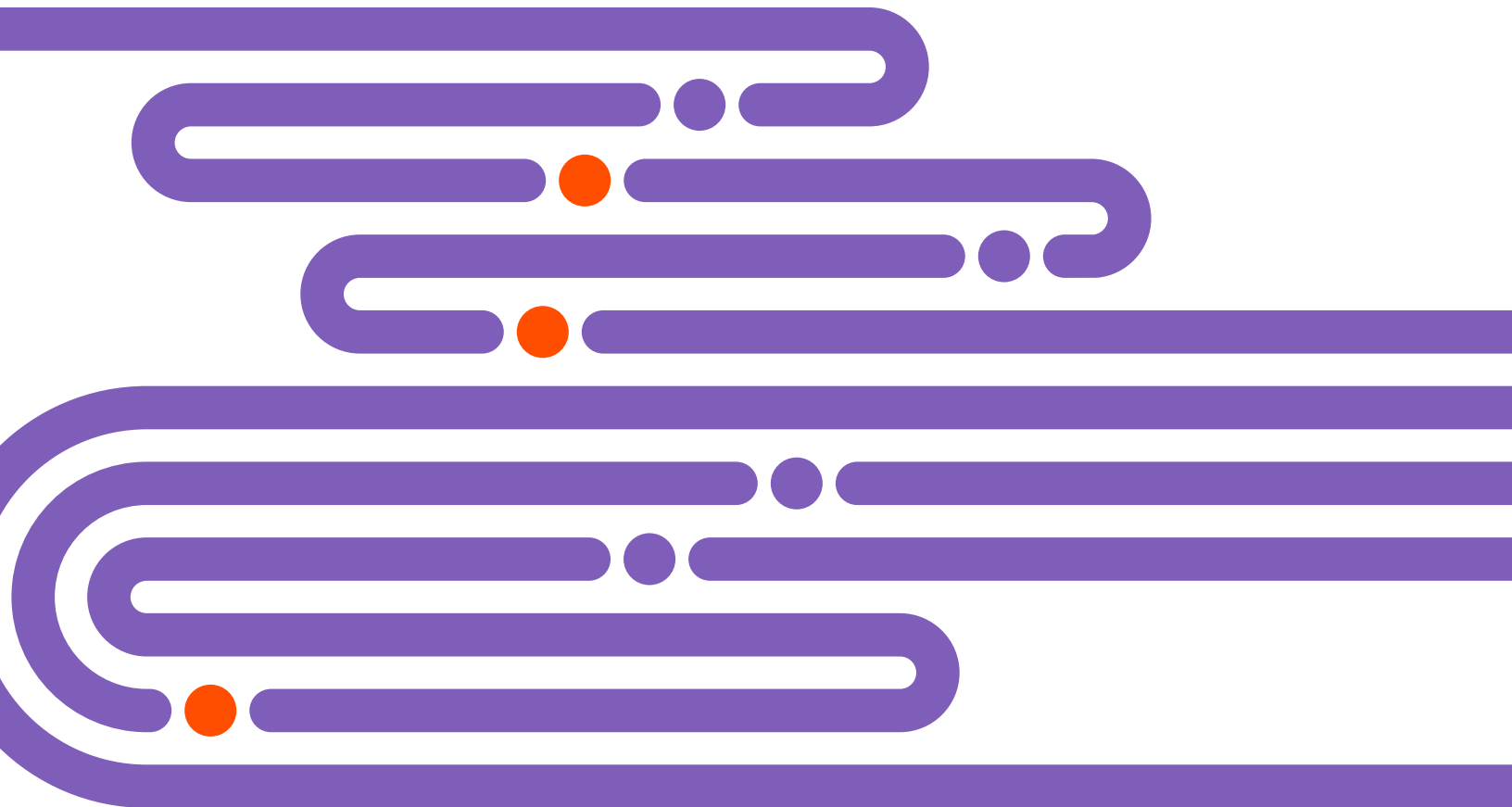


The Hospital's Clear Path to Improving Care Delivery

How transparent comparative analytics and physician championship
revitalize the hospital's market position and purpose



Introduction: motivating care delivery improvements



As payment reform moves toward value-based models of care delivery, health system executives are assessing their readiness to conduct business as usual even as new payment models evolve and change. Functioning in the tightening fee-for-service environment—while simultaneously navigating the transition to value-based care—is often likened to running treacherous rapids with each foot in a different canoe. But this river of change is not going to stop flowing; stasis is not an option.

