The Current State of Hospital Value Analysis

Implications for Suppliers

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Kotler Marketing Group is a consulting, research and training firm, specializing in solving sales and marketing challenges for suppliers to the healthcare industry. Our philosophy is based on the work of Philip Kotler, the world's leading marketing thought leader. For more on Kotler Marketing Group, please go to www.kotlermarketing.com

About MedtechAnalysis

MedtechAnalysis is a market and industry research and consulting group that provides in-depth analysis of the medtech sector. The team's research methodology includes primary research (interviews and panel surveys) and economic and trend analysis, along with a deep examination of technology and corporate developments. For more on MedtechAnalysis, please go to http://www.medtechanalysis.com/

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Executive Summary

As a direct consequence of healthcare reform efforts, hospitals are working diligently to align their goals, processes, and practices to better conform to the new healthcare delivery model – one that rewards hospitals who can deliver high quality care efficiently, and penalizes those who fail to deliver on these objectives. The reimbursement penalties (e.g., those associated with Value-Based Purchasing, Readmission Reduction, etc.) can be significant. Given that most hospitals operate on slim margins, the stakes are clearly high.

In order to position themselves for success, hospitals have moved aggressively to instill a disciplined, data-driven approach to everything they do, in particular the manner in which they evaluate and source medical devices, capital equipment, consumables, and services.

> **"It's not like it was 10 years ago. We're not all fat and happy. If Vendor ABC is here with some great new device we can't just say 'I want it – give it to me.' It's not like that anymore. It can't be."**
>
> *– Supply Chain Director, 8 hospital system*

Decision-making authority has increasingly been shifted away from clinicians (doctors, nurses, and service line managers) and placed in the hands of Value Analysis Committees (VACs). Committees in this role can go by a variety of other names, including value analysis teams (VATs), technology assessments committees (TACs), and clinical use evaluation (CUE).

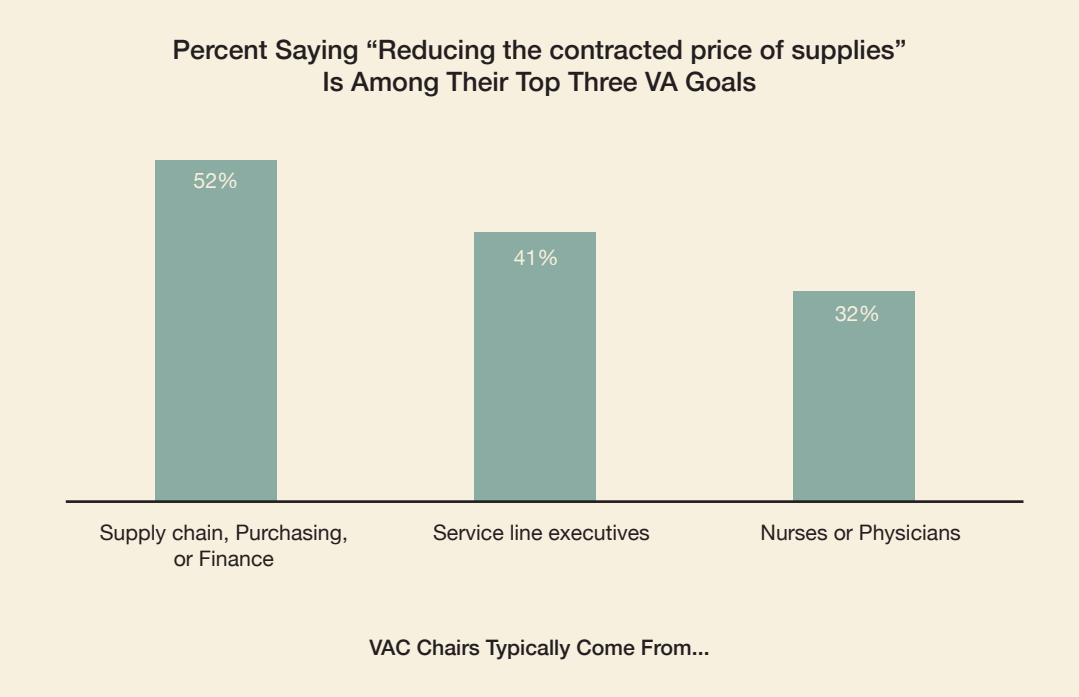
This has a clear implication for suppliers. It is no longer enough to focus the sales effort on doctors or other clinicians. Salespeople need to be equally comfortable presenting the value of their products and services to a broad spectrum of personnel, from service line managers, to quality and infection control, to the people charged with running the committees – the clinical value analysis directors. In order to be effective in this regard, supplier sales and marketing personnel need an in-depth understanding of the value analysis process. Unfortunately, for a great many, hospital value analysis remains a "black box."

To help healthcare vendors understand the current state of hospital value analysis in the United Sates, Kotler Marketing Group and MedTech Analysis surveyed U.S. hospital personnel who sit on at least one VAC at their organization.

Among the 121 respondents there is general agreement on the primary goals of value analysis:

1. Improving patient care outcomes
2. Standardizing on products and care protocols
3. Reducing the contracted price of supplies

The study found several factors to be predictive of whether reducing price is a top value-analysis goal. These include VAC leadership (see figure), the size of the hospital or system, as well as its focus on new payment models such as accountable-care and bundled payments.



Variation in Organization & Process

The study found wide disparity in terms of how hospitals work to achieve their objectives. For example, in terms of how value analysis is organized, a plurality of respondents (47%) reported having multiple VACs rolling up to a steering committee. But a roughly equal number (45%) have chosen to organize their VACs differently. Similarly, when we examine who is chairing these committees, there is no clear consensus. At a plurality of hospitals VAC chairs typically come from the supply chain organization. But close to two-thirds usually have chairs from other functional areas.

Nor have hospitals coalesced around a single methodology for rating and comparing competing products. In fact, many have not even achieved much internal consistency in their VA work. The survey found that a plurality of hospitals develop a one-off scorecard for each analysis.

Nonetheless, more than half of respondents (55%) have managed to standardize their approach to some extent:

- 27% have a standard scorecard for use across all evaluations.
- An equal portion has developed different scorecards for different product categories.

VACs Face Significant Challenges

Value analysis can be seen as a struggle to synthesize clinical and financial objectives. Though in principle these objectives can be complementary to one another, there is undoubtedly a tension between them. This is amply demonstrated by the significance of various value-analysis challenges cited by survey participants. Two stand out:

- Getting physician buy-in;
- Balancing clinical and spend reduction goals.

While these two are the most "top of mind" challenges for VACs, they are difficult to address because of other, underlying challenges. These related challenges include:

- Making value analysis data-driven;
- Conducting clinical evaluations and trials;
- Tracking results post-implementation.

The Role of Suppliers

Given that VACs have become the primary decision-making authority, the study explores their view of suppliers, the degree to which suppliers are providing them with worthwhile information, and ways their relations with suppliers are evolving.

Almost all respondents (93%) say suppliers' materials clearly explain their product advantages. But respondents are evenly split on whether suppliers typically provide clinical evidence that is actually useful in evaluating those advantages.

While vendors do a good job of providing descriptions of their products and services, respondents report that suppliers perform decidedly less well when it comes to providing compelling clinical evidence, as well as comparisons with competing suppliers. Perhaps these shortfalls explain why there is a move afoot to hold device, equipment, and service providers accountable for the claims they make.

The study examined interest in risk-sharing and gain-sharing (RS/GS) arrangements, as they are generally known. A quarter of respondents report they are already implementing such agreements, with larger hospitals and health systems more inclined to pursue them than their smaller counterparts.

Excluding respondents already in such agreements, 19% of the remaining respondents have indicated serious interest, or are currently investigating RS/GS. Another 39% express mild interest.

Future Trends

We also identify several likely directions for hospital value analysis going forward.

Decisions will be based on "profitability", not "preference"

Getting physician buy-in to the value analysis process is a common challenge many hospitals face. Many participants cited the need for physicians to be financially aligned with hospitals in seeking cost savings and standardizing processes.

Data Middle Men Will Emerge to Support the VA Process

Decisions need to be data-driven. Yet many respondents, especially those at smaller hospitals, are severely challenged at integrating meaningful data into their decision processes. Large IDNs are developing data warehouses to address this problem. For others, data consortiums offer a potential solution.

Executive Leadership Will Remain Engaged and Compensation Plans Will Change

Survey respondents who have successfully achieved physician buy-in say support from senior executives, especially the CEO and CMO, has been critical. Therefore, look for executive steering committees to continue to proliferate and become more involved in driving the value analysis process.

Interest in Risk-Sharing/Gain-Sharing Arrangements is Likely to Rise

Risk-sharing-gain-sharing arrangements with suppliers seem to be the logical conclusion of the VAC push for accountability from suppliers. VAC members, including physicians, finding themselves accountable for cost savings and improved patient outcomes, will look for suppliers to have "skin in the game."

To Survive, Hospitals Will Shift Their Focus from "Price" to "Value"

Hospitals who are committed to "alternative payment models" are far less likely to pursue price reduction as a top priority. Instead they tend to focus more on goals such as improving patient care outcomes, staff safety, and process efficiencies. The longer providers hold back from a strong commitment to quality improvement over cost savings, the further behind they fall in areas such as IT integration and care coordination. And the greater the risk they get penalized under Medicare's mandatory P4P programs.

Methodology

The online survey was fielded to personnel involved in hospital value analysis. Responses from hospital personnel not directly involved in value analysis were omitted, as were responses that were not fully completed. In order to prepare for this survey, Kotler Marketing Group conducted 24 in-depth interviews with clinical value analysis directors at U.S. acute care hospitals. These interviews informed the development of the online survey instrument. Survey data was gathered via an online instrument between March 1 – April 1, 2017.

Respondent Profile

In total, 121 respondents participated. The charts below provide a breakdown of survey respondents by their organization's size, type, and market footprint, and by the respondent's job role.

Figure 1: Respondents by Organizational Size

Question: "How many staffed beds does your hospital or system have across all of its facilities?"

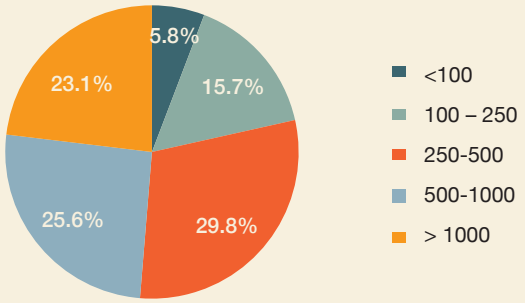


Figure 2: Respondents by Hospital Type

Question: "What best describes your hospital/system?"

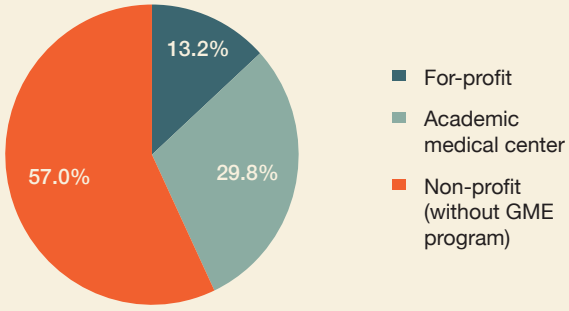


Figure 3: Respondents by Market Footprint

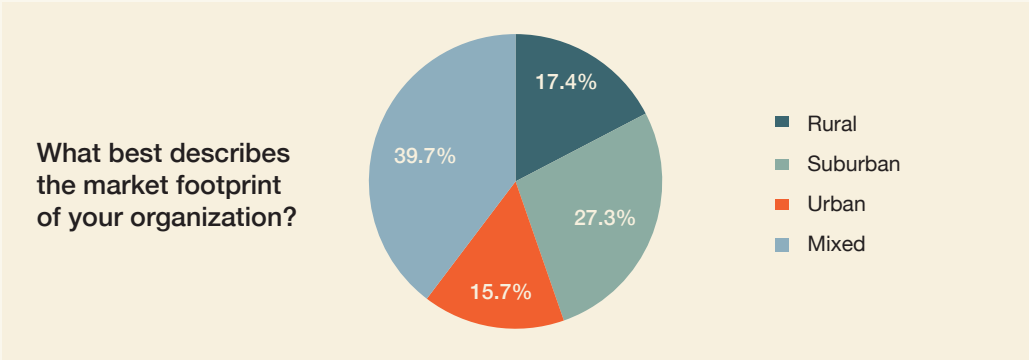
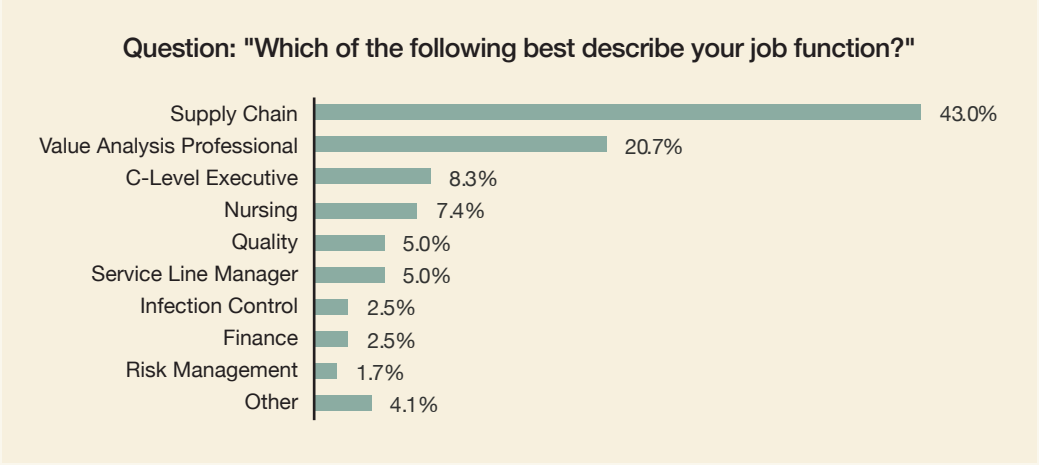


Figure 4: Respondents by Job Role



The study was conducted in partnership between Kotler Marketing Group and MedtechAnalysis.

Chapter One: It's Not All About Price

1.1: Top Goals for Value Analysis Programs

Value analysis is about ensuring that the benefits of a medical device, consumable, or piece of equipment are maximized relative to the price paid. In our experience speaking with suppliers, they often perceive value analysis committees (VACs) as focused solely on the price side of the equation. The survey found, however, that the opposite is true. VAC members most frequently identify "improving patient care outcomes" as a top value analysis goal—and that by a significant margin (see Figure 1.1).

The importance of "improving patient care outcomes" to VACs implies that suppliers should give at least as much weight to the clinical benefits of their offering as to issues of price. However, in the context of value analysis "giving weight" means more than simply describing those clinical benefits (something that no supplier would fail to do). Respondents made clear that suppliers are expected to demonstrate and document them in a rigorous fashion.

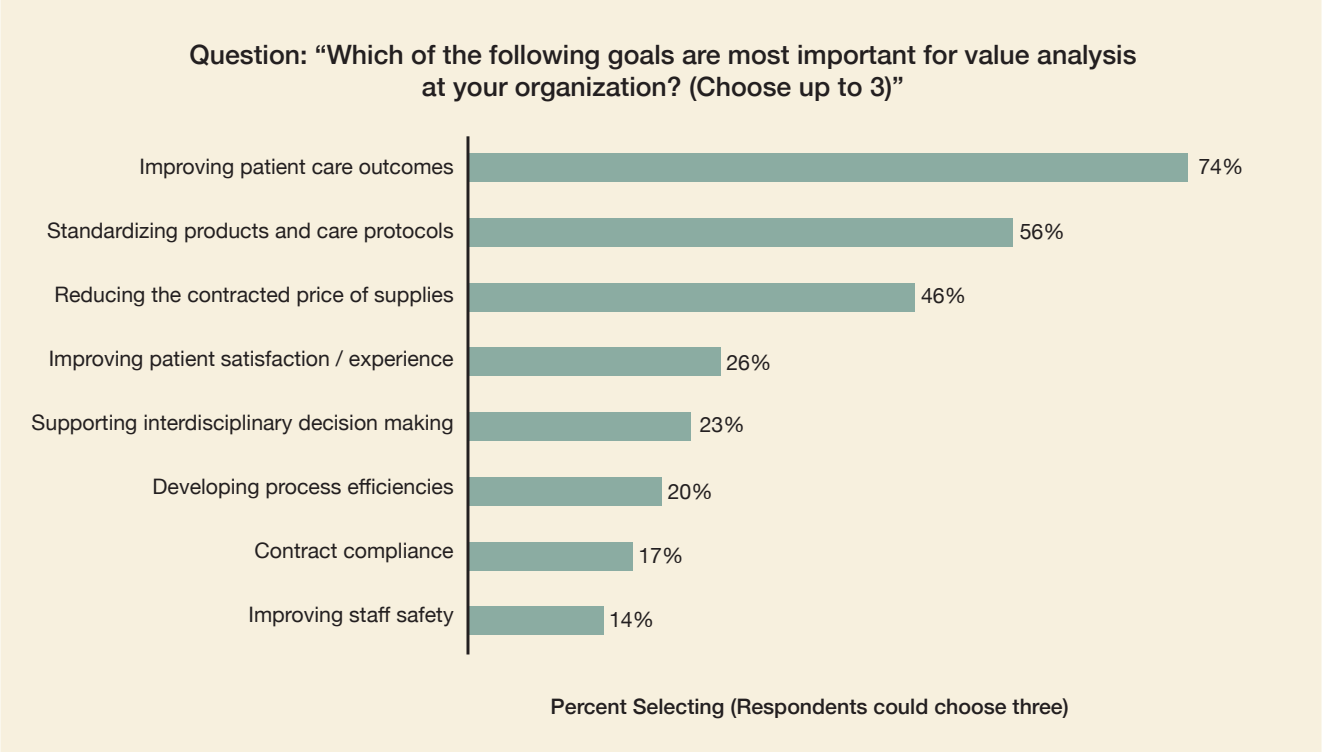


Figure 1.1, n=121

If you consider standardization as an intermediary goal, then readers familiar with healthcare trends will surely recognize the trio of end goals – "improving patient outcomes," "reducing contract price," and "improving patient satisfaction." They overlap significantly with the well-known "Triple Aim Initiative," and with the basic goals at the heart of healthcare reform.

To be sure, hospitals *are* concerned about reducing their costs. But reducing costs is not the same as demanding price reductions. The latter is but one way to achieve the former, and the findings suggest it is not the preferred or dominant approach. Indeed, more hospitals identify "standardization" as a top value analysis goal than "reducing contract price." That is to say, hospitals are more likely to try to reduce costs by limiting the range and variety of products they purchase than by merely demanding concessions on price.

This raises the question of what the basis for standardization is. The survey results in Figure 1.1 suggest that clinical considerations are more important than spend reduction. All of which reinforces the importance for suppliers of demonstrating the clinical value of their product, or else risk being "standardized" out of the account.

1.2: Value Analysis Goals by Hospital Size

"Improving patient outcomes" and "standardization" are by far the most important value analysis goals, with 88% of respondents choosing at least one as a top-three priority. Furthermore, the popularity of these goals did not vary significantly by organization size.

