%
9	Cochlear Implants	ENT	\$17,688	-3.9%
10	Spinal Cord Stimulator - analgesic	Spine	\$16,834	+3.4%



### Surgeon Cost Awareness Lacking

**21%** Percentage of orthopedic surgeons able to estimate implant costs with +/- 20% accuracy

1) Devices ranked by total U.S. sales

Source: "Technology Price Index: June 2015," Modern Healthcare, available at: <http://www.modernhealthcare.com/section/technology-price-index>; Advisory Board interviews and analysis.

# Introducing our 2015 Proceduralist Survey

The increased reliance on data transparency is only one tool highlighted in our recent survey of proceduralists, which aimed to shed light on two key areas of broad concern to suppliers: (1) how surgeons' roles in product evaluation and selection are changing, and (2) how their asks of vendors are evolving. The rest of this document summarizes our key findings from that survey.

Our sample consisted of 63 physicians with surgical or interventional specialties. In other words, every member of our sample performs invasive, device-reliant procedures in an acute care setting.

While we aimed for a diverse, representative sample, our respondents skewed toward the extremes in terms of age and experience. Just over half of our respondents had twenty or more years of experience, while 17% had only 1-5 years of surgical experience. While this sample may not be as balanced as we had hoped, the significant experience level of our respondents likely captures the opinions of tenured experts who may be more likely to serve as key influencers and/or product decision-makers.

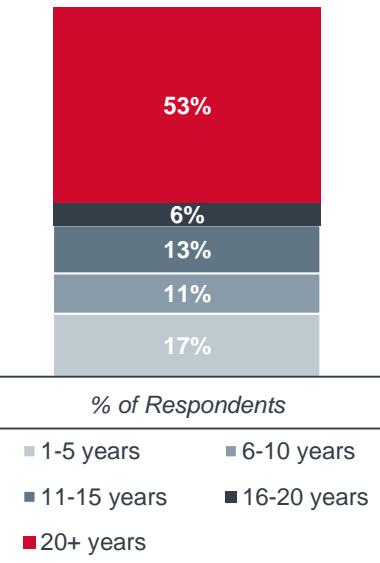
## Specialty and Professional Experience Distribution

### Five Most Common Specialties



- 1 Orthopedic/Spine Surgery
- 2 General Surgery
- 3 Interventional Radiology
- 4 Interventional Cardiology
- 5 Cardiovascular Surgery

### Experience Level



Source: Advisory Board interviews and analysis.

# Physician-Hospital Relationships in the Survey Sample

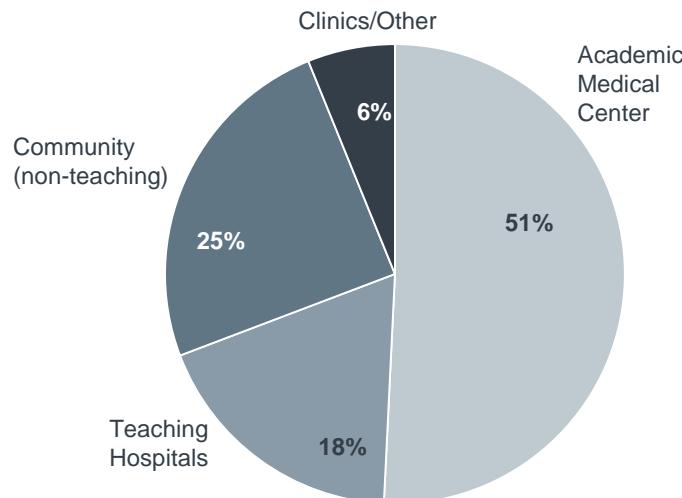
Our sample also skewed more heavily toward surgeons affiliated with academic medical centers (AMCs). As a consequence, many participants self-identified as faculty members.

Coupled with the high level of surgical experience in our sample, the survey results probably best represent the views of tenured surgeons affiliated with some kind of teaching hospital. That means they may be more likely to be performing complex procedures and/or using cutting-edge equipment than the average surgeon.