Health care leaders find at least one element is foundational to success at virtually every stage on the payment reform continuum: alignment with physicians and other provider partners.

Fortunately, the currently available strategies for physician-hospital alignment are fairly well-defined. They have been vetted by health systems nationwide, whether in a fee-for-service environment or more fully integrated situations. These strategies can be implemented in a step-wise fashion, as regulatory and market needs dictate changing provider relationships. This whitepaper offers insights into the “how” and “why” of what’s working in these uncertain times.

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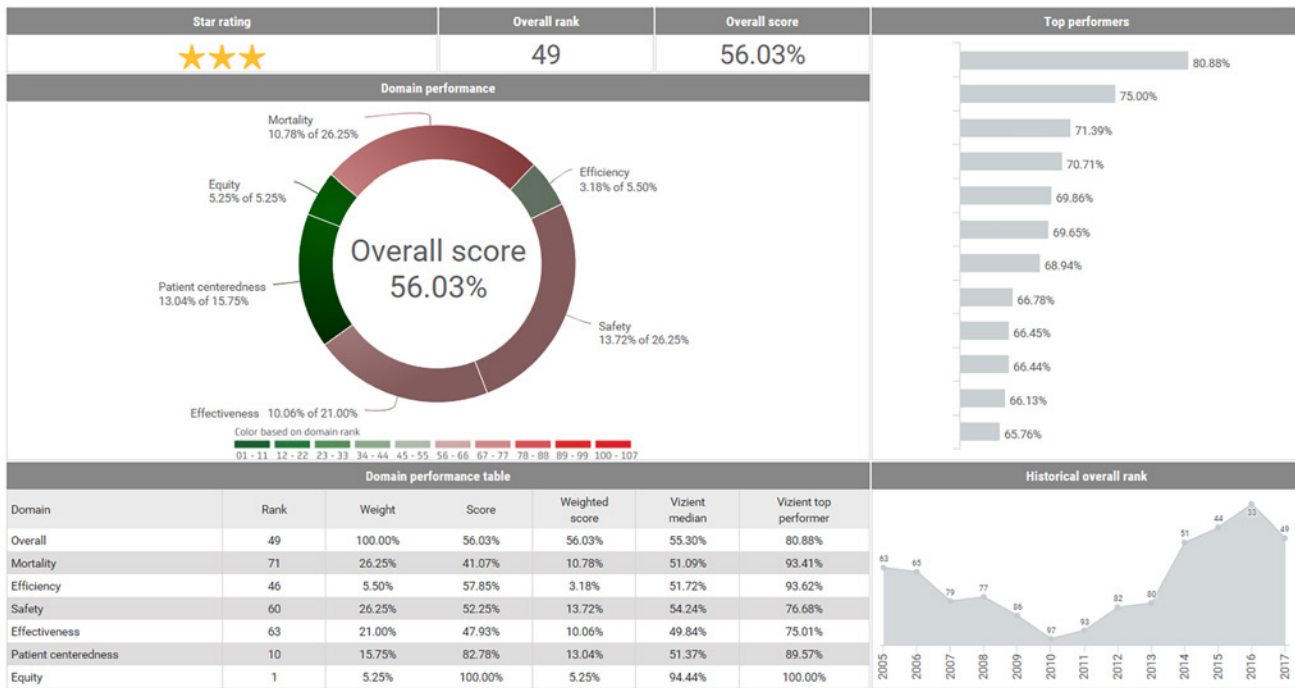
- How to align quality and cost
- Strategies to reduce non-value-added clinical variation and achieve true value
- Re-inventing service lines into competitive systems of care

Balancing quality and total cost of care: are we making it too complicated?

Value-based care presents health care with what appears to be a conflicting mandate: improve the quality of care while reducing the total cost of delivering it. From this directive one could easily make the mistake of assuming that quality is heavily dependent on cost. However, studies repeatedly demonstrate that high quality care can be accomplished without driving total cost. More often than not, taking a hard look at a set of comparative performance measures among similar hospitals provides the data needed to drive a better understanding of

the opportunities to improve patient care. Some top performing hospitals are ordering fewer supplies and reducing expensive lengths of stay, while improving outcomes. At the individual level, many physicians perform surgeries with better outcomes at a lower cost than colleagues with similar patient demographics. Globally, three actions that all top-performing hospitals take are setting goals, tracking performance, and taking bold steps to change.