However, looking at the next-most-popular pair of goals – "reducing contracted price" and "improving patient satisfaction" – we see more of an effect from hospital size. In fact, amongst large hospitals "patient satisfaction" is identified more often than "reducing contract price" as a value analysis goal.

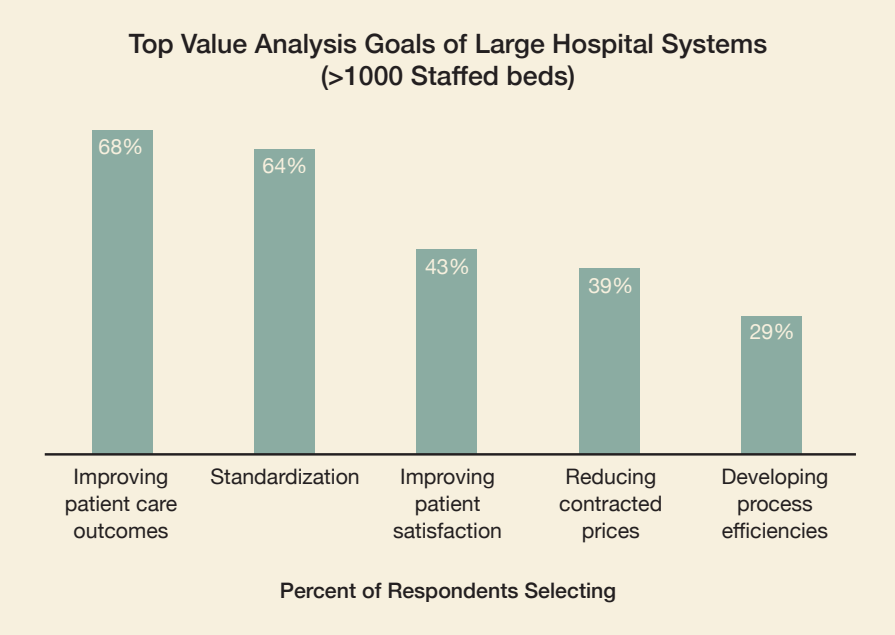


Figure 1.2, n=121

This is important if one assumes large hospitals to be further along in developing their value analysis processes than small and medium ones. Thus, as value analysis becomes more deeply entrenched in the healthcare industry it may be that patient satisfaction will become a larger factor in purchase decisions.

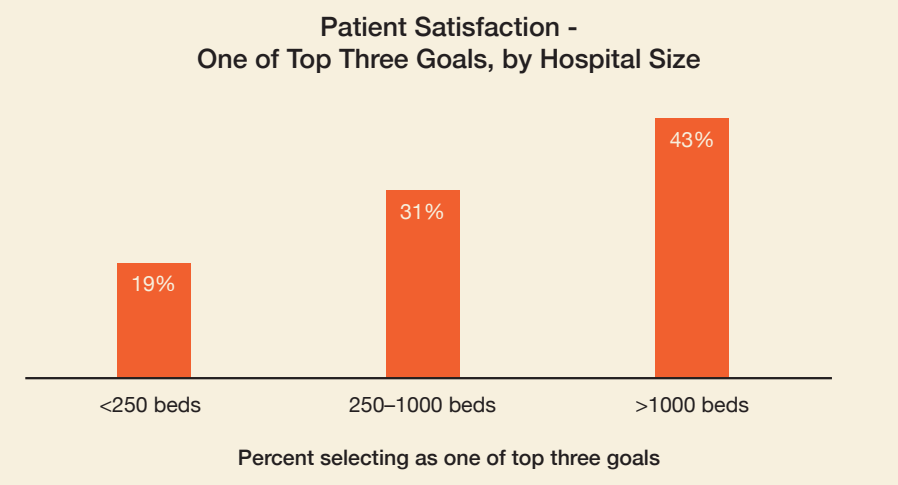


Figure 1.3, n=121

The recent evolution of pay-for-performance (P4P) programs has helped drive this trend. Since 2003, hospitals have been reporting survey data (via the Inpatient Quality Reporting mechanism) into The Centers of Medicare and Medicaid Services (CMS). Known as HCAHPS (the Hospital Consumer Assessment of Healthcare Providers and Systems), this patient satisfaction survey is required for all hospitals in the United States. For the past three years, CMS has used HCAHPS scores to reward or penalize hospitals under Value-Based Purchasing (VBP), and accountable-care-organization (ACO) programs (see section 1.6 below).

As a complement to the HCAHPS scores that get reported into CMS, hospitals have pursued their own initiatives to improve patient satisfaction. In addition, third parties such as Yelp and have collaborated to provide data such as emergency wait times. Taken together, it is clear that hospitals are focused on patient satisfaction, not because of a general desire for patients to have a positive experience, but because these measures increasingly impact a provider's bottom-line.

"Our strategy is to excel at patient satisfaction and we're willing to pay premiums in order to source from vendors who can help us improve our scores."

– Director of Clinical Quality Value Analysis, 800 bed system

1.3: The Gap Between Goals and Impacts

Turning from hospitals' goals for value analysis to the areas where they believe it is, in fact, having its greatest impact reveals an interesting discrepancy.

- Process goals – standardization, interdisciplinary decision making – move up in rank order, to first and fourth respectively.
- Outcome goals – e.g. improving care outcomes, and patient satisfaction – drop down in rank order.

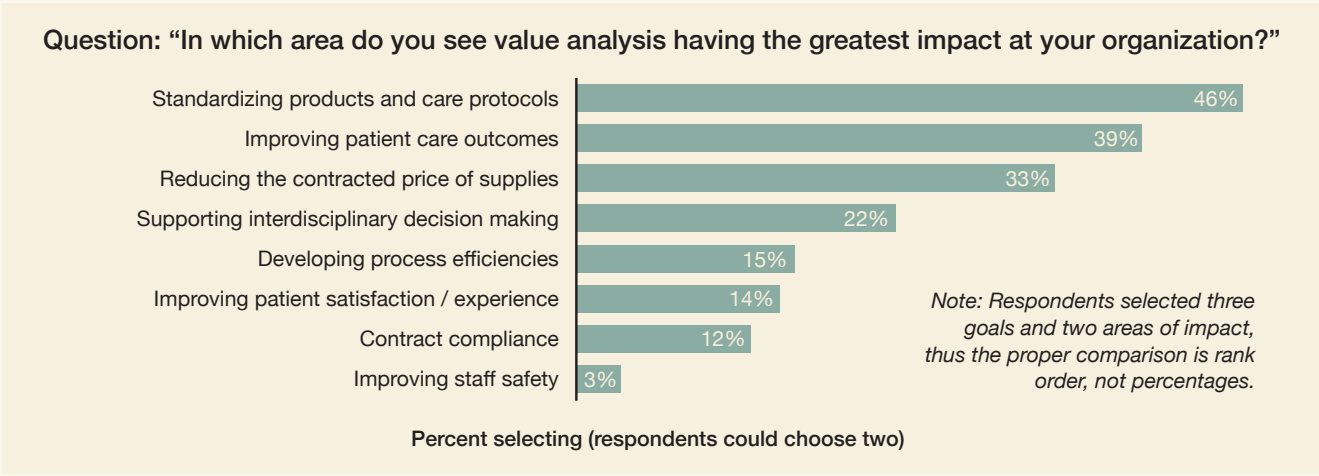


Figure 1.4, n=121

This is seen even more starkly when we look at the respondents who chose each goal among their top three, and see whether they said this was also among the top two impacts they see. Since respondents could choose three goals, but only two impacts, some drop is to be expected. However, the drop-off was greater for some benefits than others (see Figure 1.4).

- While 74% said improving care outcomes is a top-three goal, only 36% also said it was a top-two impact they are seeing from value analysis.
- While 31% said improving patient satisfaction is a top-three goal, only 9% also said it was a top-two impact they are seeing.
- And notably, while reducing prices is a top-three goal for 45%, only 26% also said it was a top-two impact being seen.

This suggests that while hospitals would *like* value analysis to have a positive impact on patient care, some are not as convinced that it *is in fact* doing so. One reason, no doubt, is that neither they nor their suppliers are effectively documenting the impact of their products on clinical outcomes.

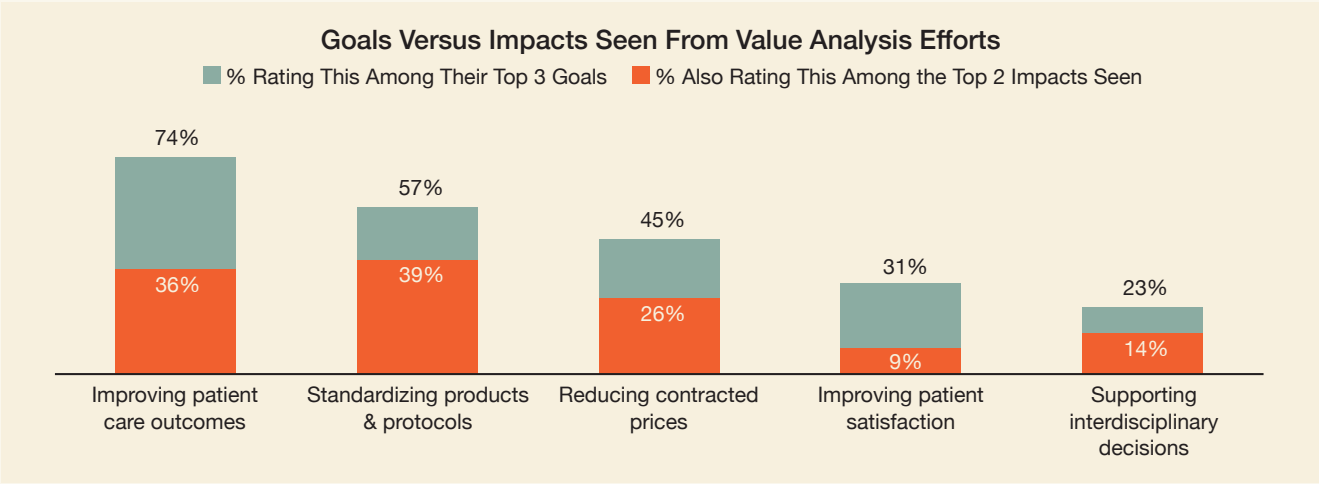


Figure 1.5, n=121

1.4: Pay-For-Performance ("P4P") Programs

As part of the Affordable Care Act (ACA) the Center for Medicare and Medicaid Innovation Center (CMMI) was charged with developing a series of programs designed to encourage healthcare providers to transition from a fee-for-service model to a healthcare delivery system that rewards providers for delivering high quality care in an efficient manner. These programs are frequently described as "Pay-for-Performance" (P4P) programs. Under these programs providers are rewarded or penalized depending upon how they perform with respect to specified quality and cost measures. It is becoming increasingly common for hospitals to evaluate vendors in terms of the impact their products will have on those performance metrics.

"[With each sourcing decision] We are looking for some sort of financial impact we can measure – impacting VBP metrics, ACO/MSSP savings, time savings, etc – we need to see something. "

– Value Analysis Director, 400 bed hospital

"Our quality department tracks all the CMS metrics (VBP, HACs, RRs, etc.) and reports them out on a dashboard and we have working groups who meet regularly on each program.

– Assistant Director Supply Chain, 8 hospital system

The survey asked respondents about five of Medicare's most important P4P programs. For reference, we provide brief descriptions of each:

Value Based Purchasing Program (VBP): a program that rewards and penalizes acute care hospitals +/- 2% of all their Medicare Part A reimbursement. More on the program can be found here: https://www.lsqin.org/wp-content/uploads/2015/11/FY2018-VBP-Fact-Sheet-11.10.pdf

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Readmission Reduction Program (RRP): a program that penalizes acute care hospitals for higher than average 30 day readmission rates for conditions such as AMI, Pneumonia, HF, COPD, TKA/THA, and CABGs. Poor performers face penalties of up to 3% of all their Medicare Part A reimbursement. More on the program can be found here: http://go.cms.gov/1gLbnoa

Hospital-Acquired Condition Reduction Program (HACRP): A program that penalizes high rates of healthcare-associated complications and infections such as CLABSIs, CAUTIs, CDI, MRSA, and SSIs. The HACRP penalizes the worst quartile of hospitals 1 percent of their Medicare Part A reimbursement. More on the program can be found here: http://bit.ly/2h7hkFh

Shared Savings Program (MSSP): This program providers healthcare organizations who have come together to form an Accountable Care Organization (ACO) with an opportunity to earn

bonuses from CMS based on their ability to efficiently deliver high quality care, More on the program can be found here: http://go.cms.gov/2w59Cy6

Bundled Payments: also known as episode-based payment or case rates, bundled payments are defined as reimbursement of providers on the basis of expected costs for clinically-defined episodes of care. They go beyond the traditional DRG reimbursement and hold providers accountable for the cost of care for up to 90 days beyond the specific procedure in question. A summary of bundled payments initiatives pursued by CMS can be found at: http://bit.ly/1le2DbC

Taken together, these programs place a minimum of 6% of a participating hospital's Medicare reimbursement at risk. For hospitals with margins in the mid-single digits, performance on these programs can be the difference between a positive and negative operating margin.

Given their importance, respondents' level of understanding of these P4P programs is below what one might expect. While almost all have some awareness of them, those saying they have detailed knowledge range from 31% to 57%.

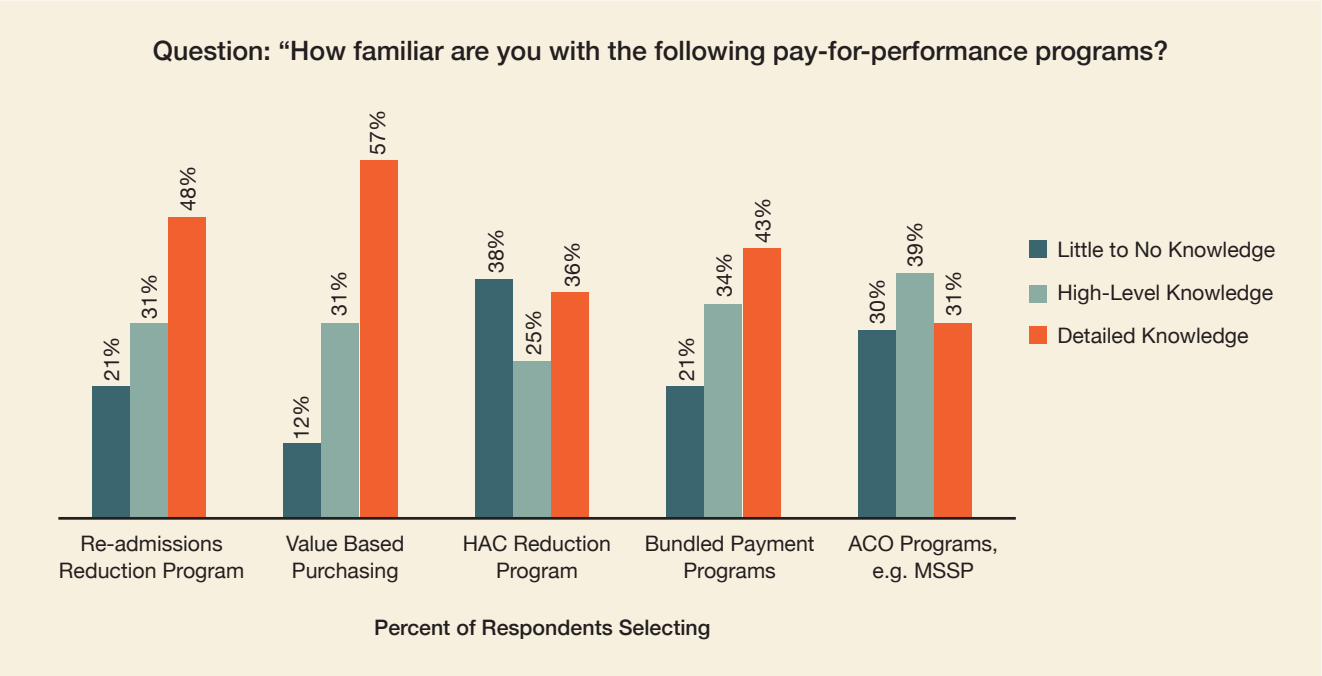

Figure 1.6, n=121

Despite lacking detailed knowledge of how these programs work, most hospital personnel do appear to grasp the importance of P4P programs. A majority deems two of the five programs (Readmissions Reduction and VBP) to be "extremely" or "very important" factors in their value analysis decisions. The other three programs are rated as extremely/very important by 45% to 50% of respondents. This is likely because these programs only affect a minority of hospitals, either due to the way penalties are assessed, or because participation is voluntary.

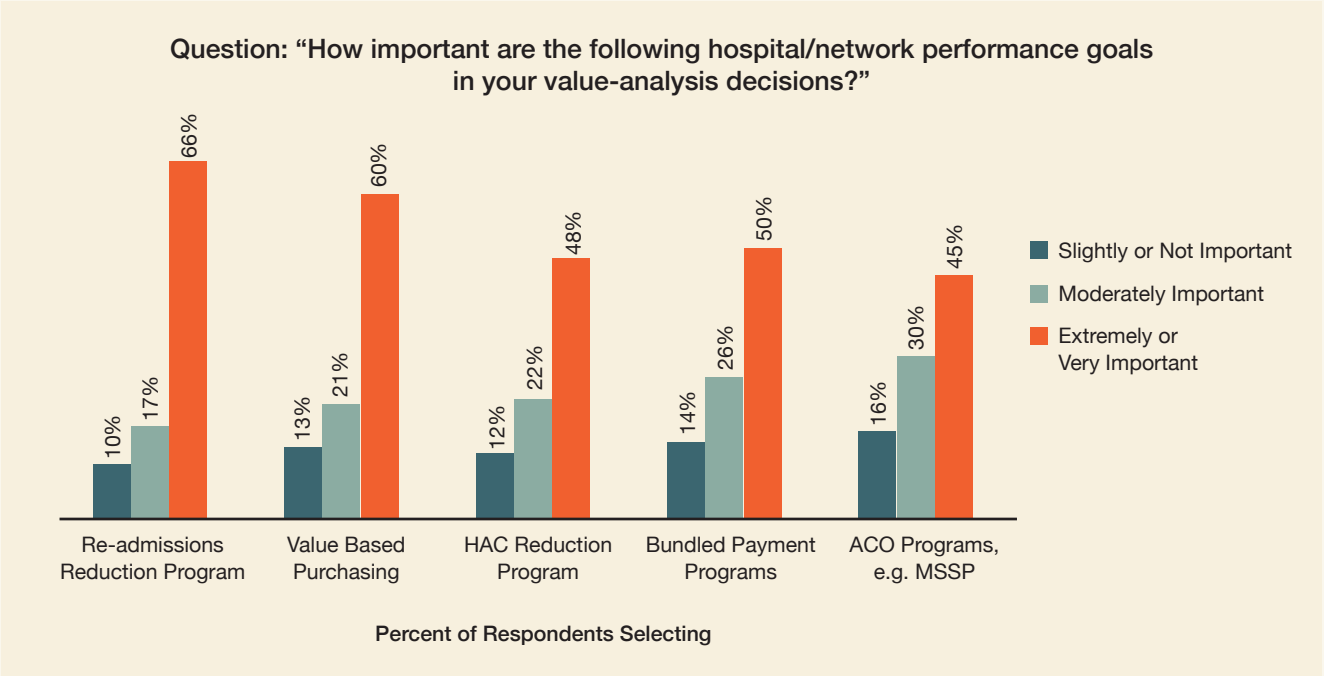

Figure 1.7, n=121

Supplier Takeaways

- Vendors must reorient the way they think about value analysis, and the manner in which they present the case for their devices, equipment, and consumables.. They should strive to translate everything they offer a provider into a clinical and financial impact.