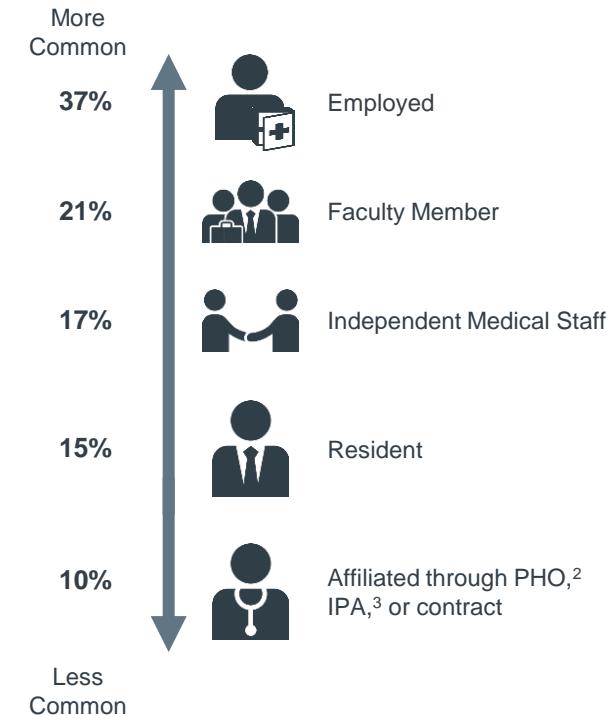
Despite these sampling limitations, our survey responses reveal several important insights about evolving surgeon preferences – for products, for information, and for supplier support. While we do not claim these results to be definitive, we do hope that they can shed additional light on these important purchasing stakeholders and further inform your IDN<sup>1</sup> and surgeon engagement strategies.

## Hospital Type and Affiliation Status

### Primary Hospital Type



### Physician Alignment Model



1) Integrated Delivery Network  
2) Physician-Hospital Organization  
3) Independent Practice Association

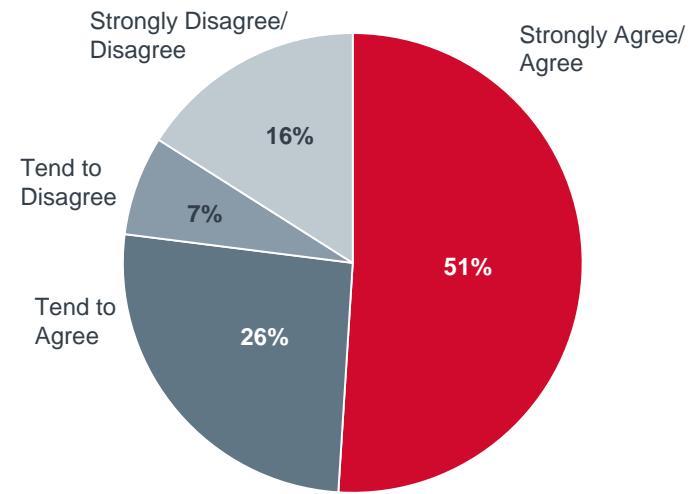
Source: Advisory Board interviews and analysis.

# Surgeons Feeling Moderate Pressure on Device Selection from Administrators

For the vast majority of proceduralists surveyed, their product selection is heavily influenced by their institutions' existing vendor contracts. That isn't to say that their device choices are totally prescribed, but rather that they must obtain prior approval for all devices in advance of surgery, and that a significant majority (77%) face institutional pushback when trying to use devices not on the facility's preferred products list.

## Health Systems Limiting Device and Supply Options

**Percent Who Report they Face Institutional Pushback When Selecting Non-Preferred Devices<sup>1</sup>**



### Most Purchases Need Preapproval

**79%**

Percentage of surgeons who must have surgical devices contracted for and pre-approved by their institution prior to usage

1) I face institutional pushback when I use devices that are not on the facility's preferred product list  
2) In what percentage of your procedures do you estimate that the vendor representative is with you in the OR/cath lab? How is this different from 3 years ago?

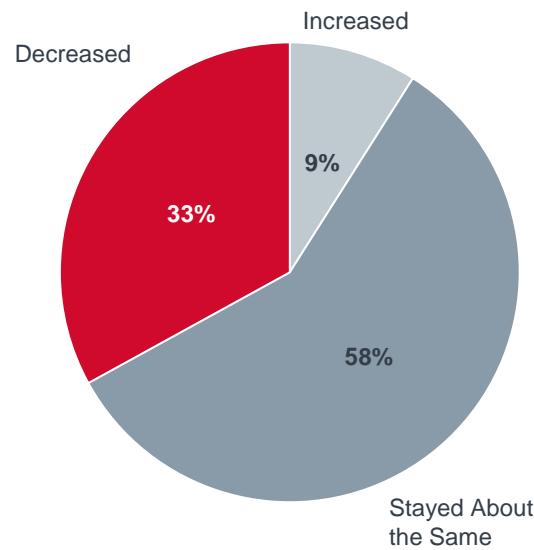
Source: Advisory Board interviews and analysis.