Figure 1: Data matters—leading hospitals have in-depth data to drive clinical decisions



Source: Vizient Clinical Outcomes Report

Table 1: Top performing hospitals consistently engage in analytics and reporting

Ranking:	Reports	Ranking:	Reports
Top performer		Bottom performer	
A	6,935	Q	1,735
B	5,927	R	2,646
C	7,294	S	3,225
D	17,111	T	4,192
E	9,969	U	823
F	12,654	V	3,022
G	6,191	W	552
H	8,424	X	1,796
I	13,331	Y	2,935
J	9,197	Z	2,098
Average	9,703	Average	2,304

Leading hospitals in quality and accountability leverage consistent reporting and analysis for in-depth analytics based on broad quality and cost data metrics. On average, leading hospitals write about 7,000 more reports versus lowest ranking hospitals, leading to strong correlation to data driving performance improvement.

Source: Vizient Clinical Data Base, 2017

What is missing from driving systemwide care delivery improvements is a clinical perspective to balancing cost and quality of care. In this perspective, “quality” is the primary driver, with the goal of identifying where the best outcomes are being achieved at the lowest cost. From a strictly supply chain perspective, “cost” is the chief driver. While this can cut corners in the short term, it can also result in poorer outcomes that will take a harsh toll on the patient’s and the hospital’s health.

Moreover, without corresponding clinical alignment and leadership behind reducing costs, goals of reducing total cost of care are challenged by clinical effectiveness. Supplies—including high-cost physician preference items—are ordered according to the widely varying preferences of clinicians and facilities, regardless of whether these variations in care produce better outcomes. This takes away the powerful bargaining tool of ordering supplies at scale. Instead, hospitals must order supplies in wastefully small increments—and at a corresponding price. Some estimates put wasteful spending in the U.S. health care system at an incredible \$700 billion every year. The primary contributors: unnecessary care and over treatment. Both are common in hospitals when clinical input and insight on clinician performance don’t play meaningful roles in cost-reduction and quality improvement efforts.

Evidence clinicians trust:

Valid, transparent comparisons: performance is compared with hospitals by name and not in aggregate performing similar procedures on similar patients

Transparent methodologies: clinicians have a clear understanding of how data is obtained and scored

Continuous data sharing: insight into performance is made frequently available

Drill-down capabilities: overall performance on metrics are not presented without drilling in and understanding why a difference exists

Table 2: Transparent benchmarking enables strategic decisions

Hospital	Beds	Inpt dis	Inpt surg	CMI	TX	%ICU cases	DX codes	Proc codes
1	315	17072	4786	1.6	689	8.4	11.6	1.4
2	257	14465	5958	2	612	19.7	15.7	2.3
3	379	22506	7144	1.8	957	11.2	11.4	1.8
4	275	13782	3495	1.7	1142	13.2	10.4	1.7
5	369	23665	5031	1.5	294	9.8	12.8	1.1
6	357	11640	1888	1.3	26	11.5	13.1	0.8
7	289	12735	2910	1.5	368	8.5	12.3	1.3
8	321	14832	2570	1.5	323	10.1	12	1.9
9	444	24597	7735	1.9	2203	11.1	11.3	1.8
10	261	19001	6059	1.6	874	4.4	9	1.3
11	449	27073	6422	1.6	1762	15.9	12	1.7

Hospitals that can benchmark performance by creating a custom compare group using selected attributes are able to effectively prioritize and improve outcomes and processes for competitive advantage and patient satisfaction. In addition, transparent benchmarking enables hospitals to collaborate and network with similar organizations for peer-to-peer improvement.