- Hospitals want value analysis to help them improve patient care outcomes, but there is evidence that at present this is more hope than reality. There is thus an opportunity for suppliers to work with hospitals in their ongoing initiatives in this area.

- Competing merely on the basis of price remains a real, albeit undesirable possibility. The most likely context for price-based competition is when suppliers do not make an adequate clinical case for their offering. This leads to the presumption that one is as good as another (both are deemed "clinically acceptable") and the only basis for choosing is price. Failing on this front can be especially costly to suppliers, given that these decisions are often being made as part of a standardization process.

- Both hospitals and vendors find themselves on a significant learning curve when it comes to P4P programs. Vendors have an opportunity to help their customers and differentiate themselves from competitors by getting ahead of this curve.

Chapter II: Price-Focused vs. Value-Focused

As discussed in the previous chapter, product price can be an important factor in value analysis decisions, but price reduction is by no means the dominant goal driving value analysis efforts. To the contrary a significant percentage of VAC respondents (55%) do not identify reducing contract price as a top value analysis goal. Since, for reasons to be discussed in Chapter VI, that percentage is likely to increase in the future, this segment of "value focused" respondents merits further analysis, which we provide in the sections to follow.

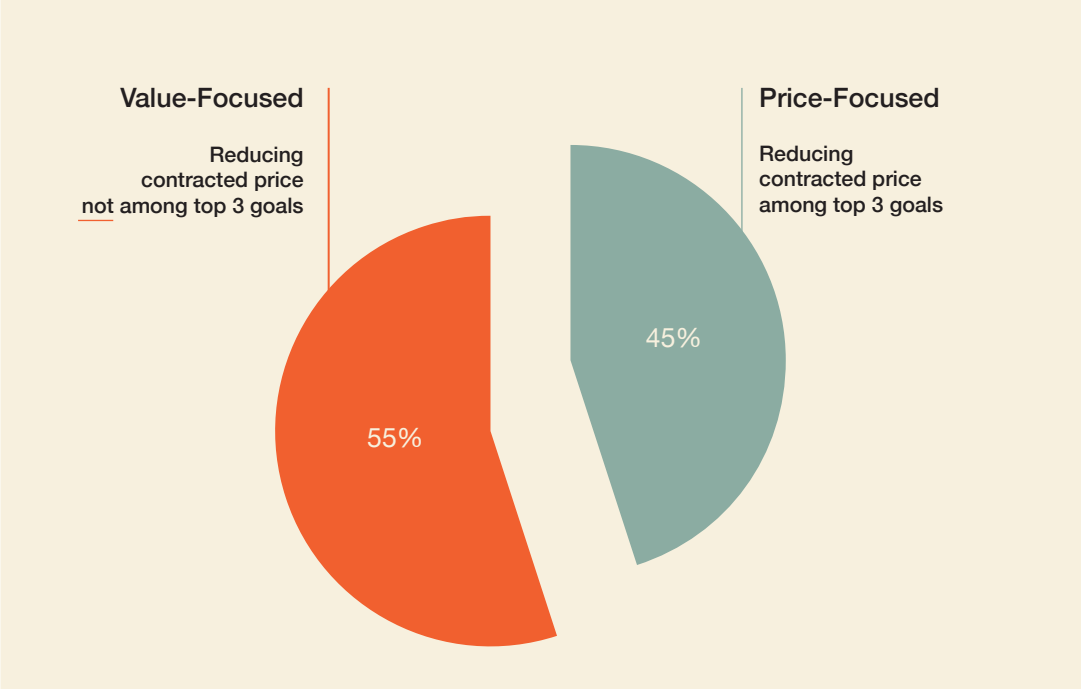

Figure 2.1, n=121

2.1: If Price Reduction Isn't The Goal, Then What Is?

One might suspect that those less interested in price reductions would be more interested in improving patient outcomes. To some extent this is true, with 79% of value-focused respondents citing this as a goal versus 67% of the price-focused group. But the larger differences can be seen in the prevalence of other goals – goals rarely seen among price-focused VACs:

- Improving patient satisfaction
- Developing process efficiencies
- Improving staff safety

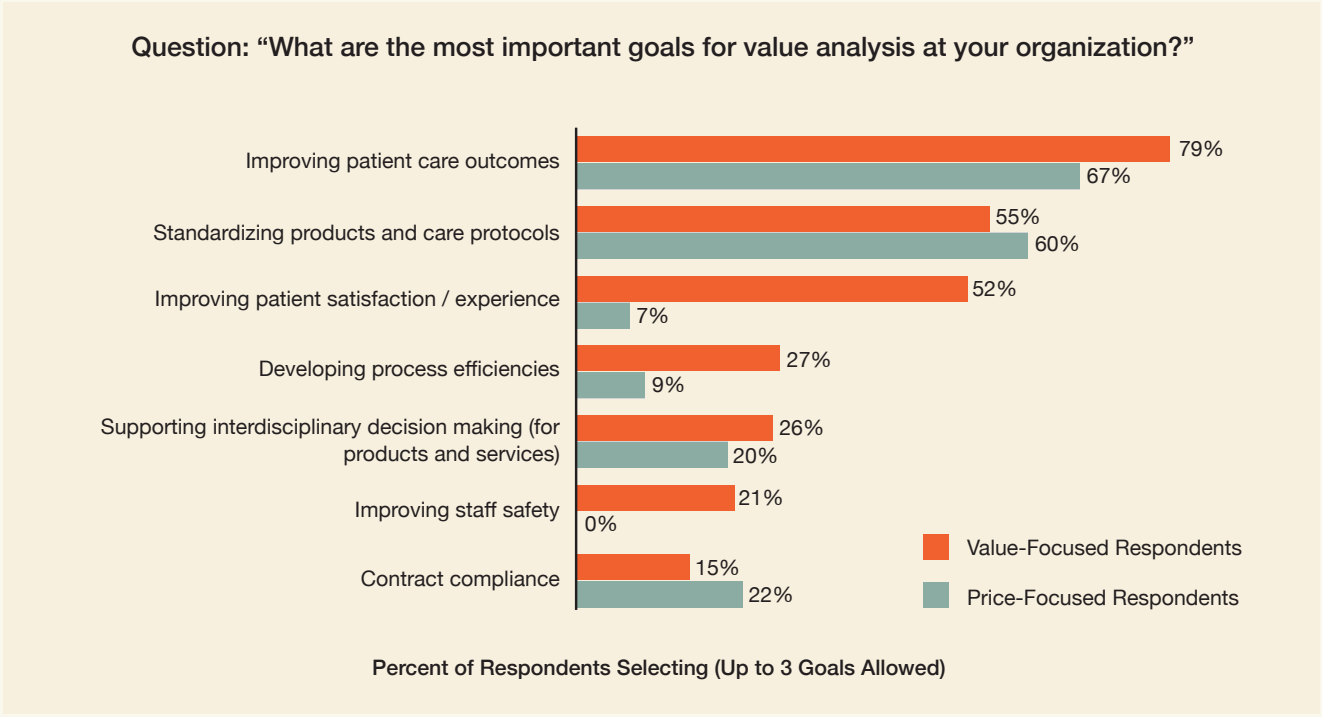

Figure 2.2, n=121

The frequency of citing "patient satisfaction" as a goal shows the largest difference. It is a top-three goal only seven percent of the time for price-focused respondents, but a whopping 52% of the time for value-focused respondents. As discussed in the previous chapter, part of the motivation for these organizations is likely P4P programs that tie bonuses and penalties to patient satisfaction scores.

Similarly lop-sided results can be seen for "developing process efficiency" and "improving staff safety" as top goals. In the latter case not a single price-focused respondent indicated that improving staff safety was a top goal for their VACs. Among value-focused respondents, 21 percent said it was among their top three goals.

It should be noted that a significant segment of hospitals appear to be cost-focused without necessarily being price-focused. One can view them as merely pursuing cost reduction by other means. In particular, process efficiencies and staff safety should, in theory, be goals that could yield substantial cost savings.

2.2: What Value-Focused Hospital Systems Look Like

What demographic traits characterize a value-focused hospital or IDN? One might expect to them to be more prevalent among for-profit than non-profit hospitals, but the survey found this is not the case. Respondents from for-profit hospital systems were actually somewhat less likely to have price reduction as a top goal, although the difference was not significant.

Comparing across different sizes of provider organization yields more interesting results (see Figure 2.3). As hospital or system size increases, fewer choose price reduction as a top goal for value analysis. The exception being the smallest hospitals, many of whom are exempted from CMS programs (e.g. critical access hospitals).

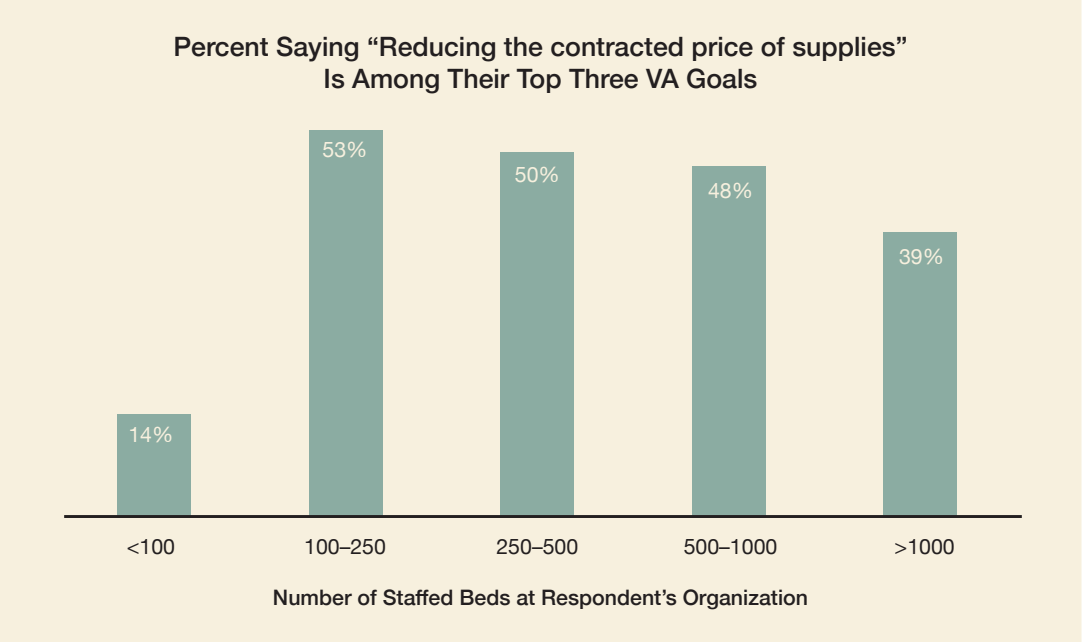

Figure 2.3, n=121

In terms of internal organization, price sensitivity is affected by which function typically chairs the VACs. At organizations where Supply Chain, Purchasing, or Finance typically play this role it is also more typical that price reduction will be a top goal. Whereas organizations that typically give their VAC chair duties to more clinically-focused personnel such as nurses, physicians, or service line executives are less likely to be price focused.

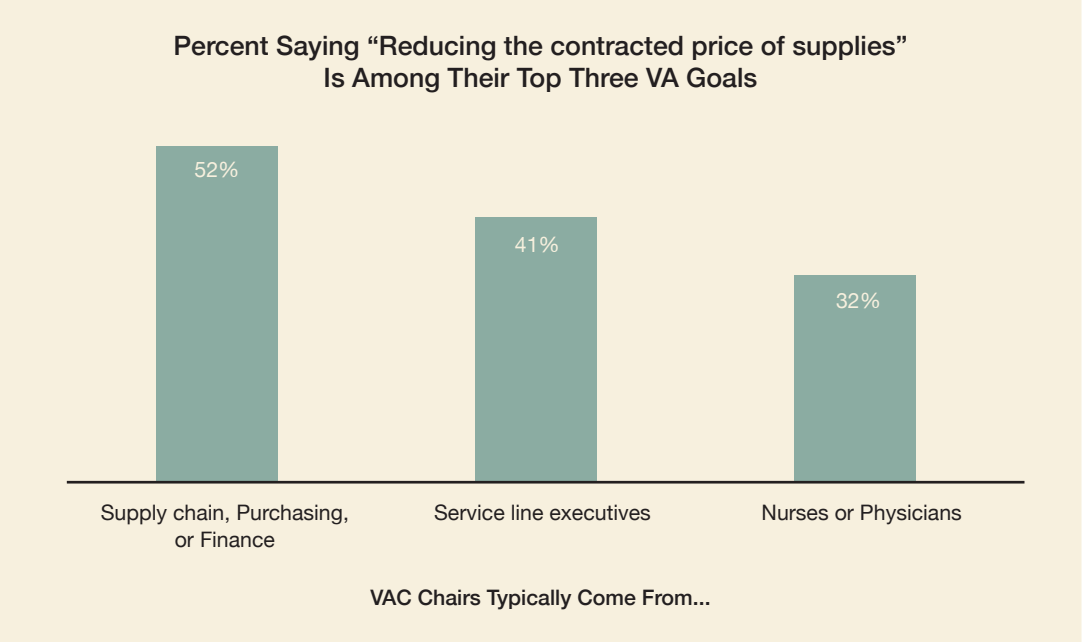

Figure 2.4, n=121

2.3: Which P4P Programs Matter?

Respondent organizations who give more weight to doing well under P4P programs are significantly less likely to pursue price reduction as a top priority. As noted above, they tend to focus more on goals such as improving patient care outcomes, staff safety, and process efficiencies.

This is especially true when looking at respondents who are focused on succeeding under ACO and bundled payment programs (for example, see Figure 2.5). It's noteworthy that Medicare's ACO and bundled payment programs, unlike their other P4P initiatives, are voluntary. These respondents, we can assume, are at hospitals that have made a conscious commitment to a future of value-based, capitated payments.

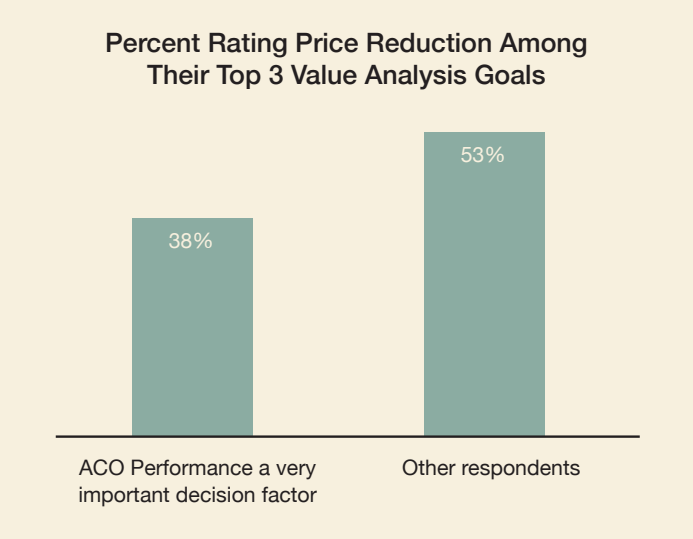

Figure 2.5, n=121

Supplier Takeaways

- When dealing with a VAC, supplier sales reps should be prepared for its members to be more focused on securing big discounts when the hospital organization has the following characteristics:
  - Small to mid-sized (fewer than 1000 total beds);
  - Not part of any ACOs, or participating in any voluntary bundled payment pilot programs;
  - VACs chaired by Supply Chain, Purchasing, or Finance.

- On the other hand, VACs tend to be more focused on other goals, such as patient satisfaction, and process efficiencies, and less focused on winning discounts, at hospitals with the following characteristics:
  - Larger hospitals and health systems (>1000 beds);
  - Showing a commitment to the ACO model and/or bundled payment pilot programs;
  - VACs chaired by service line directors, nursing, or physicians.

- Suppliers whose products are able to lower total costs to the healthcare system (payers as well as providers) should consider targeting hospitals that are committed to the ACO model, and/or bundled payment models. These suppliers should develop a clear understanding of how their clinical impacts (e.g. shorter length of stay) translate into reduced costs. They should also ensure that their clinical champions understand this impact and can clearly and persuasively communicate it to their VAC peers.

- With price-focused hospitals, vendors should re-double their efforts to educate stakeholders and influencers about how improved quality, patient outcomes, and patient satisfaction impact reimbursement. In other words, chasing low price may yield short-term savings for these hospitals, but there are very real longer-term risks to revenue, and ultimately to financial stability.

Chapter III: Value Analysis – Inside the "Black Box"

3.1: Value Analysis Triggers

Having examined the goals driving value analysis efforts, we now look into the workings of those efforts, at the organizational structures and processes involved.

To begin with we look at the precipitating events that typically trigger a value analysis review. Interviews revealed that typically all requests for new products go through value analysis. Therefor we were more interested in other common trigger events. Interviewees mentioned a range of triggers, some emanating from the front lines (e.g. staff requests), and others from above (e.g. strategic initiatives). Survey results (Figure 3.1) show three that stand out in importance:

1. The desire standardize a product or process;
2. A request from clinical staff;
3. Driven by an internal quality initiative.

These findings fit neatly with those of the previous chapter: Again, we see the paramount importance of standardization as a means to both clinical and financial improvements. And again we see a stronger strategic focus on the former than the latter. Whereas nearly half of respondents (46%) cited internal quality initiatives as a common trigger for VA evaluations, only 20% cited cost benchmarking.

On Who Selects Product Categories to Evaluate

"[We] involve physicians and end users in the beginning of the process to assist with identifying products for standardization or conversion."

– Supply chain manager, academic medical center

[We hold] quarterly meetings with Physician Group, Supply Chain, and C-Suite, in an effort to discuss cost reduction opportunities."