# Supplier Presence in the Operating Space Under Scrutiny

Their hospitals' vendor access restrictions also appear to be working, although some may be working better than others. While just over half of surveyed proceduralists report seeing about the same number of supplier reps in the OR/catheterization laboratory as they did three years ago, one-third actually report a decrease in supplier representative presence overall.

## Fewer Representatives in the Operating Room (OR)

### Change in Prevalence of Supplier Representatives in the Operating Space During Procedures vs. 3 Years Ago<sup>2</sup>



1) I face institutional pushback when I use devices that are not on the facility's preferred product list  
2) In what percentage of your procedures do you estimate that the vendor representative is with you in the OR/cath lab? How is this different from 3 years ago?

Source: Advisory Board interviews and analysis.

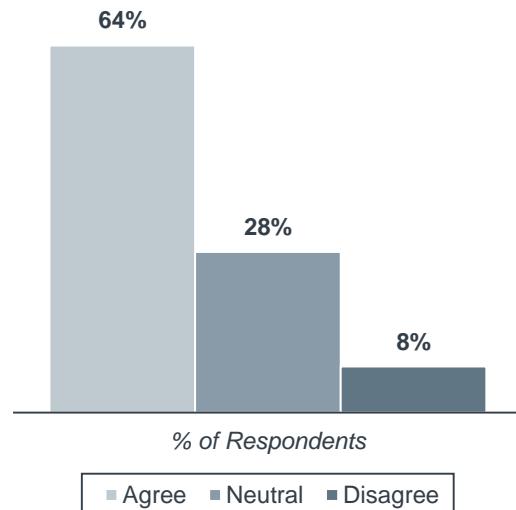
# Surgeons Want Vendor Presence in ORs

Despite the declining prevalence of supplier reps in the operating room, the physicians we surveyed still want you there. Nearly two-thirds (64%) agreed that supplier reps should be allowed in their procedural areas. And it's for good reason; most respondents (72%) felt that they performed better when a supplier rep was in the OR/cath lab with them.

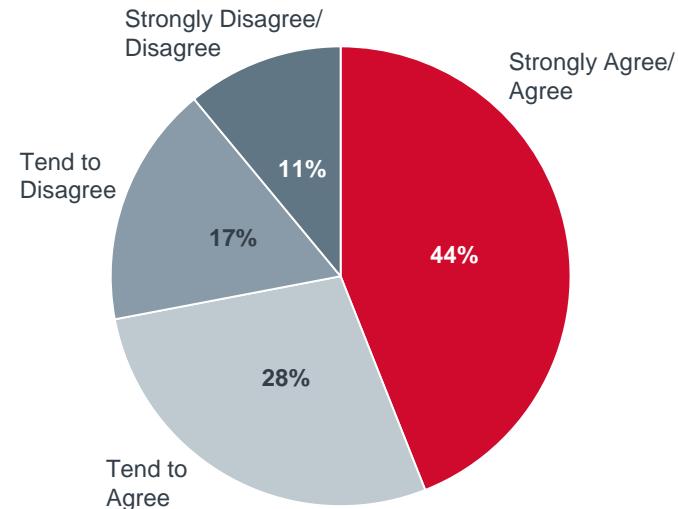
But proceduralists appreciate more than just supplier presence in the OR. More than 80% of our respondents felt that device reps provide valuable services to them and to their staff. And a near-universal 97% believe that supplier representatives appropriately educate them about relevant products and services.

## Positive Ratings for Supplier Support

### Percent Who Want Suppliers to Be Allowed into Their Procedural Space



### Percent Who Think Supplier Presence During Procedure Improves Their Performance<sup>1</sup>



### Supplier Representatives Provide Valued Services

**82%**

Percentage of surgeons who agree or strongly agree that representatives deliver a valuable service to clinical professionals

**97%**

Percentage of surgeons who agree or strongly agree that representatives do a good job educating about supplier devices

<sup>1</sup>) I perform better when the vendor's representative is in the OR/cath lab with me.

Source: Advisory Board interviews and analysis.