Source: Vizient Clinical Data Base, 2017

CMI = case mix index; dis = discharge; DX = diagnosis; ICU = intensive care unit; inpt = inpatient; proc = procedures; surg = surgery ; TX = treatment

Figure 2: Linking quality to cost

Global Measures:

Include - MS-DRG: 652 Kidney Transplant

Hospital	Cases	Mean LOS (obs)	Mean LOS (exp)	LOS Index	% Deaths (obs)	% Deaths (exp)	Mortality Index	DDD Cost/Case \$
Great State	101	3.92	6.16	0.64	0.00%	0.36%	0.00	\$4,566
Vizient Benchmark Group	2,025	5.07	6.12	0.83	0.10%	0.37%	0.26	\$6,892
All Vizient CRM Participants	8,557	5.87	6.07	0.97	0.13%	0.38%	0.34	\$8,748

Drug Utilization External Benchmarking

Drug	HCO			Vizient Benchmark Group			All Vizient CRM Participants		
	% Use	Duration (days)	DDD Cost/Case \$	% Use	Duration (days)	DDD Cost/Case \$	% Use	Duration (days)	DDD Cost/Case \$
albumin	13.5%	1.2	\$206	29.9%	1.3	\$212	37.9%	1.4	\$233
alemtuzumab	0.0%			14.4%	1.0	\$1,755	5.8%	1.0	\$1,758
anti-thymocyte globulin (equine)	0.0%			0.1%	4.0	\$16,055	0.7%	2.9	\$11,701
anti-thymocyte globulin (rabbit)	49.0%	2.8	\$8,232	44.5%	3.1	\$10,202	60.6%	3.4	\$10,267
basiliximab	0.0%			25.5%	1.6	\$4,702	20.2%	1.7	\$5,104
belatacept	1.0%	2.0	\$5,554	1.9%	1.8	\$5,157	1.8%	1.7	\$4,721
cytomegalovirus immune globulin, human	0.0%			0.4%	1.4	\$3,481	0.3%	1.6	\$5,669
ganciclovir	0.0%			11.9%	4.3	\$292	15.1%	4.0	\$279
immune globulin (IGIV)	2.1%	1.5	\$4,338	5.3%	1.9	\$5,472	4.3%	2.3	\$6,746
mycophenolate acid	3.1%	4.3	\$101	35.1%	5.2	\$123	27.1%	5.5	\$129
mycophenolate mofetil	100.0%	4.9	\$27	74.7%	4.5	\$174	76.5%	5.5	\$181

Leading organizations have transparency to map cost to quality indicators, such as length of stay and mortality.

Source: Vizient Clinical Data Base, 2017

Action steps to align quality and cost

The transition from volume to value depends greatly on reducing waste while making outcomes transparent to consumers and payers. The key to bringing this goal within reach is access to the right kind of data. Integrated analytics transparently tie cost and quality outcomes, which in turn can be used to eliminate waste and improve patient experiences. The following steps provide a framework for redesigning care to achieve this balance between cost and quality.

Identify where the health care organization stands against like peers in terms of quality of care, patient outcomes and patient satisfaction. Comparative analytics enable the hospital to evaluate its performance against other hospitals with similar patient cohorts across hundreds of metrics—from mortality and complication rates to resource utilization and more. Be aware that clinicians will only trust fully transparent data. At a minimum, they will want to know the actual hospitals their own organization is being compared to, along with insight into the risk and severity-adjusted methodologies used to drive the benchmarking data. Larger comparative sets are not always better. Hospitals who can transparently compare their organization to a group of similar organizations have higher quality and accountability performance than hospitals who compare non-transparent groups of more than a hundred organizations.

Understand how to improve quality, patient outcomes and patient satisfaction in the most cost-efficient way. Use benchmarking analytics that integrate supply, quality, safety and operational data to tie patient outcomes, supplies and procedures to individual clinicians. Then use findings to compare the clinician's performance and expense with other clinicians inside and external to the hospital. From there, the findings should reveal how the clinician's treatment protocols affect quality—and identify those protocols to adopt from top performers that are cost effective or efficient without sacrificing patient satisfaction, safety and better outcomes. Only data where substantial drill down is available is valuable. It's not enough to know that you have greater pharmacy costs in chronic obstructive pulmonary disease (COPD) patients compared to a like group of hospitals. You will need a data set that can drill into the individual drugs where your utilization is much greater. **Determine which enterprisewide leadership or clinical transformation priorities to focus on, in order to position the health care organization as best in class.** Health care leaders should prioritize improvement projects that are most impactful on quality and cost—the next section includes details on this point. In a parallel requirement, providers need to understand when it is appropriate to take on any type of risk. Strong executive leadership, third-party partners and internal process improvement teams help providers improve care quality, reduce total costs of care and focus value efforts. However,

without physician championship and physician leadership, care delivery improvements are dead in the water. This reality is a primary driver of a movement to recruit physicians as executive leaders.