– Supply chain manager, small rural hospital

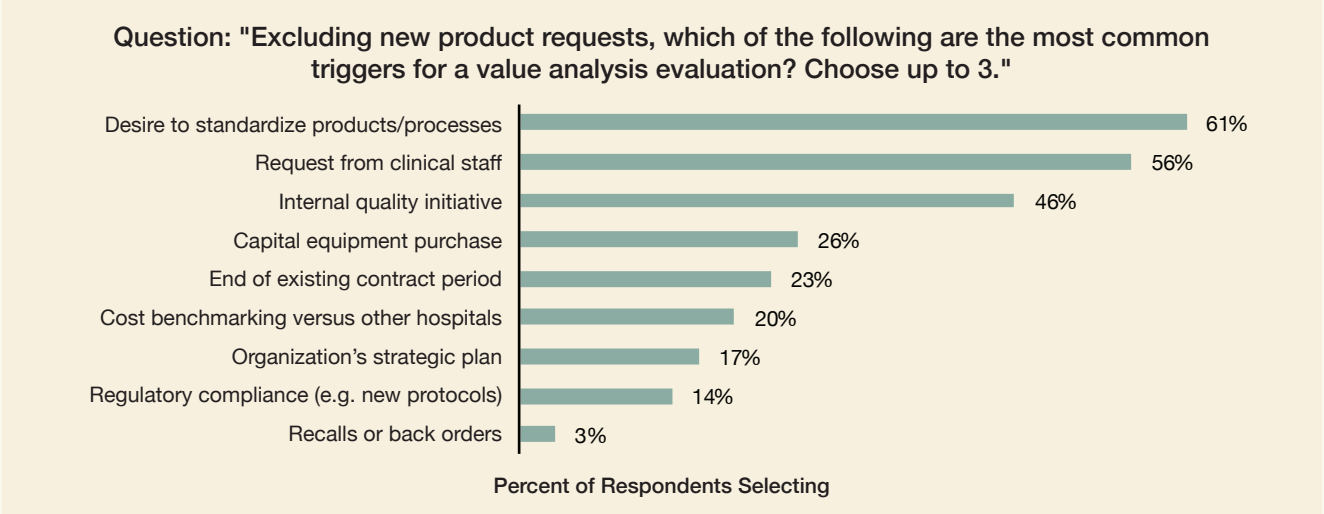

Figure 3.1, n=121

3.2: Organizing Value Analysis

The survey found wide variation in how hospitals organize their value analysis efforts, both in terms of how they structure their committees, as well as the functions (e.g., supply chain, finance, infection control, etc.) represented on each committee. This reflects that fact that value analysis as a discipline is still evolving and developing at a rapid pace.

Based on initial interviews, we identified three basic structures for organizing value analysis efforts:

1. One single centralized VAC
2. Multiple independent VACs
3. Multiple VACs that roll up to a Steering Committee

In the third structure, steering committee members are typically drawn from the ranks of senior executives, including the Chief Financial Officer, Chief Medical Officer and sometimes the CEO.

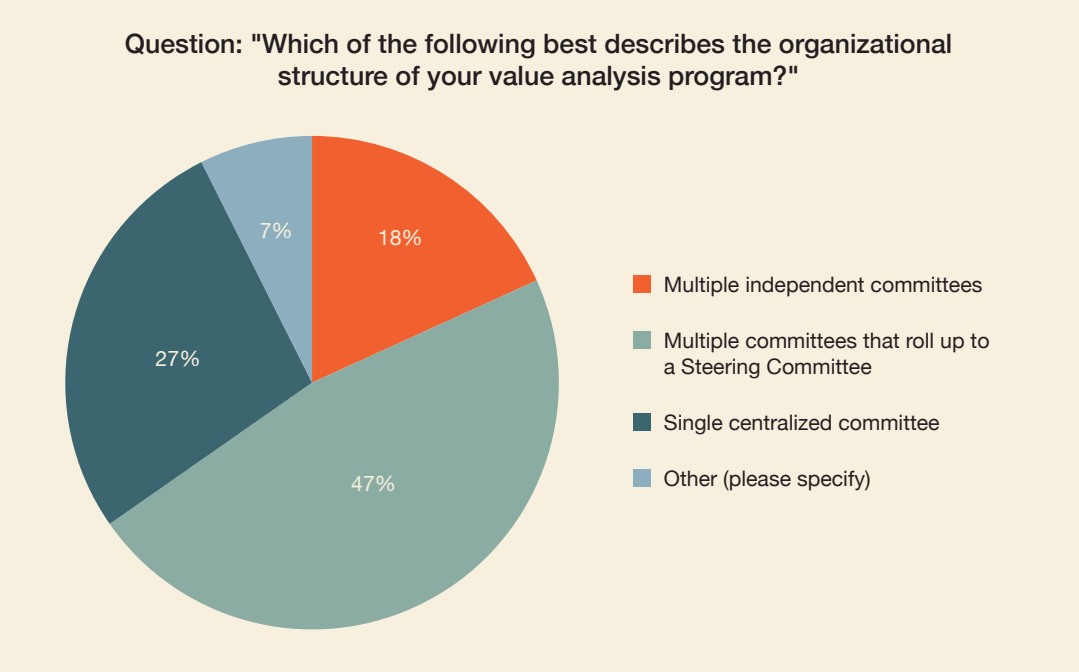

Figure 3.2, n=121

Survey respondents were asked to classify their VA organization as one of the above three approaches, or choose an "Other" category. A plurality of respondents (47%) reported having multiple VACs rolling up to a steering committee. But a roughly equal number (45%) have chosen to organize their VACs differently, either as a "single centralized committee" or as "multiple independent committees." Thus, we can say that while at present no VAC structure has been settled on as the industry standard, if an organization is large enough to have multiple VACs then the dominant approach is to establish a steering committee to oversee them.

This finding is confirmed when we examine the findings by size of hospital.

- 54% of small hospitals (<250 beds) report having "single centralized committees"
- 51% of mid-sized providers (250 to 1000 beds) report having multiple VACs and a steering committee.
- 61% of large providers (>1000 beds) report multiple VACs and a steering committee.

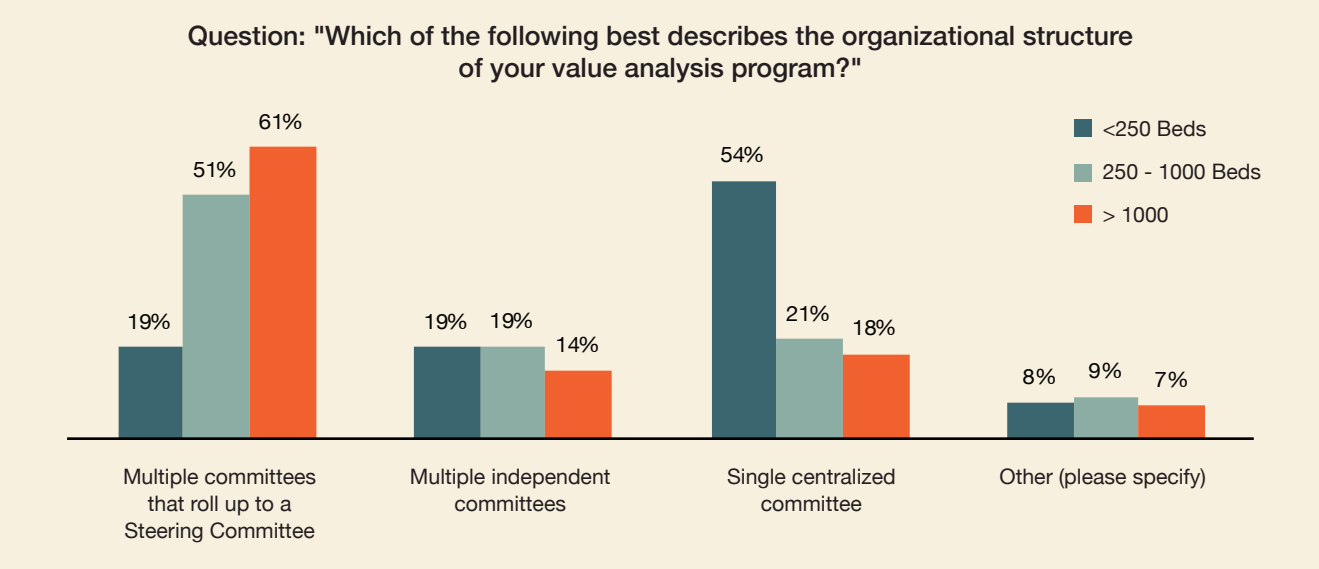

Figure 3.3, n=121

It makes sense, of course, that the larger the hospital, the more difficult it becomes to handle all of the value analyses through a single committee. Yet, as we will see in our discussion of challenges facing VACs, larger hospitals report better results at meeting these challenges. This makes it reasonable to suspect that steering committees may provide other advantages as well.

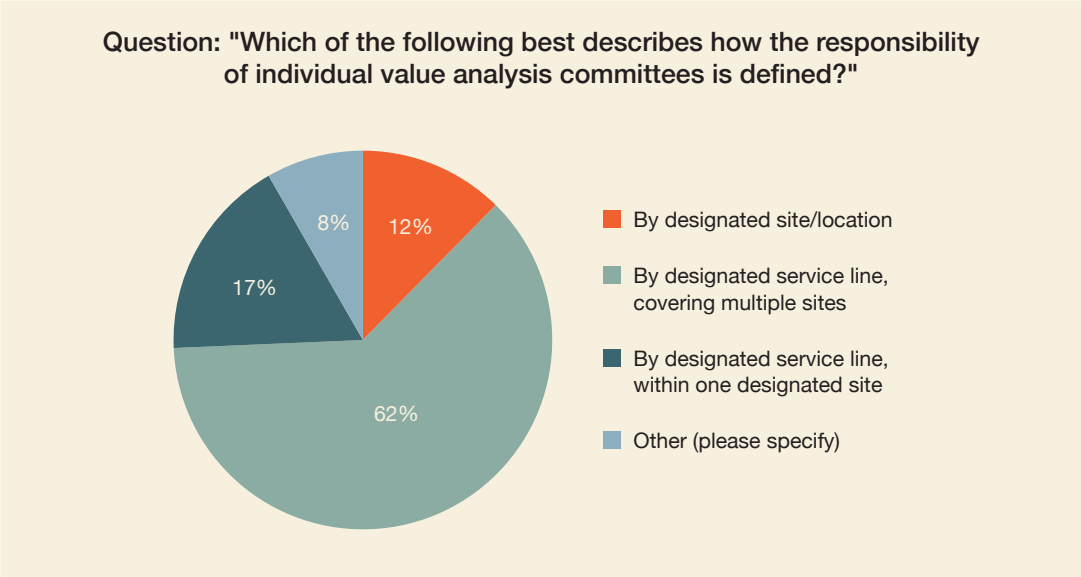

Figure 3.4, n=121

Given that most organizations have multiple VACs, the next question is how each committee's area of responsibility is defined. The survey found that VACs tend to be organized around hospital service lines (80% of respondents) as opposed to by site. As shown in Figure 3.5, value analysis professionals typically play a supporting role across all VACs.

In addition, there is a strong desire to centralize, with 62% of respondents indicating they organize by service lines across multiple sites. That is to say a given VAC (e.g. for patient care products) will make purchase decisions that affect all or most sites across the organization. Thus, function trumps location as the locus of value-analysis decision making.

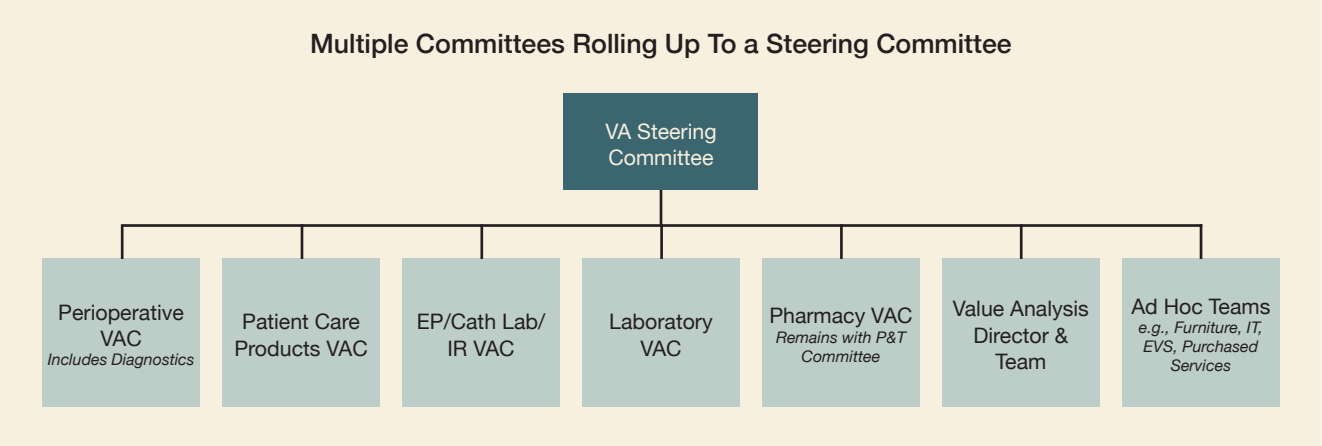

Figure 3.5

3.3: VAC Decision Making Authority

The next key issue hospitals face in organizing their value analysis efforts is how much autonomy to grant the individual VACs, and how much control to keep at the steering-committee level.

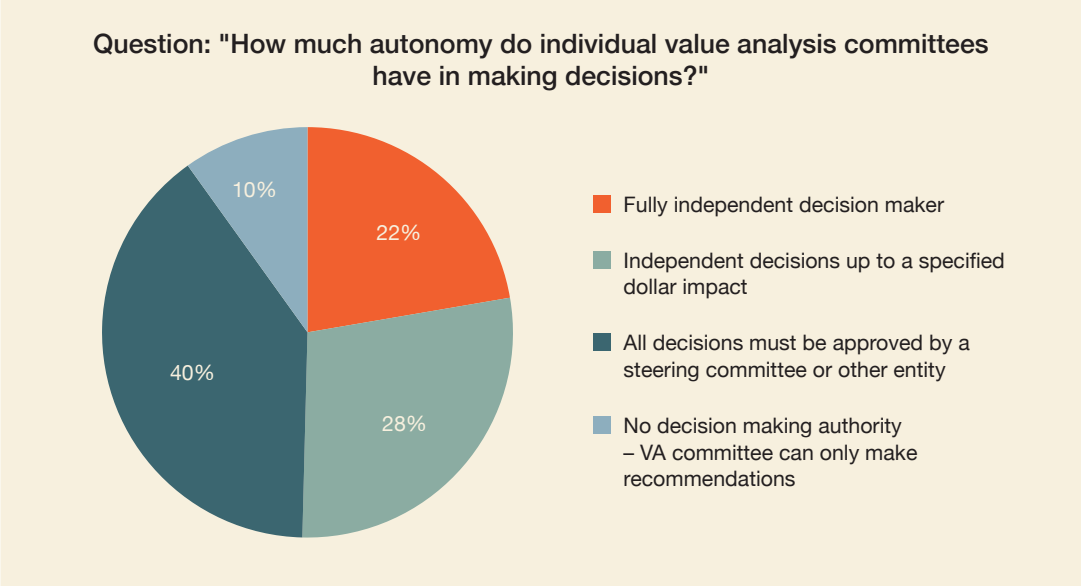

Figure 3.6, n=121

Almost all hospitals grant their VACs significant decision making authority, with some caveats. At 40% of hospitals all VAC decisions must be approved by a central steering committee or other entity. Though in principle these steering committees have ultimate decision authority, interviews suggest that in practice they tend to defer to the VACs reporting to them.

Small hospitals are more likely than medium and large hospitals to require that all decisions be approved by a central committee. In addition, they are rather unlikely to allow VACs independent decision making authority, even for smaller expenses. In other words, small hospitals tend to have more centralized decision making. Medium to larger hospitals are more flexible in this regard. Given their size, larger hospitals are forced to opt for a mix of dispersed authority and centralization.

In conclusion, then, even though it is likely that the standard organizational structure will become multiple VACs reporting to a steering committee, the heart of the decision making process will likely remain within at the lower level, with the more domain-specific VACs themselves.

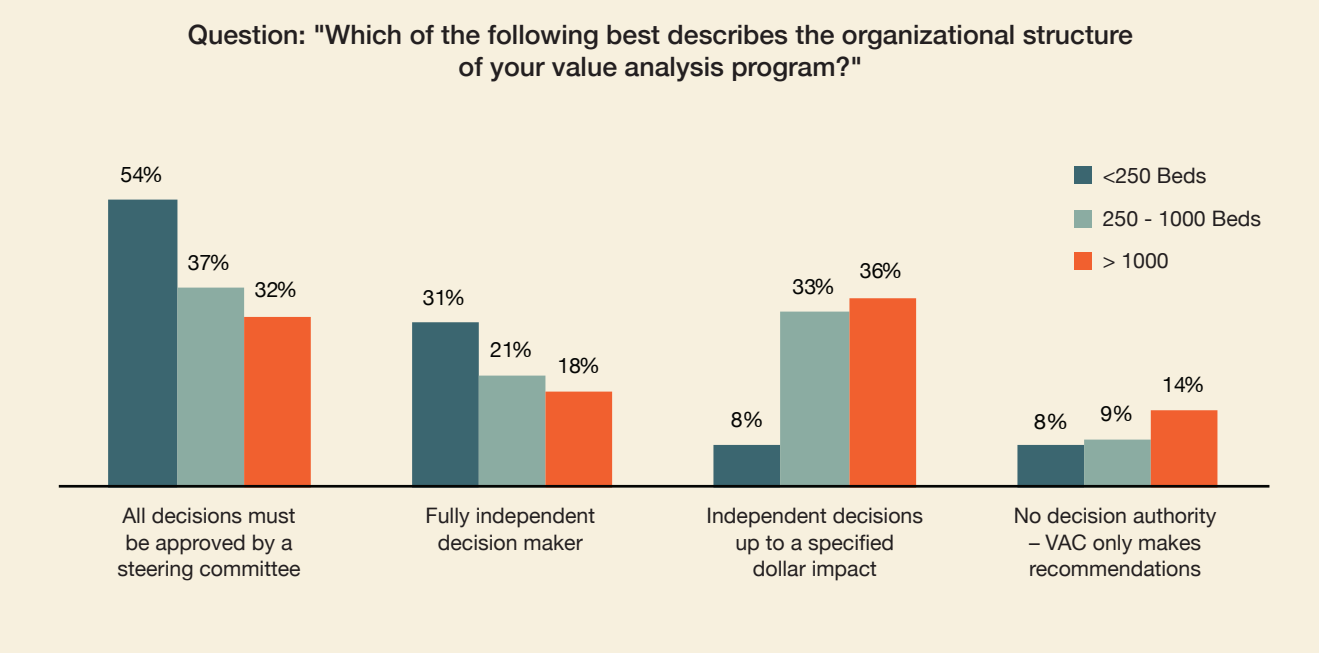

Figure 3.7, n=121

3.5: VAC Leadership

Individual VACs tend to be large groups. It is not uncommon for 12-24 individuals to sit on a single committee. The roles they represent vary considerably depending on the hospital, the service line, and often times even depending on the specific product under evaluation. Figure 3.8 illustrates some typical roles involved in a service-line VAC.

Given that VACs often have leeway to decide what product categories to review, whom to involve, and how to make decisions, committee chairs tend to play an important role. As Figure 3.9 shows, VAC chairs come from a diverse array of functional areas.