# Surgeons Favor Experiential Training When Possible

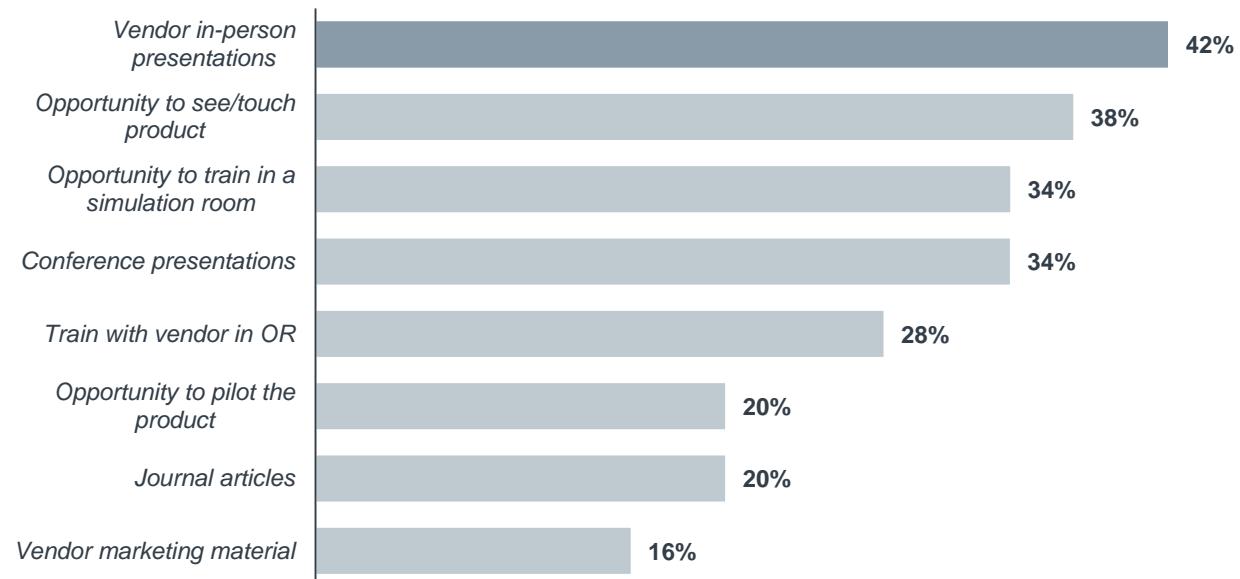
Although our surveyed proceduralists were very complimentary of suppliers' educational and training services, their responses clearly indicate a preference for experiential rather than print-based education. When asked to choose among several common methods for learning about new devices (they could choose up to three), respondents favored opportunities to interact directly with both the vendor and the product itself. While such hands-on, in-person encounters are far more expensive than reprinted articles and brochures, they may be a necessary part of your firm's ongoing clinician engagement and support strategy.

## Vendor In-Person Presentations are the Most-Favored Way to Train

### Surgeon Preferences on Learning about New Devices<sup>1</sup>

*Percent who selected method within their "top 3"*

n=64



1) How do you prefer to learn about new devices? Please select your top 3 answers.

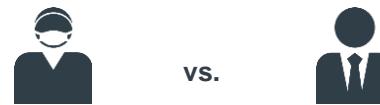
Source: Advisory Board interviews and analysis.

# Product Education Preferences Differ Widely Within the Hospital

Unfortunately, clinicians and supply chain leaders do not see eye to eye when it comes to learning about new products. While proceduralists clearly value opportunities to engage with a supplier's products and its people, many hospital supply chain leaders would much prefer that the supplier representatives just went away; perhaps not surprisingly, they rank vendor in-person presentations as their least preferred source of new product education (ranking it #12 out of twelve choices).

Supply chain leaders are extremely wary of suppliers' interpersonal influence and perceived "marketer spin." Instead, they prefer learning about new products through clinical and financial performance data presented in journal articles or their own in-house studies, and they often favor risk-mitigation strategies such as product trials or look-back performance reviews. While surgeons are unquestionably influenced by clinical and financial data, this difference in perceived value of people versus data remains a significant source of tension between clinicians and administrators at many institutions.

## Preferred Sources of Product Education for Proceduralists and Supply Chain Leaders



vs.



Category	Surgeon Rank (out of 8)	Supply Chain Rank (out of 12)
Vendor in-person presentations	#1	#12
Opportunity to trial products	#6	#1



### Vendor Presentations a Distraction for Supply Chain

In my mind, vendors presenting to supply chain, to our physicians, or to our value analysis committees can confuse the issue. We want facts, not marketing or spin. If I could I would limit supplier-physician contact.

*Director, Supply Chain*

Source: Advisory Board interviews and analysis.

# Physician Engagement Methods for Restrictive Environments

In search of a “middle ground” that can bring surgeons and hospital administrators together, several health systems have launched creative programs to help suppliers educate and engage physicians in partnership with supply chain leaders. At Baptist Health in Kentucky, vendors collaborate with supply chain leaders to set up “new product” booths outside of surgery suites at pre-approved times. In between procedures, the surgeons can visit the booths to interact with the products, review educational materials, and ask questions of the supplier reps.