Physician leadership is also paramount as physicians have immediate influence on at least 35 percent of the total cost of care, according to one estimate. This percentage represents direct variable costs—that is, those costs that are associated with patient activity, as opposed to fixed direct costs, such as hospital staff salaries. Yet too often physicians are in the dark about costs despite their influence on expenditures. In a common scenario, consider

a physician who has the choice of ordering an MRI or CT scan. As one physician noted, “It’s not about knowing the exact dollars and cents—that actually doesn’t matter. But it is about having some idea of magnitude, like an MRI is twice as expensive as a CT. When is it worth twice as much? When is it high value?”

Gleaning insights from data can answer such questions by matching outcomes to clinicians and procedures. However, someone needs to make sure the answers are actually pursued and shared with physicians to affect change. Many hospitals are putting a physician in this role.

Industry example: aligning quality and cost

A health system in rural Illinois sought to improve care, but needed clear benchmark data to accurately compare its performance against other hospitals. This is typically difficult data to acquire, with only a limited amount intermittently reported by different agencies. Once released, these reports offer hospitals little in the way of drilling down into the data to compare performance against hospitals with similar patient cohorts.

After the health system was able to access a robust database of continuously refreshed, risk-adjusted data, this challenge disappeared. Now the health system could compare both hospital and individual physician outcomes against external and internal peers. After understanding the scoring methodology behind the data, physicians had the transparency and trust they needed to willingly engage in improvement projects. This was fortunate, as the data also helped to pinpoint two particularly promising improvement projects—readmissions and mortality.

Reducing non-value-add clinical variation: the key to unlocking true value

As hospitals and physicians strive to achieve better outcomes at a lower cost, health care leaders are intensifying their focus on reducing non-value-added clinical variation. They know that quality of care depends more on consistency than cost—and that when patients go off a routine plan of care, complications and expenses inevitably mount. Waste is also linked to variation. Some hospitals, for example, order more antibiotics than are needed to treat pleurisy in pneumonia, while outcomes are the same or worse than a competing hospital that spends less. In this context, cost is quality.

But context is often the critical missing element in the puzzle. Many hospitals lack access to data that directly connects outcomes and total costs to care processes and utilization—and not just internally for individual physicians. Hospitals must be able to compare what they spend for treating various conditions and episodes of care with other hospitals, and compare the outcomes. If all hospitals had such insight—and acted on it—the financial impact on

our national health bill would be astounding. It is estimated that unnecessary variations in care account for about 30 percent of health care spending.