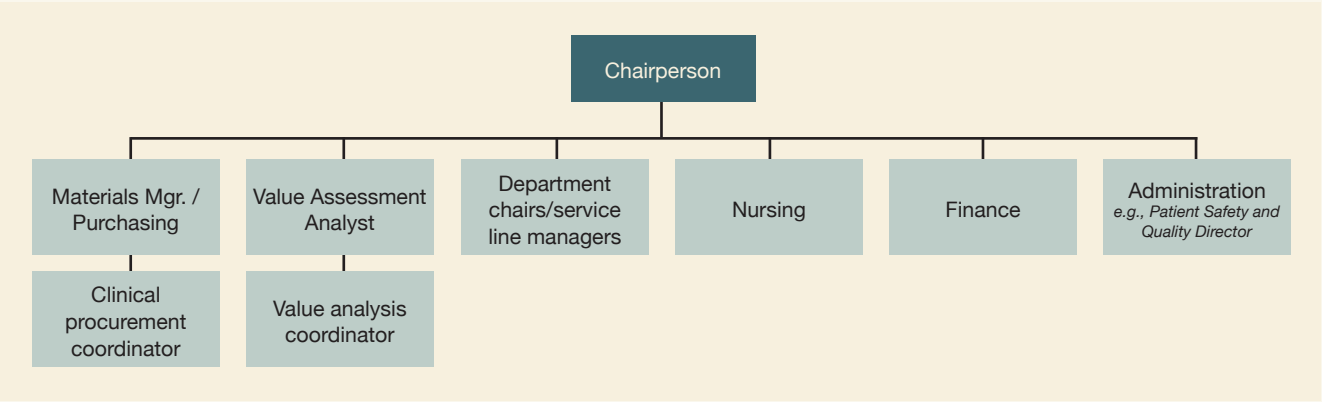

Figure 3.8

- At a plurality of hospitals (39%) VAC chairs typically come from supply chain or purchasing. But close to two-thirds (61%) usually have chairs from other functional areas.
- Looking at hospitals by size, we see more diversity across the mid-size and larger hospitals and IDNs.
- At smaller hospitals supply chain usually plays the chair role (58% of the time).

A significant number of respondents provided an "Other" response to the question of who typically chairs their VACs. Their responses often described "co-chair" arrangements involving a partnership between a physician and the head of nursing, or a physician and service line director, or even physicians and supply chain. These co-chairs, or dyads, represent 20% of all respondents.

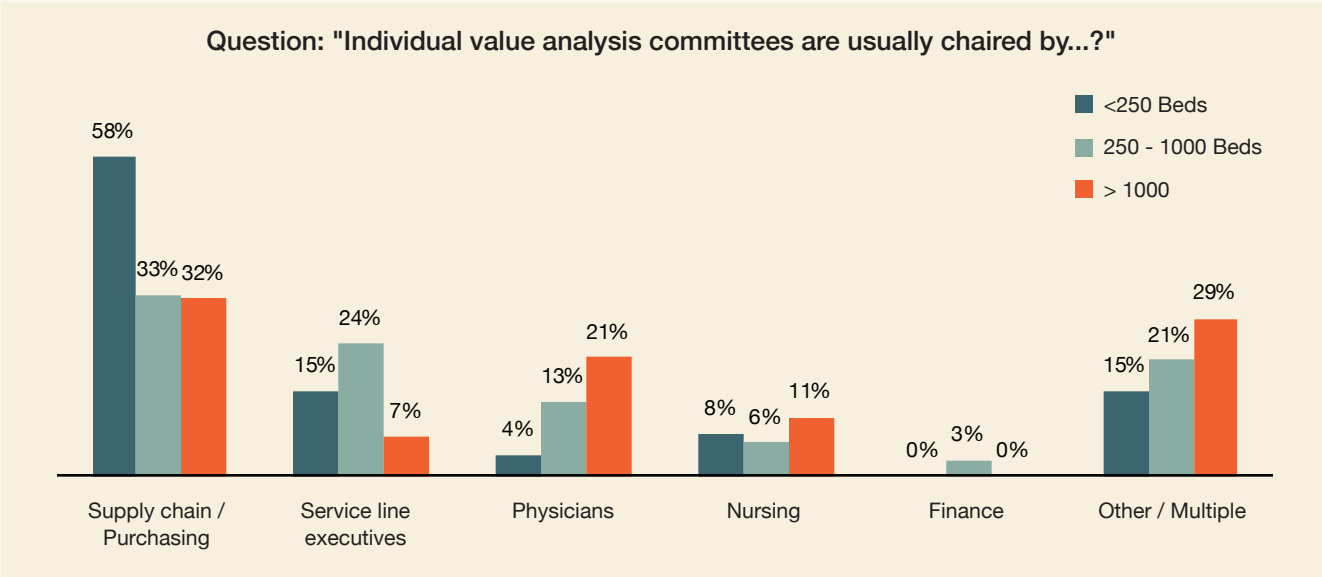

Figure 3.9, n=121

It is striking that few hospitals have physicians chairing their VACs. This is an acknowledgment that physician relationships with suppliers could stand in the way of goals such as standardization and price reduction. On the other hand, it's not surprising that respondents say getting physician buy-in is a major challenge. Or that this challenge is felt the most at smaller hospitals.

All of this reflects two points, one about the present state of value analysis in the hospital industry, the other about the nature of VACs themselves.

First, as an industry, hospitals have not settled on the type of organization that is best suited to value analysis. This is evident in the previous sections with regard to VAC structure and is even more evident here in the area of VAC leadership.

This no doubt derives at least in part from a second, related point: VACs are new and unique bodies. By nature they do not fit comfortably with traditional hospital roles and responsibilities. Though VACs are often thought of as making decisions on a purely financial basis, the reality is quite different. As the findings of the previous sections and this one show, they have the delicate task of balancing clinical and financial considerations — considerations that in many cases cannot be disentangled.

3.6: How Long Does Value Analysis Take?

Value analysis professionals interviewed for the study noted a shared desire among VAC members and end-users alike to shorten the time required to complete a given value analysis.

The unpredictable nature of the process duration can be seen in Figure 3.10. Even within a given category, such as laboratory products, survey respondents' estimates of the time required for a VA analysis varied widely. Put differently, it would not be unusual for a value analysis of the same product to take six months at one hospital and less than one month at another.

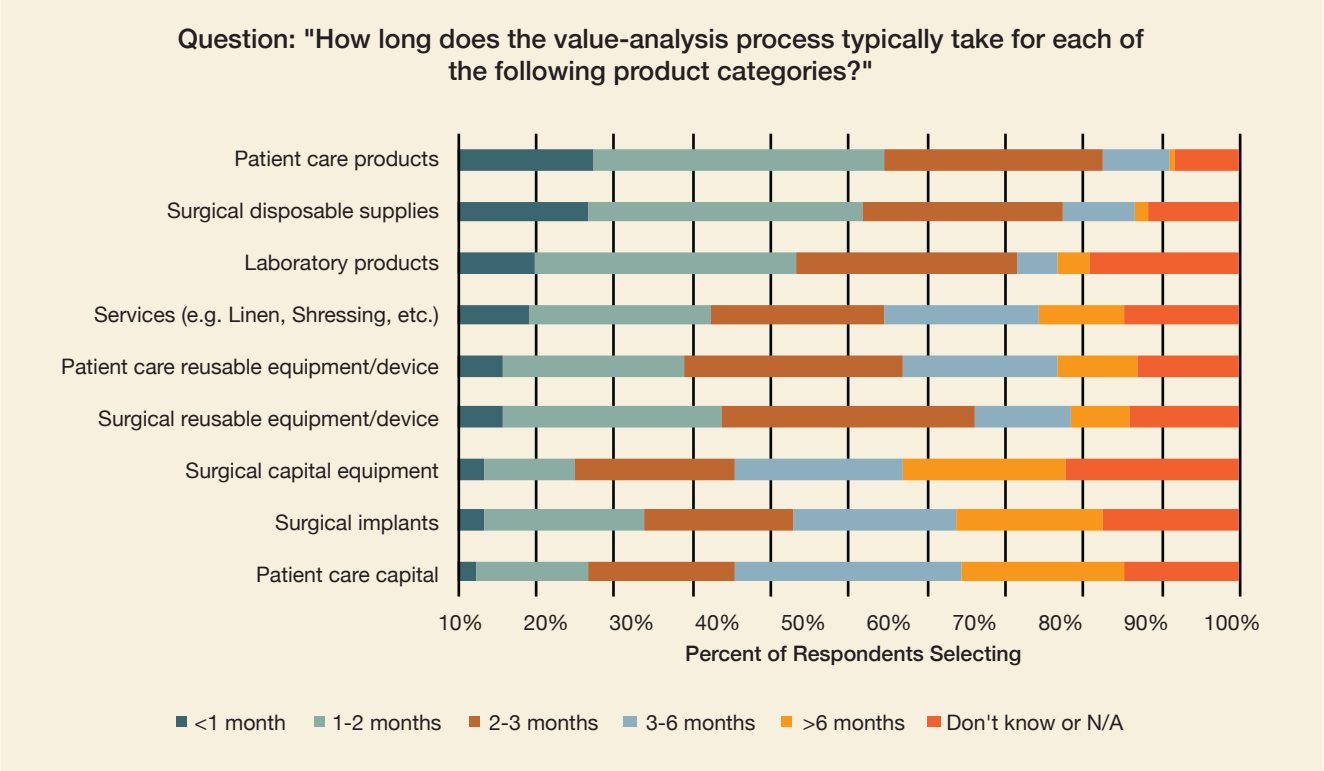

Figure 3.10, n=121

In spite of this variation, it is possible to make the following generalizations:

- Evaluations of smaller-ticket-price items typically take 1-to-3 months. This includes patient care and surgical disposables (e.g. gloves, dressings, etc.) and re-useable devices (e.g. trocars, instruments, SCD pumps, etc.).

- Decisions on capital equipment (e.g., surgical tables, ventilators) and surgical implants vary even more in duration. Roughly as many said they take less than two months as said they typically last more than six months.

Several major challenges, to be discussed more in Chapter Four, contribute to this variability in the time required for evaluations. These challenges include:

- Gathering relevant data from a wide variety of internal sources, such as data on patient outcomes, current product usage, reimbursement, etc.

- Getting input and buy-in from busy clinicians, especially physicians in the relevant areas.

- Deciding on appropriate decision criteria;

- Conducting trials. These can range from simple table-top evaluations in a conference room to usage trials in a clinical setting. The latter can last many months and pose a range of challenges in their own right.

3.7: How VACs Keep Score

Hospitals have not coalesced around a single methodology for rating and comparing competing products. In fact, many have not even achieved much internal consistency in their VA work. The survey found that a plurality of hospitals develop a one-off scorecard for each analysis. Thus there is significant variation within the variation!

The inability to develop a consistent scorecard for every evaluation is a function of the broad spectrum of products and services a single committee must evaluate, as well as the nature of the products themselves. Implantable cardioverter devices, environmental waste, diagnostic imaging equipment, and disposable patient care products will have very different clinical and financial impacts and will therefore require different sets of metrics.

Nonetheless, more than half of respondents have managed to standardize their approach to some extent:

- 27% have a standard scorecard for use across all evaluations.

- An equal portion has developed different scorecards for different product categories.

Example of a standard scorecard used for all evaluations at an 850-bed academic medical center.

Scorecard metrics

- ☐ Quality of clinical evidence
- ☐ Clinical benefits: LOS, HAI, invasiveness, patient safety
- ☐ Physician opinion
- ☐ Staff safety: "sharp" safety, lifting injuries, ease of practice
- ☐ Sustainability
- ☐ Supply chain: increasing standardization; reducing inventory, consignment;
- ☐ Overall financial impact

Interviews with respondents indicated that even when a standardized scorecard is in use, they often modify or supplement it with more customized criteria for specific product evaluations.

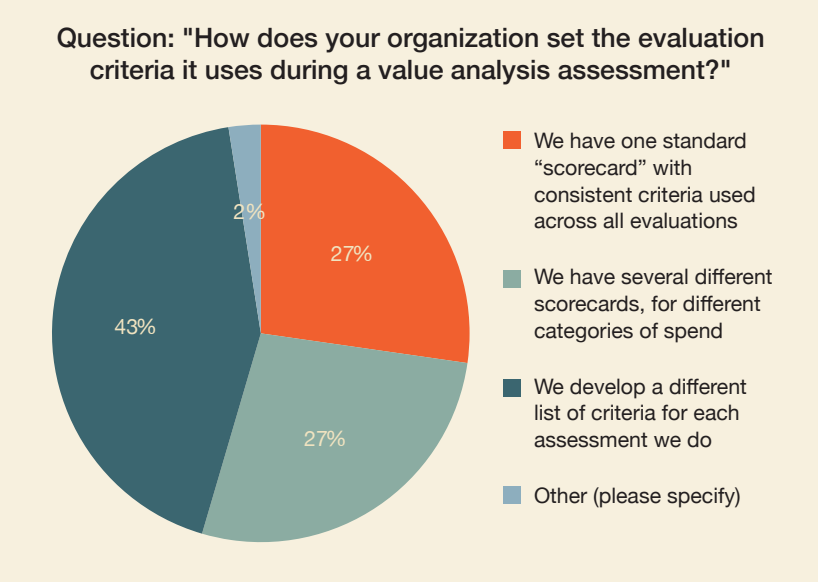

Figure 3.11, n=121

Supplier Takeaways

- Hospitals approach value analysis in decidedly different ways. Make sure you ask your internal champion to explain the process, how the committee is organized, and the role (if any) of the executive steering committee.

- Value analysis decision-making takes time, often longer than anyone would like. Ask your internal champion what the committee would need to see to speed up their decision-making process. For example, speaking to similar accounts, tightening the business case, or even offering a performance guarantee may help give committee members the assurance they need in order to say "yes."

- Make sure you understand any standard metrics to be used in the evaluation, as well as what customized scorecards or questionnaires are being developed for the analysis. Translate how your products or services map to the scorecard metrics.

- When a VAC is developing a custom evaluation tool for use on your product category, offer to provide help. Knowledgeable suppliers are well positioned to offer expert guidance on criteria to include, or even a model scorecard or questionnaire for the VAC to work from.

VAC Survey Findings

Chapter Four: Challenges

When implementing a value analysis program hospitals and IDNs face an array of challenges. Some of the most commonly cited are "people" issues related to culture change, buy-in and effective communication. Others relate more to working with clinical, operational and financial data – the nuts and bolts of value analysis work. This chapter will draw on survey findings to look at these two groups of issues in turn.

As previously noted, value analysis can be seen as a struggle to synthesize clinical and financial objectives. Though in principle these objectives are complementary to one another, there is undoubtedly a prima facie tension between them. This is amply demonstrated by survey responses when participants were asked to evaluate the significance of various value-analysis challenges. Two stand out as most frequently getting higher significance ratings (3 or higher on a 5-point scale, see figure 4.1):

- Getting physician buy-in
- Balancing clinical and spend reduction goals

While these two challenges are obviously related in some respects, they are not as correlated as one might suspect. And each one will likely require different approaches on the part of VACs and hospital administrators. We discuss these different dynamics in the following sections.

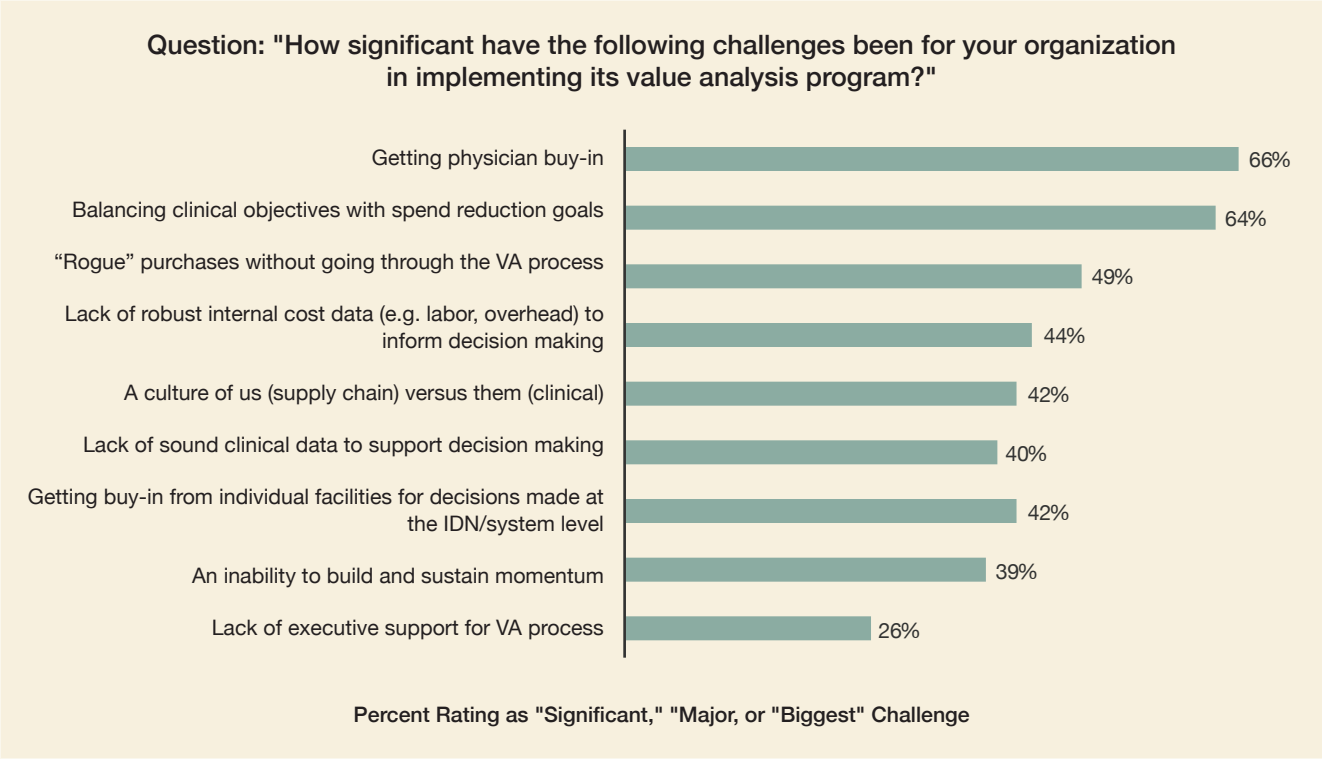

Figure 4.1, n=121

4.1: Physician Buy-In

Survey participants were asked several follow-up questions regarding physician buy-in. First they were asked to rate their organization's success on this front. Only about a third of respondents reported "good success" at getting physician buy-in on value analysis decisions.

Figure 4.2, n=121

When we look at response by size some interesting differences come into view. As we move up the size-segment ladder, larger hospital systems report greater success at getting physician buy-in. Large hospital systems are nearly twice as likely to report "good" or "very good" success, compared to small hospitals. This success may be driven by a number of factors previously discussed that correlate with size of organization.

- Larger hospital systems are more likely to have clinicians as Chairs or Co-Chairs of their VACs.
- Larger systems are also more likely to have a Steering Committee, and therefore more executive support for value analysis efforts.
- Large systems are also more likely to participate (or plan to participate) in ACO arrangements. These represent an increasingly important form of gain-sharing agreements with physicians.

What specific factors have made physician buy-in a challenge at your organization?

"Whether they are employed or not."

– Supply chain professional, small suburban hospital

"Community physicians and a lack of global perspective on the impact of their individual request."

– Value analysis professional, mid-sized hospital

"The culture here has always been to allow physicians to dictate what we buy. Now that we are trying to change that they are resistant to it."

– Value analysis professional, small urban hospital

Besides organization size, another factor to consider is physician employment. The analysis also looked at whether physician buy-in increases when the majority of physicians are on staff. That is to say, does an employment relationship give hospitals more control over the doctors, making it easier to secure their buy-in on standardization and value-driven efforts?

Surprisingly, the survey data did not support this thesis. The percentage of respondents reporting "good" or "very good" success with buy-in was roughly the same at organizations with a majority of physicians employed versus a majority from outside (38% versus 41%). Those with a roughly even mix of employed and outside physicians reported the lowest level of success (26%).