At Children’s Healthcare of Atlanta, supply chain leaders established “physician office hours” during which vendors can meet with desired clinicians – provided they schedule their visits ahead of time (informing both the doctor and materials management).

At both institutions, vendors, supply chain leaders, and physicians all report improved relationships and access to more helpful information.

## Supply Chain-Friendly Physician Communication Strategies

### Baptist Health Kentucky: Product Fairs



BAPTIST HEALTH

Baptist Health arranges product fairs outside of surgery suites to acquaint caregivers with new product line



#### Case in Brief: Baptist Health KY

- Baptist Health is an eight-hospital system based in Louisville, KY
- By ensuring that all relevant caregivers are exposed to new technologies, Baptist’s VACs can make more informed product purchasing decisions

### Children’s Healthcare of Atlanta: Physician Office Hours



Children's  
Healthcare of Atlanta

Atlanta Children’s allows suppliers to arrange visits during physician office hours as long as supply chain is informed



#### Case in Brief: Atlanta Children’s

- Children’s Healthcare of Atlanta is a pediatric hospital in Atlanta, GA
- Through implementing the office hours policy, suppliers are able to better understand end-user preferences and strengthen provider partnerships

Source: Advisory Board interviews and analysis.

# The Metrics that Matter

Regardless of how suppliers interact with proceduralists and hospital leaders today, they all must present a compelling value proposition to galvanize widespread support. But what do today's proceduralists value?

In an attempt to address this question across product categories, we asked proceduralists to identify their top five considerations when choosing a medical device. While physicians' preferred device attributes vary by procedural area, it's probably safe to say that they try to consider the total package. They want products that positively impact patients' quality of life with minimal downside risk; they want products that are easy to use (perhaps also to mitigate downside risk of error); and they'd like their favored products to cost no more than other options. As more hospitals and physicians share financial risk for cost and quality performance, we're likely to see greater hospital-physician alignment around product standardization efforts focused on value (looking at cost and quality). Products that can demonstrably improve outcomes by lowering risks of human errors and costly adverse events are likely to appeal to both clinical and administrative stakeholders, representing one measure of value in the emerging procedural marketplace.

## Surgeons Looking for the Total Package

### Top Device Characteristics as Ranked by Surgeons<sup>1</sup>

Occasional Differentiators	Frequent Considerations	The Essentials
 <b>2%-10%</b> <ul style="list-style-type: none"><li>• Measurable impact on 30-day readmissions</li><li>• Ability to use in outpatient settings</li><li>• Vendor recall history</li><li>• Blood use</li><li>• Patient preference</li><li>• # or size of incisions</li></ul>	 <b>11-30%+</b> <ul style="list-style-type: none"><li>• Measurable impact on LOS</li><li>• Reimbursement</li><li>• Impact in certain niche patient populations</li><li>• Measurable impact on patient pain</li><li>• Amount of training required before use</li></ul>	 <b>31%+</b> <ul style="list-style-type: none"><li>• Long-term impact on quality of life</li><li>• Ease of use</li><li>• Risk of adverse events (e.g., clotting, infections)</li><li>• Unit cost relative to other options</li><li>• Previous experience with that device</li><li>• Likelihood of complications within one year post-procedure</li><li>• Does something no other product does</li><li>• Measurable impact on OR time</li></ul>

<sup>1</sup>) Percentage of physicians who selected that a differentiator was one of their "top five" decision factors when selecting a device. Characteristics are ordered within a group by popularity among the physician sample.

Source: Advisory Board interviews and analysis.

# Key Takeaways for Medical Products Suppliers

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1

## Vary Education Strategies



- Continue offering diverse, experiential supplier-sponsored educational programs for clinicians
- Suppliers likely need to develop distinct educational programs for clinicians and hospital administrators in order to address different preferences for learning about and evaluating new products

2

## Incorporate Economic Data



- Wherever possible (and in compliance with local and federal regulations), show how your products impact the cost and quality metrics that unify clinical and administrative stakeholders – namely, those that mitigate downside risk (e.g., reduced errors, complications and adverse events) both within and beyond the procedural episode
- Pursue opportunities to help clinicians and supply chain leaders evaluate the clinical and financial impact of your products at their unique institutions
- Consider incorporating meaningful health economic endpoints in future trials or post-marketing studies

3

## Foster Relationships of Trust



- Seek ways to partner with supply chain leaders in identifying mutually beneficial ways to solicit clinician feedback and educate them about your products
- Do not ignore any major constituency (surgeon, supply chain, etc.) at any institution or you will risk being shut out of the sourcing process

Source: Advisory Board interviews and analysis.



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