While those respondents who report low success with physician buy-in frequently blamed outside physicians in particular, the above finding suggests that the problem is more complex. The issue is not simply the lack of an employment relationship. It is likely more related to the other factors mentioned above, such as executive support and financial alignment.

What specific steps or factors have helped in getting physician buy-in?

"Including physicians on the front end, providing data, trialing products."

– Value analysis professional, mid-sized rural hospital

"Approaching them as to how it affects patient care, outcomes, and the fiscal impact it has on the hospital."

– Supply chain professional, large urban hospital

"Educating them about relationships between clinical outcomes and the impact on reimbursement, in particular around the ACO and bundled payment models."

– Value analysis professional, mid-sized urban hospital

"They are held accountable by the CMO for cost savings, standardization and patient outcomes."

– C-level administrator, mid-sized urban hospital

In summary, larger hospitals seem to have progressed further in addressing the "people" issues that affect the value-analysis process as a whole. Their progress shows that though physician buy-in remains a challenge (even at many large hospitals) it is one that can be successfully overcome.

4.2: The Tension Between Clinical and Financial Objectives

However, success with physician buy-in does not necessarily surmount the fundamental tension inherent in doing value analysis. Getting physicians bought into the process does not make the task VACs face – bringing clinical and financial objectives into some sort of harmony – any easier. This is evident when looking at those survey respondents who indicated that "Balancing clinical objectives with spend reduction goals" was a significant challenge. They were just as likely to report good success at getting physician buy-in as the other respondents (34% vs 35%). Furthermore, respondents from larger hospitals and systems, who as a group reported better success at getting physician buy-in, were actually more likely to see balancing clinical and financial goals as a significant challenge (see figure 4.3).

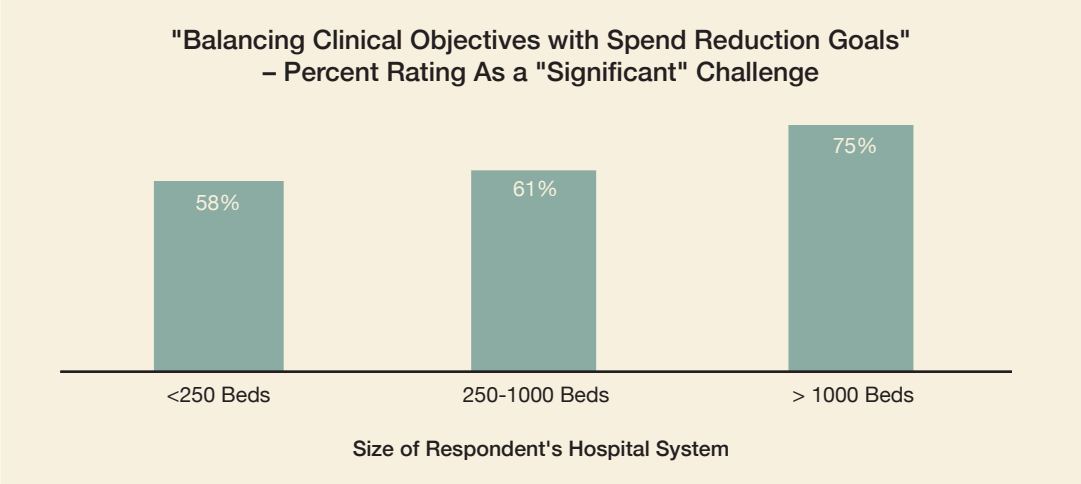

Figure 4.3, n=121

There seems little reason to expect this challenge to respond to steps such as changing VAC leadership, or even aligning financial incentives. What seems more likely to help is a data-driven decision process, fed by reliable data that VAC members can buy into. Of course, developing such a capability is a challenge in and of itself, as we discuss below.

4.3: Making Value Analysis Data-Driven

A truly data-driven process is seen by many VAC members as something of a "Holy Grail." They see it as key to solving challenges ranging from getting physician buy-in, to balancing clinical versus financial objectives, to holding suppliers accountable for results. The survey asked several questions to gauge the industry's progress towards becoming data-driven. They covered three points in the value analysis "life cycle" where qualitative interviews suggested that gathering robust, reliable data is most important, and most challenging.

1. The initial product review, which draws on existing published research, as well as relevant internal data;
2. Conducting product trials, whether in a clinical setting or just "touch and feel" demonstrations in a conference room;
3. Post-implementation tracking of results at designated time intervals (e.g. 6 or 12 months).

The first step tends to receive the most attention. VACs begin by evaluating available data from a range of sources, both internal and external. These can include, but are not limited to:

- Published research, including clinical outcomes and clinical effectiveness studies. These may be provided by suppliers, but more often are obtained through research databases, or third parties such as PubMed, MD Buyline, and AHRQ.

- Internal data on product usage, costs, and clinical outcomes, including comparisons by facility or by physician.

- Pay-for-performance metrics and goals. E.g. readmissions and infection rates.

All this data and information must be interpreted and assessed, then brought to bear in the context of the hospital's value analysis goals.

Survey respondents were asked to rate their organization's ability to integrate meaningful clinical evidence and outcome data into the value-analysis decision process. Fewer than one-third reported "good" or "very good" success. Obviously the implications for the value analysis approach are serious. At the risk of sounding overly negative, a value analysis without good data is a value analysis in name only.

Figure 4.4, n=121

Once again the problem is seen as especially severe at smaller provider organizations. Respondents with fewer than 250 beds were more than twice as likely to report "poor" or "limited" success at integrating meaningful outcome data into their VA process (42%), compared to respondents from large systems with more than 1000 beds (18%).

These respondents – the ones struggling the most to integrate data into their decision process – were asked to describe the specific challenges they face. Several themes related to internal data gathering emerge from their responses:

- Because relevant data is often not integrated, "data islands" exists within the organization. For example, product usage data separate from charge data separate from clinical data. This creates both technical and political ("sharing") barriers that prevent timely access for use in value analysis.
- At a more basic level, some reported issues with data quality and accuracy.
- Multiple respondents saw a "data warehouse" or central data depository as the solution to these problems.

"The biggest, weakest link in healthcare and value analysis right now is data. Vendors need to provide data that shows us who is using the product, what their outcomes look like, how they compare to ours."

– Assistant Director Supply Chain, 8 hospital system

For others the main issue is cultural rather than technical. If committee members have not made the mental shift to focusing on outcomes, they do not bring the relevant data to the table. As one clinical supply-chain manager at a large academic medical center put it:

> *"Data that physicians think is meaningful and that support their position for a new product is not necessarily meaningful to our VAC team."*

Regarding published outcomes studies, the main challenge mentioned was finding independent, unbiased research. Respondents typically said they read vendor-sponsored research, but regard it with a high level of skepticism.

4.4: Conducting Clinical Evaluations & Trials

Healthcare providers tend to be conservative in their evaluation decisions and in making any sourcing changes. It is therefore common practice for VACs to want to "trial" a device, piece of equipment, or consumable, before a full roll out. However, trials conducted in a clinical setting can be very time-consuming, adding months to the value analysis process in some cases.

When conducting a trial in a clinical setting, there are a myriad of challenges, from gathering and analyzing data, to marshalling resources, and coordinating schedules and obtaining feedback.

As figure 4.5 shows the top challenges almost all relate to communication and coordination, rather than lack of resources per se. The top obstacle, indeed the only one identified by a majority of hospitals, is "obtaining sufficient staff feedback."

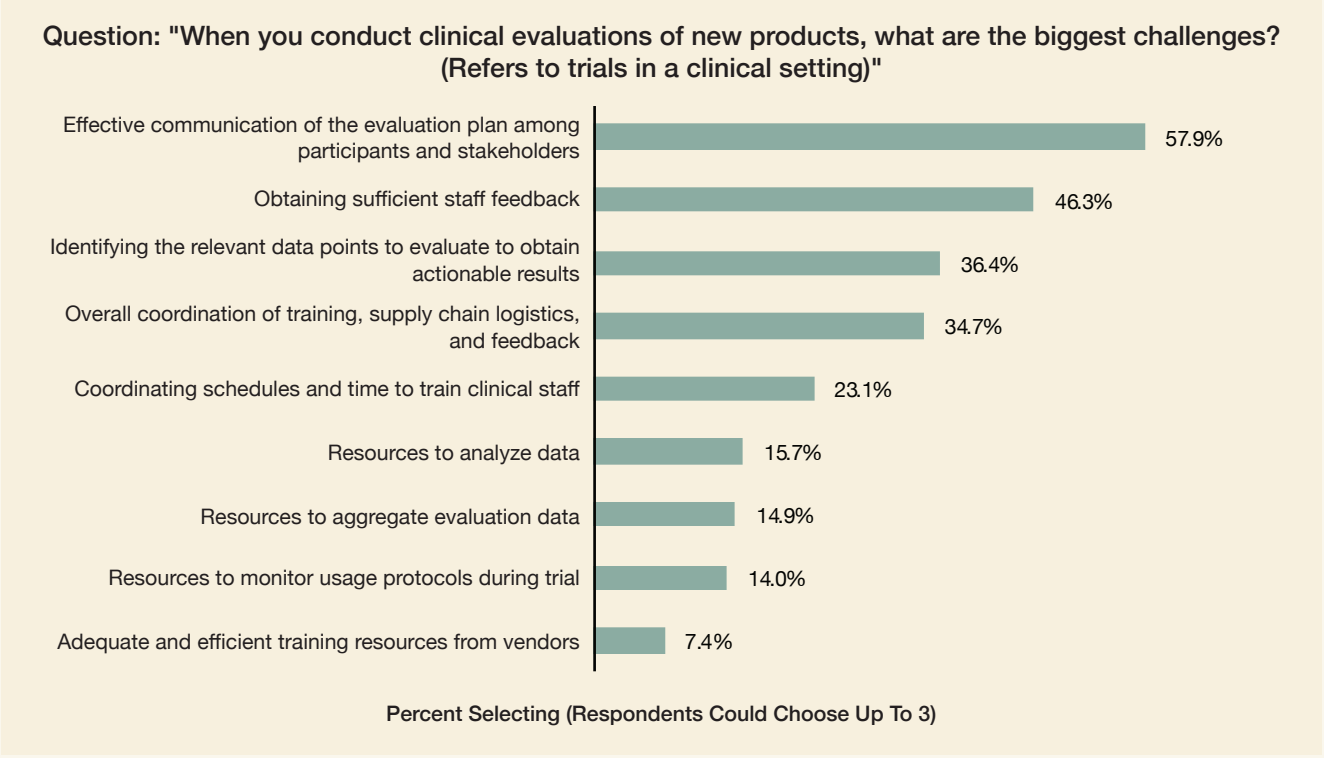

Figure 4.5, n=121

4.5: Tracking Results Post-Implementation

In discussions with value analysis professionals, a point that came up repeatedly (though not universally) was the need to do follow-up tracking – whether of clinical improvements or cost savings – at periodic intervals after implementing a new sourcing decision. As the value analysis director at a rural mid-size hospital explained:

> *It is important to have a measurement. E.g. if we implement new items that are intended to reduce infections, re-admissions, shorter surgeries, etc. we review utilization in 3 or 6 months with a report of the current measures and would expect to see our numbers (for infections, etc.) be reduced. We monitor new products and what they are intended to do pretty regularly.*

The Director for Clinical Integration at a nine-hospital system described implementing a similar approach:

> *What we've started to do now is have them provide follow-up metrics for us. The idea is that if you come back in 6 months and the follow-up metrics have not been met, then we will stop using the product. And our Exec Leadership team stands behind this.*

The survey confirmed this to be a widespread practice, although carried out with varying degree of consistency. About half of respondents (49%) report tracking clinical impacts post-implementation, always, or most of the time. Another quarter of respondents (23%) report doing so about half the time. The remaining quarter (27%) do so rarely or never.

Survey findings also suggest this is an effective strategy for improving the impact of value analysis efforts, or at a minimum the perceived impact.

- Among those that always/usually track clinical results post-implementation, 42% see VA having a positive impact on outcomes.
- Among those who track clinical results about half the time, 46% see VA having a positive impact on outcomes.
- In comparison, among those who rarely or never track results post-implementation, only 27% see a positive impact.

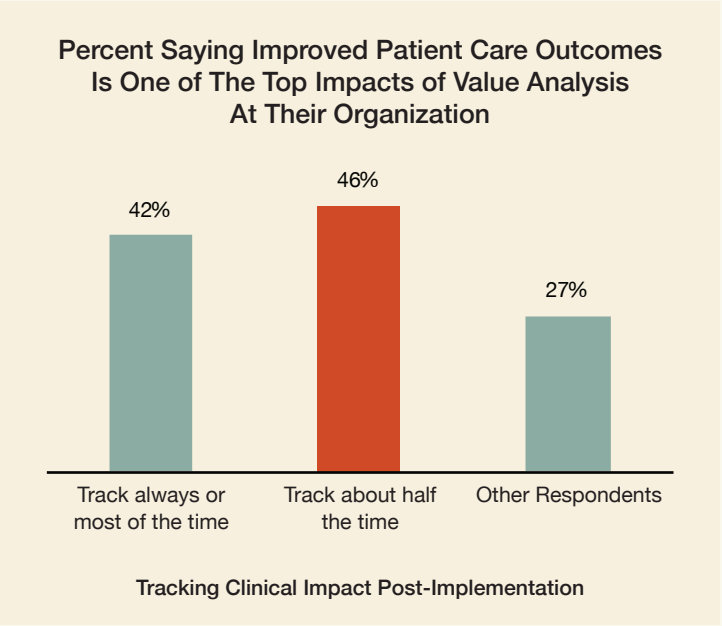

Figure 4.6, n=121

In other words, the adage seems to apply that what gets measured gets fixed. Of course, those who do not track results post-implementation are in a poor position to judge the actual impact their value analysis decisions are having. Therefore some of the difference in impacts reported by respondents may be a matter of perception, or lack thereof.

Supplier Takeaways

- As administrators find the right combination of "carrots" and "sticks" to engage physicians in the value analysis process, physicians are under pressure to back up their preferences with outcomes data. Suppliers can add value, while serving their own cause, by investing in well-designed research studies that tie product performance to clinical outcomes and other quality metrics.

- VACs struggle to balance clinical and financial goals. However, new payment models such as ACOs and bundled payments are designed to better align these objectives. Vendors should help their clinical champions understand how their product's performance impacts reimbursement under these new payment models.

- A significant gap in data systems and capabilities exists between smaller and larger hospital systems. Suppliers can play a positive role, and again help their own cause, by facilitating data sharing and aggregation across hospitals, for data that relates to the supplier's product performance.

- Finally, suppliers should consider ways in which they might support clinical evaluations and trials. Adequate user training is important, but other opportunities can be explored. For example, suppliers could provide templates for data collection tools, or best-practice tips for increasing staff response rates.

Chapter Five: The Role of Suppliers

In this section, we examine the extent to which suppliers provide value analysis committees with relevant and useful information. We first examine the types of information suppliers provide. Next, we examine the extent to which supplier information is underpinned by clinical evidence that VAC members regard as credible. Lastly, we examine VAC members' attitudes and experiences with risk-sharing-gain-sharing arrangements.

5.1: Supplier Marketing Materials

Suppliers develop a variety of different marketing and sales tools and collateral in their efforts to sway value analysis committee members. In addition to descriptions of their products and services, respondents report that suppliers frequently provide some form of clinical evidence, as well as comparisons with competing suppliers.

Notably, it is relatively less common for suppliers to feature testimonials from reference accounts. This may be a function of the difficulty securing such testimonials, or of suppliers underestimating the importance of such testimonials.

Responses also show suppliers tending to shy away from providing competitive pricing comparisons (36%), likely because accurate information can be hard to come by. Another factor is the supplier legal teams may be uncomfortable including this type of comparison. Regardless, this is data that value analysis committees are interested in. Ultimately they are tasked with making comparisons based on value (performance) versus price.

As for clinical evidence, while 65% of respondents indicate suppliers typically provide it in some form, the question, addressed in the next section, is whether this data is considered to be credible.

Figure 5.1, n=121

5.2: Do Suppliers Make The Case?

At a high level, VAC members' evaluation of supplier marketing material presents us with a "glass half-empty-half-full" situation. Almost all respondents (93%) say suppliers' materials clearly explain their product advantages. But respondents are evenly split on whether suppliers typically provide clinical evidence that is actually useful in evaluating those advantages (Figure 5.2).

Interestingly, when we look at the responses by job role, the picture changes very little.

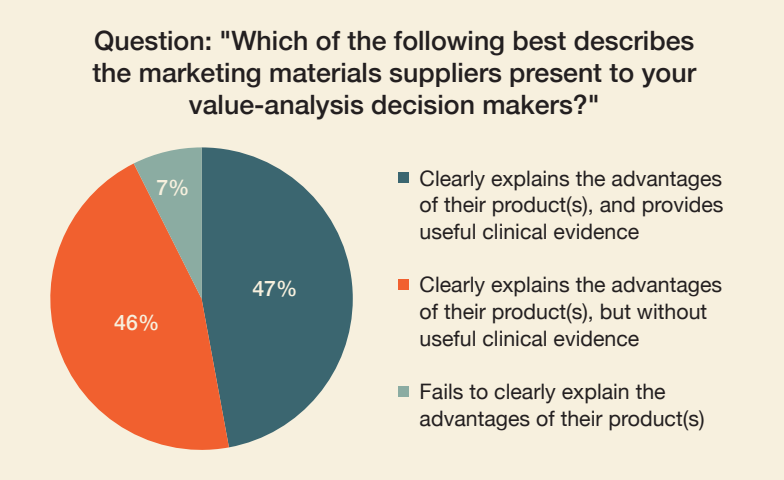

Figure 5.2, n=121

Figure 5.3 below groups respondents into two camps:

1. Job roles that tend to be Supply Chain – focused, including respondents in purchasing, materials management, and supply chain. These job functions tend to be more focused on pricing and spend management objectives.
2. Job roles that tend to be Value-focused, including service line managers, physicians, nursing, quality, and infection control. These personnel tend to be more concerned with clinical matters (e.g., outcomes, patient satisfaction, etc.).

To the extent these two groups approach product evaluations with different perspectives, the question becomes whether they have different takes on supplier marketing materials. But as Figure 5.3 shows, the survey found only negligible differences between the two groups.

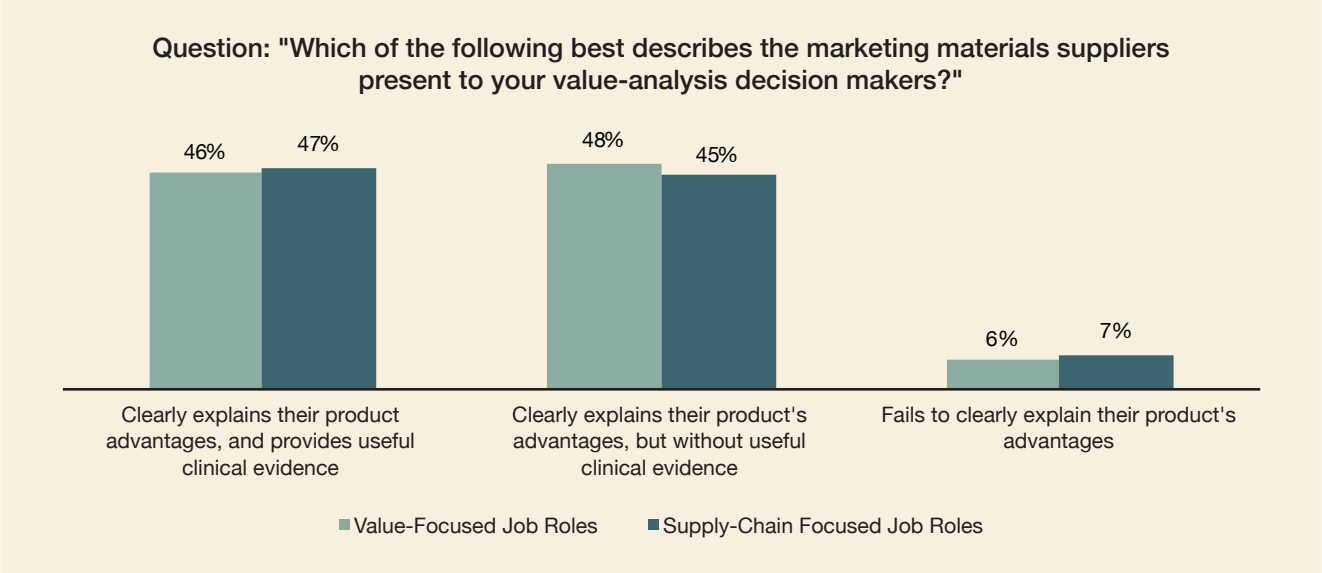

Figure 5.3, n=121

Given the importance of clinical evidence to VAC members, it is notable that less than half say suppliers typically provide any that is useful. Perhaps it is simply that vendors have not invested enough in outcomes research. However, to the extent suppliers do sponsor research on clinical outcomes it is often discounted by VAC members.

Since the importance of clinical evidence varies by product category, the survey also asked respondents to rate supplier-provided clinical evidence separately for a variety of different categories. In addition to asking about the degree to which vendors provide decision-makers with useful clinical data, this question asked about the sufficiency of the clinical data. In other words, it is one thing to provide some clinical data points, but it is quite another matter to provide clinical data that gives VAC members the confidence to move forward, or "greenlight" an instrument, device, piece of equipment, or service.

Figure 5.4 shows the percent of respondents who reported that suppliers in a given category provide sufficient clinical data "most of the time" or "always." Respondents indicated that suppliers of higher-ticket products (implants, capital equipment) are more likely to present sufficient clinical evidence for their products, compared to suppliers of consumables and services.

"Evidence means to me a published peer-reviewed study where outcomes were measured."

– Director of Clinical Value Analysis, 19 hospital system

"I'm amazed at what is passed off as clinical evidence."

– Clinical Value Analysis Director, 21 hospital system

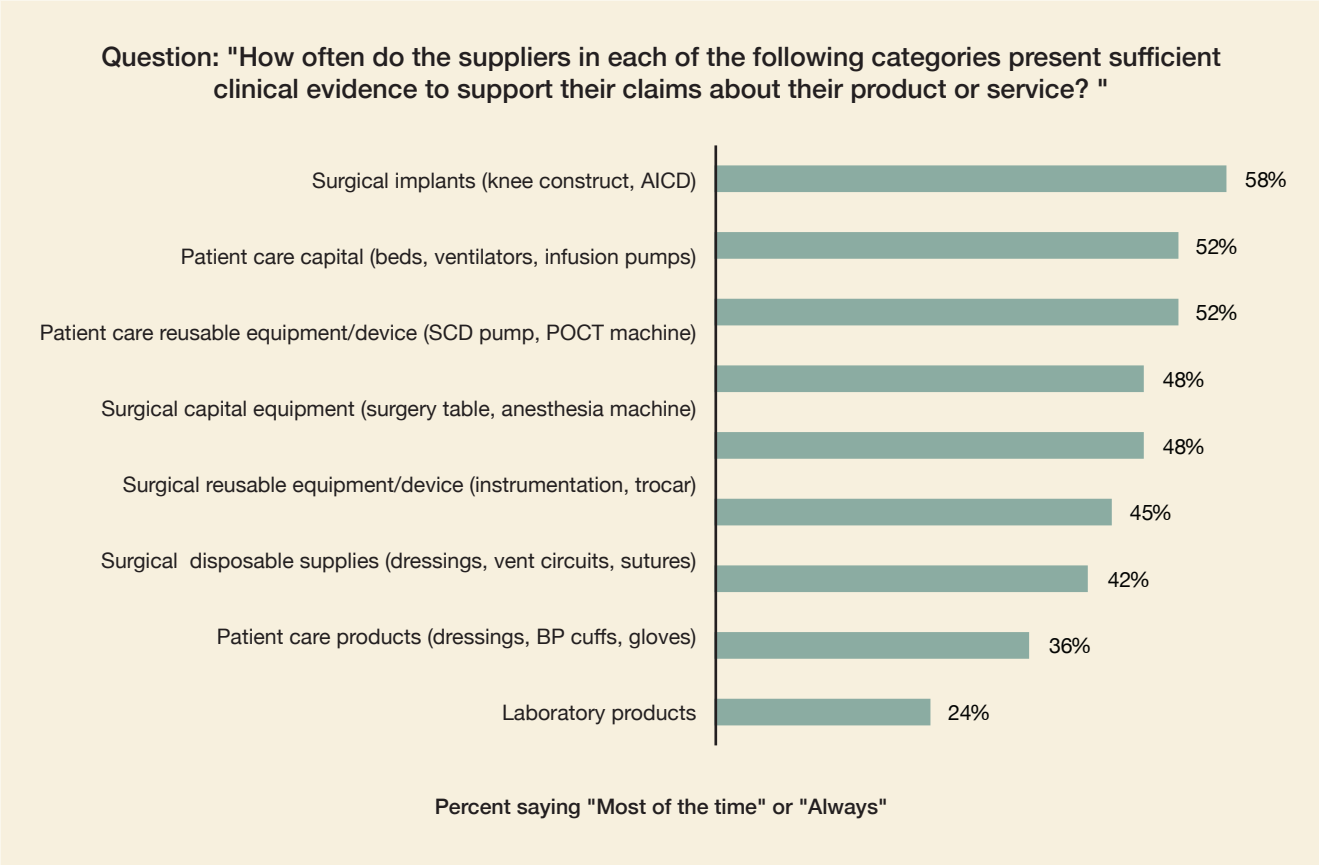

Figure 5.4, n=121

Again, it is worth looking at whether our two different job groupings (Supply Chain - focused vs Value-focused) showed differences with regard to any of the product categories. Figure 5.5 provides such a breakdown.

In some cases, these two groups assess vendor clinical evidence in very much the same way (e.g., surgical capital equipment, laboratory products). In other cases (surgical implants, patient care capital equipment, and surgical disposable supplies), respondents have a very different reaction to what vendors have presented, with the Supply-Chain-focused group being far less impressed than their Value-focused counterparts.

There are several possible explanations for why the two groups might assess the sufficiency of clinical evidence differently. Physicians, nurses, and other front-line users are often the ones requesting a new product, because they've heard good things from other practitioners, or have seen a demonstration. They may tend towards defining "clinical evidence" in terms of things like bench tests that Supply Chain is not as impressed by.

Another possible explanation for the relative skepticism on the part of Supply-Chain-focused personnel is that surgical implants, patient care capital equipment, and surgical disposable supplies are categories where respondents appear to be questioning whether there is sufficient clinical benefit to warrant the pricing. In the case of joint implants, the growth of Medicare bundled-payment programs could be adding to the increased scrutiny.

During in-depth interviews, the Value Analysis Director at a four-hospital system illustrated this skepticism: "The implant companies are always claiming they are spending a lot of money on R&D, but the product really does not appear to have changed all that much. Still, their prices keep going up."

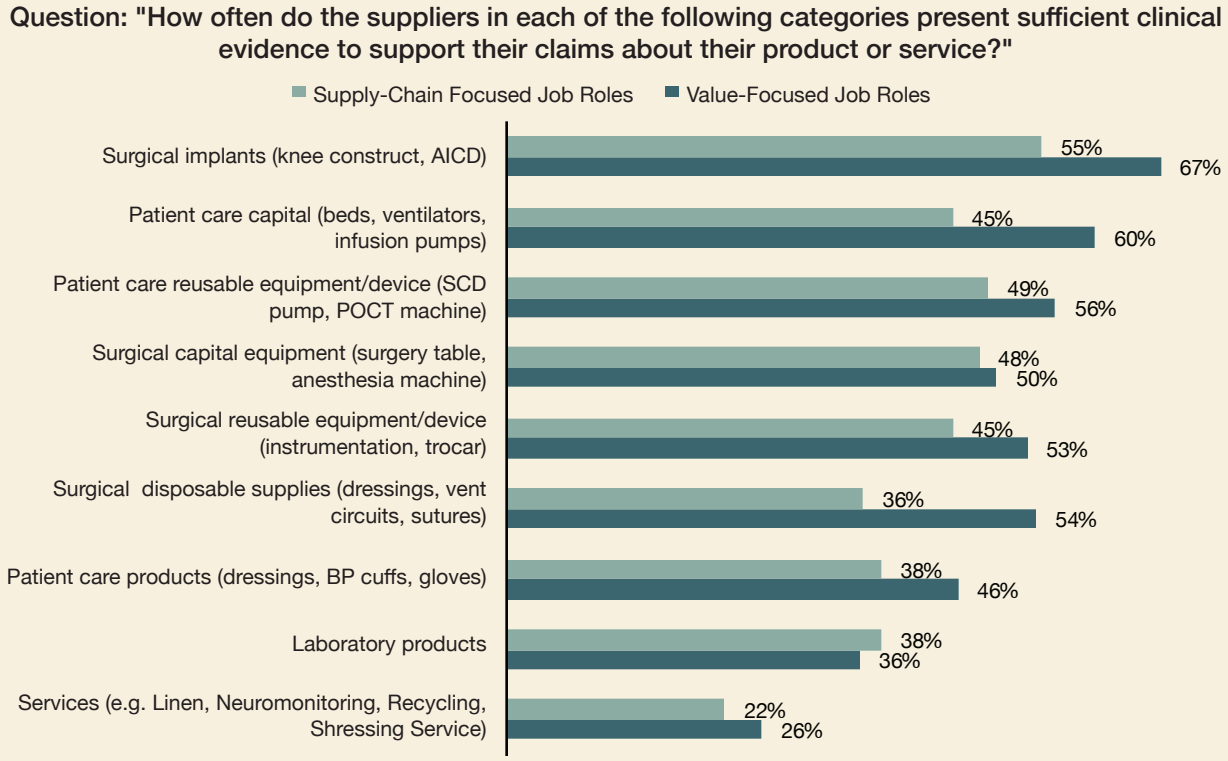

Figure 5.5, n=121

5.3: Appetite for Risk Sharing/ Gain Sharing Arrangements

> *"Gone are the days when you can just claim you're going to save me $1 million. If I'm going to give you the business based on that premise then I want to know the criteria for accomplishing that. I want you to have money on the line with me." – Director of Clinical Value Analysis, 19 hospital system*

As the above quote illustrates, there is a move afoot to hold device, equipment, and service providers accountable for the claims they make about the degree to which they can deliver clinical and/or financial benefits.

Risk-sharing and gain-sharing (RS/GS) arrangements, as they are known, have emerged as a framework that, when well-constructed and executed, promise an "ideal" transaction in that they align the interests of suppliers and providers. These arrangements cover everything from simple money-back guarantees to arbitrary penalties, to outcomes-based risk sharing.

These agreements carry a varying degree of "risk" for each party. For example, vendors may obligate themselves to rebate the cost of devices that do not perform as advertised, or commit to paying to treat complications (e.g., surgical site infections) that occur as a result of using their devices. In return for taking on more risk, these agreements can be attractive to vendors because they often allow them to lock in premium pricing, or provide additional financial returns that would not be possible under traditional price-focused negotiations. These arrangements, at least on paper, can be attractive to buyers and suppliers alike.

A list of RS/GS arrangements currently offered by vendors appears in Appendix A. While there is variation in how these programs are structured, most tend to follow one of three distinct structures:

1. **Money-Back Guarantees:** vendors agree to provide full or partial refunds should the healthcare provider not be happy with the product.
2. **Performance Guarantees:** in this version of RS/GS, the vendor will commit to deliver on specific performance objectives, If specific performance thresholds are not met, the vendor "rebates" a portion of the full cost of the device, equipment, consumable, or service. The penalties established under these contracts are often set arbitrarily by the vendor (e.g., $1,000,000).
3. **Outcomes-Based Risk Sharing:** here the vendor goes beyond rebates, and instead commits to compensate the healthcare provider based on falling short of defined "outcomes." For example, a vendor might commit to paying the cost of treating specific complications that develop while using their devices.

As we can see in Figure 5.6, only 24% of hospitals have entered into some form of risk-sharing/gain-sharing agreement(s) with suppliers. The vast majority have yet to do so. Although this may be a conservative estimate given that 21% of respondents do not know if such an arrangement is being considered by their organization.

Question: "Has your organization ever entered into gain-sharing or risk-sharing arrangements with suppliers? I.e. where the supplier is financially penalized or rewarded based on how well their product performs in use?"

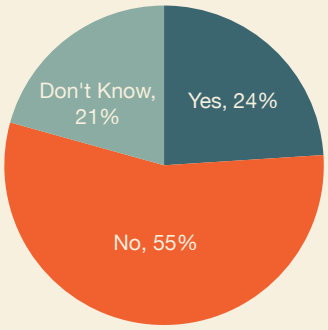

Figure 5.6, n=121

As we see in Figure 5.7, larger hospitals and health systems are more inclined to pursue these arrangements than their smaller counterparts.

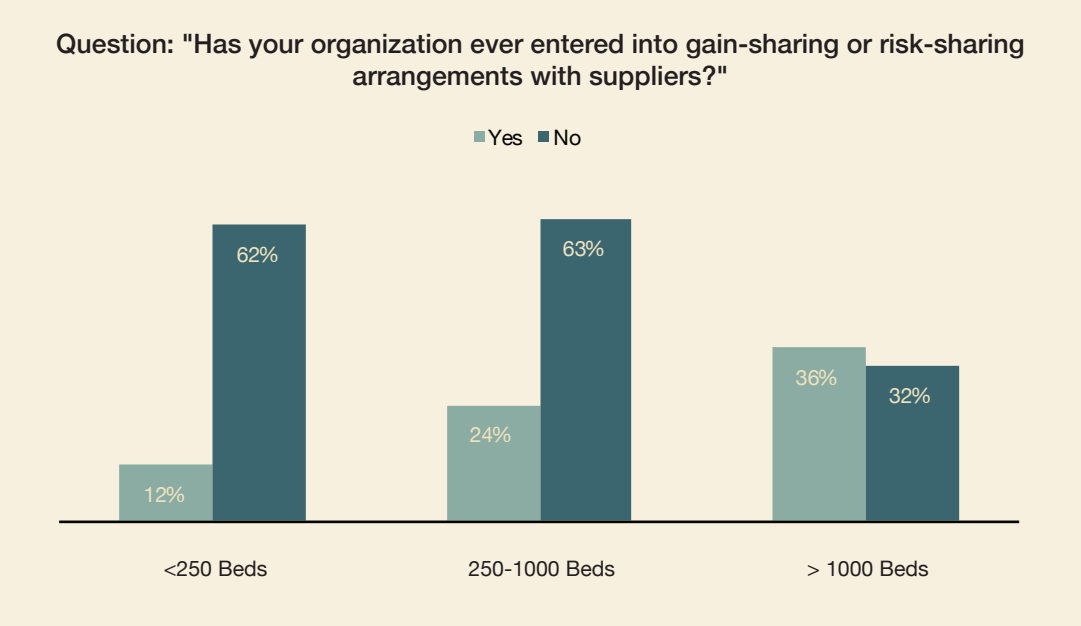

Figure 5.7, n=121

Excluding respondents already in such agreements (24%), another 19% of the remaining respondents have indicated serious interest, or are currently investigating RS/GS. Another 39% express mild interest.

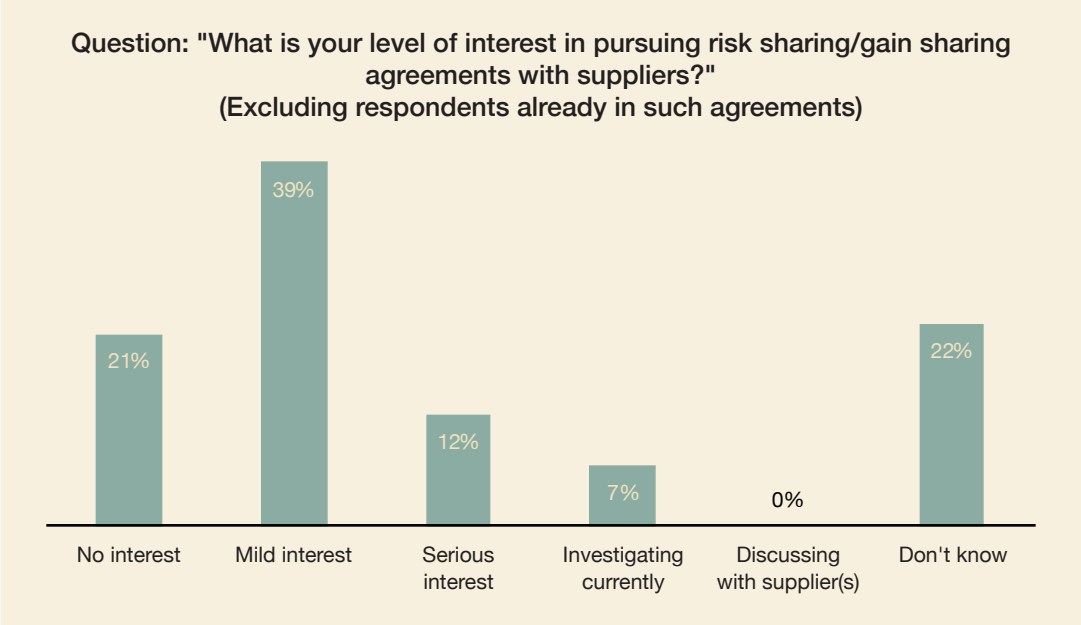

Figure 5.8, n=121

Thus, while overall interest in RS/GS arrangements is widespread, the industry is clearly in the "early adopter" phase. There are a myriad of challenges and issues associated with making these arrangements work. Respondents repeatedly mentioned two in particular

Tracking: It can be a challenge to link cause with impact. As we saw in Chapter #4, hospitals do not typically do good post implementation tracking to determine if a clinical intervention or particular device is working.

Compliance: RS/GS agreements contain a lot of "fine print" and may sometimes be constructed in such a way that they allow vendors an easy "out" early in the implementation, if they so desire. Hospitals have complained that vendors may have written these agreements in such a way to make compliance very difficult. For example, a vendor may mandate that its equipment be calibrated by caregivers on a daily basis in order to remain in compliance with the RS/GS agreement.

RS/GS arrangements represent an emerging way for vendors and healthcare providers to work together and align interests. As we see companies such as Medtronic, Amgen, Massimo and Titan Spine commit to this model, it will not be long before other vendors will feel compelled to follow suit.

Supplier Takeaways

- While suppliers are generally doing a good job of "checking all the boxes" in terms of providing a variety of marketing and sales materials, they should look for ways to enhance their collateral by including more reference account testimonials, competitive price comparisons, and reimbursement data (if applicable).

- Customer facing materials should be tested with members of the value analysis community to ensure they are properly formatted and address the right issues and metrics, so as to resonate with VACs. Once marketing and sales collateral have been properly vetted, vendors should turn their attention to organizing such materials and collateral into what are known as Value Analysis Committee Information Kits (VAC Packs). For more information on what to include in a VAC Pack, please see the appendix. Forcing more and more accountability onto vendors is a clear industry trend. RS/GS is a sensible way for vendors to counter this development. As an initial step, they may want to test the concept with a few friendly accounts. Ask for their input in terms of how such an arrangement could be structured in a way that would be fair for both parties. As a next step, consider piloting some form of RS/GS agreement with accounts who are amenable. Moving quickly up the learning curve on this front will likely provide a source of competitive advantage.

- Vendors with experience with RS/GS in some form should look for ways to enhance their current program. Since risk-sharing arrangements (e.g. rebates) can often quickly digress into petty infighting if not well designed, we believe a better approach is to focus on "gain sharing" aspects. Rather than quibbling over matters of compliance, vendors and providers should both be more equally motivated to achieve the targeted gains.

Chapter Six: Future Directions

The study findings paint an overall picture of value analysis as an evolving discipline, with significant variation across hospitals in terms of organization, process, and even the goals trying to be achieved. As their programs evolve, hospital executives are looking to follow best practices to address key challenges. Foremost among these challenges is getting buy-in from physicians.

We therefore sought to learn more from the minority of survey respondents who said they were having "good" or "very good" success getting physician buy-in on VAC decisions. For comparison we also examined responses from those who reported "poor" or "limited" success on this front. Each group was asked about the reasons for their success, or lack thereof.

We also looked at those who reported success at improving patient care outcomes. This was the goal most commonly cited by respondents as a top priority for their value analysis efforts. Yet while three quarters (74%) said it is among their organization's top three VA goals, only 39% say it is among the top two impacts they are seeing.

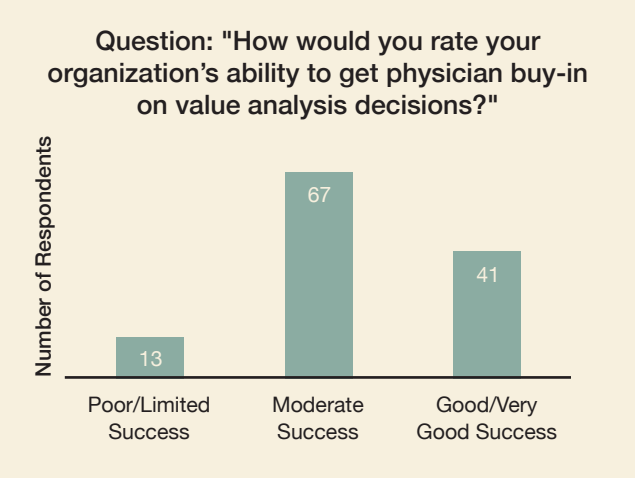

Figure 6.1, n=121

Taken together, the qualitative and quantitative responses from these two "success" groups suggest future directions for hospital value analysis more broadly.

6.1: Making PPIs About "Profitability", Not Just "Preference"

Respondents' most frequent advice for getting physician buy-in was to involve them early and often in the decision process. To some extent this is a matter of basic outreach and communication practices.

But ultimately many participants – whether they are having good success or struggling – cited the need for physicians to be financially aligned with hospitals in seeking cost savings and standardizing processes. Means to achieve this alignment include profit-sharing, and/or partnering with them in accountable care arrangements (i.e., Shared Savings programs).

The experience of a VA Director at a West Coast academic medical center illustrates one path for this evolution from VAC participation to profit-sharing:

> *"It took many years of raising the issue of the importance of having physicians in the VA process to COO, CFO and CMO. Finally they helped engage physician leaders to get their co-chair level participation in all the VA Committees. The physicians are very good at challenging each other and their clinical practices as part of the product decision making; however, they are also now pushing for a savings gain sharing agenda for their efforts."*

Here we see how physician participation can accelerate the shift to new financial arrangements, such as bundled payments and ACOs. By the same token, joining in one of these "shared savings" vehicles makes it easier to get physician cooperation.

Whatever payment model is ultimately best for a given provider, clearly making value analysis effective requires some means to financially align their physicians with the larger organization. As one respondent struggling on this front complained about doctors, "…they think 'me' not 'organization'…" Changing this mindset means changing the financial relationship between the two.

6.2: The Rise of Data Middle Men

Another common theme echoed by successful respondents was that decisions need to be data-driven. One respondent from a large network of non-profit hospitals described their recipe for engagement as:

> *"Gather appropriate research data, cost data, utilization information, peer data, and patient outcome data. Communication, Communication, Communication!"*

Several interviewees also pointed out that physicians are trained scientists, and tend to buy into decisions that are supported by solid data.

Yet many respondents, especially those at smaller hospitals, are severely challenged at integrating meaningful data into their decision processes. Internal data gathering is a particular problem. In some cases relevant data simply isn't gathered, while in others it is plagued by data quality issues and the problem of separate "data islands" within the organization.

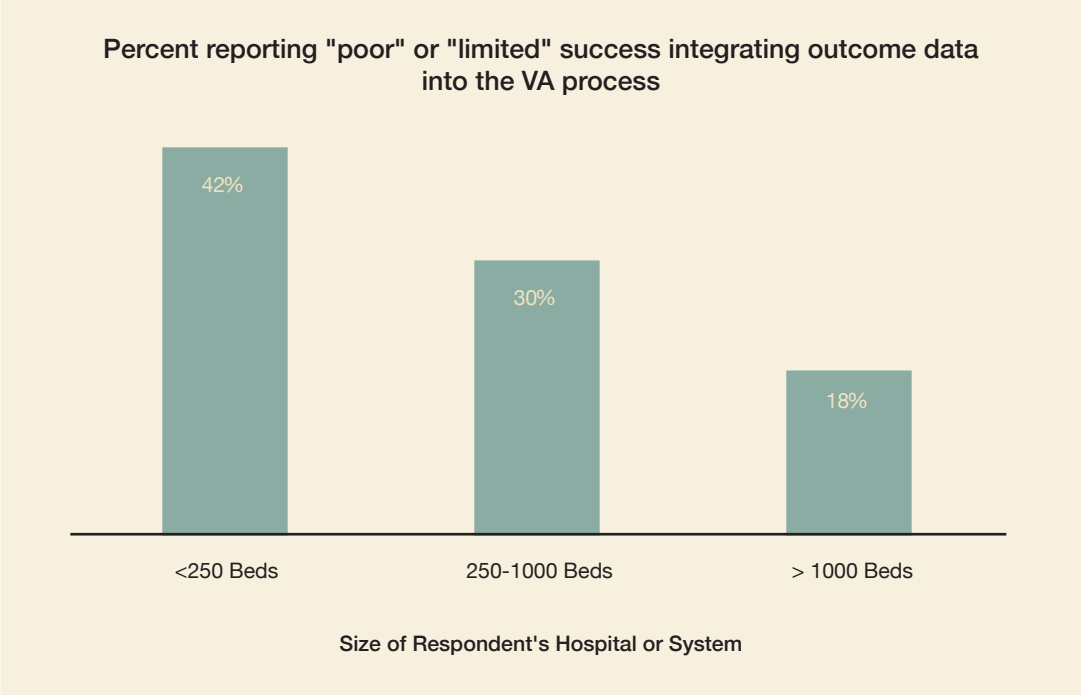

Figure 6.2, n=121

Large hospitals and IDNs are developing data warehouses to address this problem. But given that such IT projects are expensive and time-consuming, many will turn to other data sources.

- Services that aggregate and rate published clinical evidence are already popular. Look for these to expand and proliferate.

- But the bigger challenge is to aggregate, analyze, and share the outcomes data that hospitals do collect internally. Data consortiums offer a potential solution.

- GPOs, with their access to product usage information, may also have a role to play.

Look for these services to play an increasing role, and for new third-party players to emerge. Decision makers are hungry for data that compares key outcomes across competing products being evaluated.

6.3: The C-Suite Takes a Firmer Hand

In qualitative interviews, when asked about changes to their value-analysis process, several mentioned being in the process of setting up an executive steering committees. Similarly, those survey respondents who have successfully achieved physician buy-in say support from senior executives, especially the CEO and CMO, has been critical.

Therefore, look for executive steering committee to continue to proliferate and become more involved in driving the value analysis process. However, this does not mean executives will become more involved in individual sourcing decisions. Their involvement is likely to focus on process issues such as:

- Setting VAC goals, tracking progress, and enforcing accountability;

- Ensuring the right physicians and clinicians are involved early in the process;

- Ensuring relevant data is shared with the committees in a timely manner;

- Getting buy-in as sourcing changes get rolled out and ensuring compliance to new standards.

We also expect to see hospital systems increasingly tie administrators' pay to performance on P4P program metrics. Leaders in this regard include IDNs like Trinity Health System. Trinity, the nation's fifth largest not-for-profit healthcare provider, recently unveiled a compensation plan that links 10% of administrator and executive compensation to outcomes such as reduced HACs and readmissions, and improved patient satisfaction, as well as operating profit. Other systems such as Mercy Health, and Henry Ford, are implementing similar programs. Some estimates suggest anywhere from 20% to 35% of large health systems currently tie incentives to population health measures.

Developments such as this are likely to lead administrators to push accountability for quality metrics down to the VACs, and in turn down to the vendors they choose to do business with.

6.4: Suppliers on the Hook

Risk-sharing-gain-sharing arrangements with suppliers seem to be the logical conclusion of the push for accountability – from hospital executives to VAC, and from VAC to suppliers. However, respondents reported mixed success with such contracts to-date.

Several suggested that the transaction costs involved are too high. It is possible that these transaction costs will decline rapidly with experience, as templates for such contracts become better worked-out and better-known. However, this remains to be seen.

> **"What we've started to do now is have them provide follow-up metrics for us. The idea is that if you come back in 6 months and the follow-up metrics have not been met, then we will stop using the product. And our Exec Leadership team stands behind this."**
>
> *– Director for Clinical Integration, 9 hospital system*

In either case, VACs and administrators are already seeking to impose accountability on suppliers in other ways. Typically this involves formal post-implementation impact reviews. Half of survey respondents track results post-implementation either "always" or "most of the time." Furthermore, those who do so are more likely to see their value analysis efforts actually having a positive impact on patient outcomes.

As administrators push accountability for quality down to individual VACs, this trend is likely to accelerate. VAC members, including physicians, will look for suppliers to have "skin in the game" – either explicitly via RS/GS deals, or implicitly via tracking outcomes.

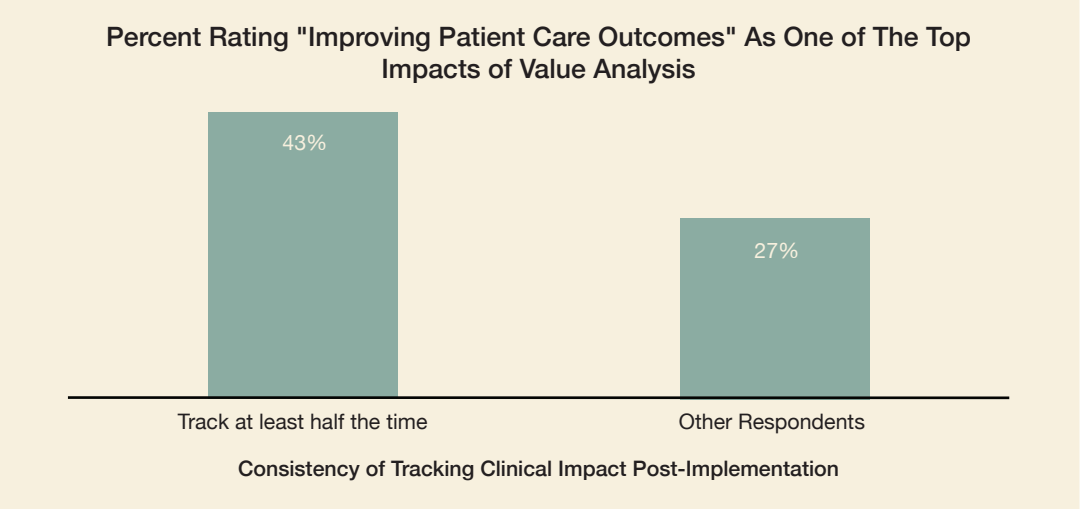

Figure 6.3, n=121

6.5: Price or Value: A Fork in the Road

Looking ahead, will hospitals remain committed to value-driven healthcare or will they instead focus on spend reduction goals? In the face of ongoing efforts to cut Medicaid and Medicare funding, will they focus on extracting large price concessions from suppliers, as a way to mitigate financial risk?

When asked whether the current uncertainty coming out of Washington had changed their value analysis approach, respondents were split. Many said it had merely led them to redouble their efforts. Others reported increasing their focus on spend reduction in particular.

A key factor setting the two groups apart is their commitment to shared savings payment models, including ACOs and bundled payments (see fig 6.3). Those who are committed to these payment models are far less likely to pursue price reduction as a top priority. Instead they tend to focus more on goals such as improving patient care outcomes, staff safety, and process efficiencies.

It's noteworthy that Medicare's ACO and bundled payment programs (the Comprehensive Joint Replacement program excepted), unlike their other P4P initiatives, are voluntary. These respondents, we can assume, are at hospitals that have made a conscious commitment to a future of value-based, capitated payments. They have made investments in the technology and personnel required to succeed in these payment models. They will likely double down on these investments going forward, with a continued focus on standardization, improving outcomes and avoiding unnecessary procedures. Doing so is the path they have chosen in pursuit of long-term financial stability.

How has the current uncertainty regarding the ACA affected your value analysis strategy?

"If anything, this has strengthened the case for well-functioning value analysis efforts."

"Our goals haven't changed."

"Very little to no impact on our program goals."

"It has supported the effort to achieve better pricing on supplies and services."

"It has increased the level of scrutiny when evaluating cost as a factor."

On the other hand, hospitals who have not invested in transitioning to an ACO model or a future of capitated payments will likely focus more on short-term cost reduction. They see extracting price concessions from suppliers as their way to hedge the risk of possible cuts to Medicaid. Whether this strategy will pay longer-term dividends is uncertain. The longer providers hold back from a strong commitment to quality improvement over cost savings, the further behind they fall in areas such as IT integration and care coordination. And the greater the risk they get penalized under Medicare's mandatory P4P programs (e.g. the HACRP, or MRRP). A downward spiral can follow in which penalties further starve the organization of the funding needed to invest in quality.

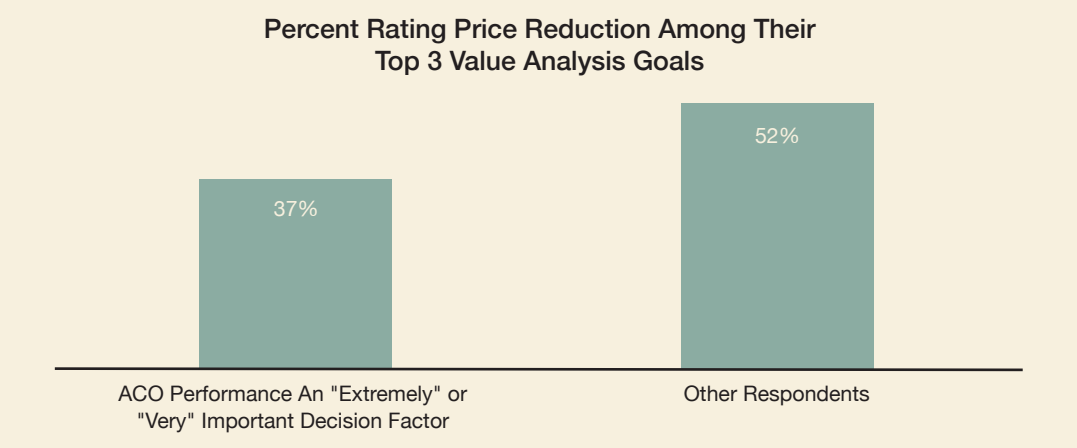

Figure 6.4, n=121

Appendix A

Risk-Sharing/Gain Sharing Examples

As discussed in Chapter #5, providers and vendors alike are showing interest in Risk-Sharing/Gain Sharing arrangements, as they are generally known. Below we profile several different examples – from money back guarantees to outcomes-based risk sharing.

Money Back Guarantees:

Millenium Surgical:
https://www.surgicalinstruments.com/about/our-pledge

Sklar Surgical:
http://www.sklarcorp.com/lifetime-guarantee

Risk-sharing in our commercial transactions is going to be an increasing component going forward."

– Omar Ishrak, CEO, Medtronic

Performance Guarantees:

Masimo:
http://www.masimo.com/masimo-set-$1-million-performance-guarantee/

ICU Medical:
http://www.icumed.com/$100,000-performance-guarantee.aspx

Outcomes-Based Risk Sharing:

Medtronic TYRX:
http://www.medtronic.com/documents/tyrx_absorbable_uc201405268fen.pdf

Medtronic MiniMed(TM) 670G system
http://newsroom.medtronic.com/phoenix.zhtml?c=251324&p=irol-newsArticle&ID=2283068

Titan Spine:
http://www.titanspine.com/content/news/Guarantee.htm

Stryker EMS:
https://ems.stryker.com/en/proven-to-save

Amgen:
https://www.amgen.com/media/news-releases/2017/05/amgen-and-harvard-pilgrim-agree-to-first-cardiovascular-outcomesbased-refund-contract-for-repatha-evolocumab/

Xenex:
http://www.businesswire.com/news/home/20150626005700/en/Xenex-Offers-Industry%E2%80%99s-HAI-Reduction-Guarantee-Multiple

Teleflex (Arrow Assurance program):
http://www.thearrowadvantage.com/

Appendix B

Value Analysis Information Kits

As Value Analysis Committees (VAC) have become the primary decision-making conduit through which hospitals and health systems evaluate and make sourcing decisions, vendors need to provide committee members with succinct and compelling summaries presenting the clinical and economic benefits of their offerings.

To resonate with clinical and non-clinical buyers, VAC Packs should exhibit the following characteristics:

- **Concise:** VACs typically meet once per month and must make many evaluation and sourcing decisions in a short period of time. They often have as little as 10 minutes during committee meetings to review vendor materials and options. The VAC Pack must be direct and to the point, and easy to review and digest.
- **Compelling:** Most healthcare providers are evaluating sourcing decisions in terms of – "Triple Aim" goals: "improving patient outcomes," "reducing cost," and "improving patient satisfaction." The VAC Pack should ideally address all three areas, as well as be grounded with compelling clinical data.

To resonate with clinical and non-clinical buyers, VAC Packs should exhibit the following characteristics:

Organizing the VAC Pack

- Executive Summary
- The clinical problem your device/equipment/service addresses
- Brief description of the product
- Competitive Positioning (emphasis on differentiating features)
- Summary the clinical and economic value propositions
- 510K Letter
- Instructions For Use (IFU)
- Clinical Effectiveness Research (either abstract or whole study)

In total, the heart of the VAC Pack should be no more than 6-10 pages long (not including attachments or the appendix).