Prioritizing variation reduction projects

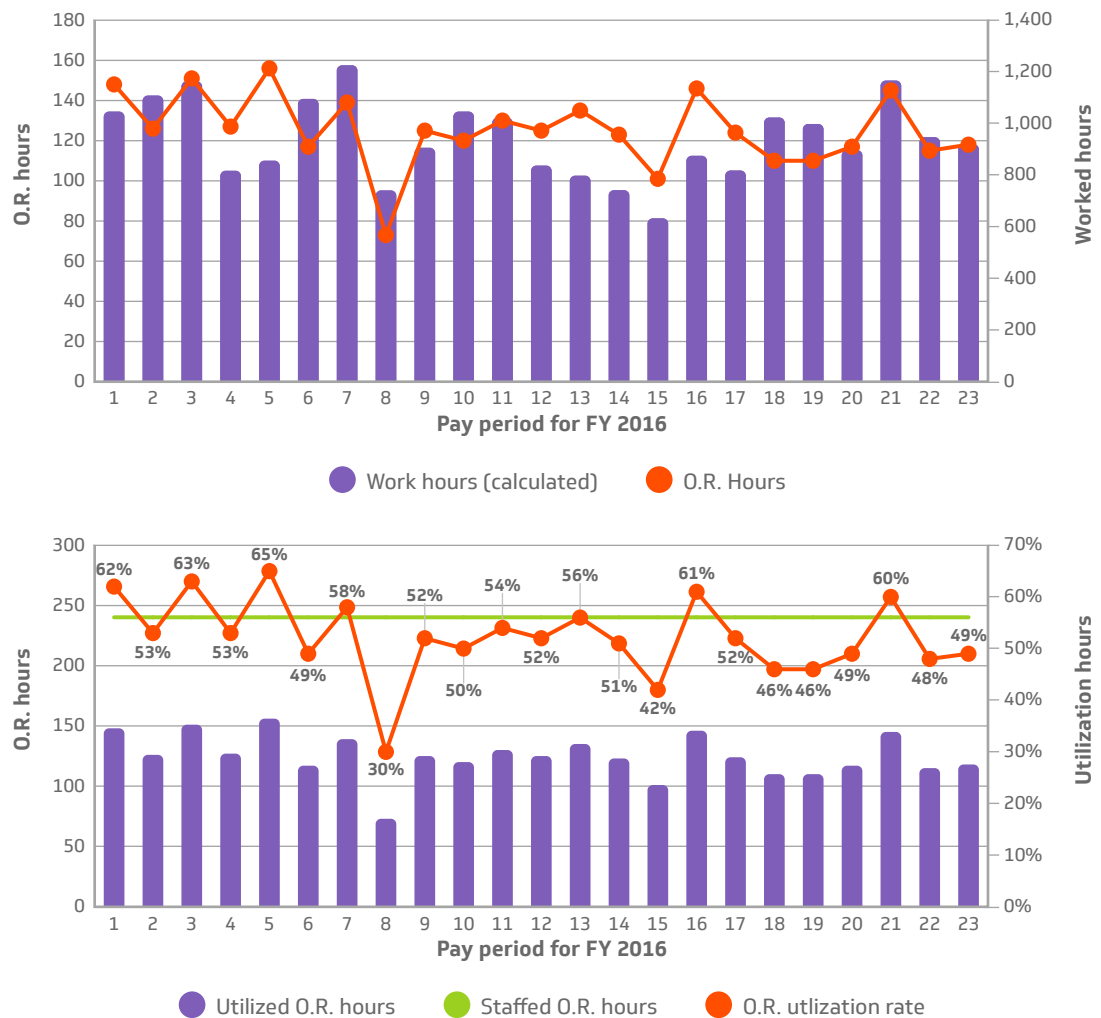
Health care leaders who want to reduce variation should first pinpoint the outcomes they hope to achieve. Common targets include:

- Reducing variation across physicians or sites for same case
- Reducing variation in outcomes across physicians or sites for same case
- Lowering cost per case
- Improving patient and employee satisfaction

While all are desirable outcomes, health care leaders should typically focus on the ones that are most impactful on quality and cost. For example, a hospital might be performing poorly on measures such as catheter-related bloodstream infection and heart failure readmission rates. If only a handful of patients are affected with a blood stream infection, while hundreds more are experiencing heart failure readmissions, then it makes sense to concentrate more resources on the latter. In the same way, one can also examine product preference to determine whether items with a higher price are resulting in better outcomes.

Other factors can also determine a course of action, with local market needs the biggest driver of all. A hospital that serves a community with significantly high rates of chronic heart failure or diabetes, for example, would likely want to focus on corresponding improvement initiatives. Or perhaps the media is shining a light on hospital-acquired sepsis, putting pressure on a local hospital to make improvements. In either case, a robust, comparative analytics database can enable mirror-like comparisons with other hospitals. If examining sepsis outcomes, for example, health care leaders can compare against hospitals with similar patient variables, such as acute kidney failure and malnutrition as significant predictors.

Figure 3: Productivity and utilization in the O.R.



Key data metrics identify variance in clinical operations to further target and prioritize clinical performance improvement

Source: Vizient Labor analysis

Action steps for reducing variation

Health leaders interested in achieving value should give serious consideration to standardizing the best, most cost-effective processes and supplies across the system.

It is truly one of the most powerful strategies for lowering the total cost of care while increasing quality and better outcomes. In addition, organizations need to reduce the number of order sets they use by examining utilization of labs, ancillary services, drugs, diagnostics and blood. To that end, the following set of steps are designed to pinpoint sources of clinical non-value-added variation.

Identify the specific drivers of supply, labor and resource utilization variation across the health system's physicians or facilities. In a parallel step, identify the drivers of outcomes or service variation across the health system's physicians or facilities.

Comparative evidence identifies drivers of expensive utilization, and also those drivers that achieve clinical and cost alignment. With these insights in hand, health leaders can identify the best clinical processes to standardize. As an example, suppose a hospital wants to increase operating room (O.R.) throughput—without, of course, jeopardizing patient safety. A logical place to start is comparative data that shows the number of operations conducted by the hospital's surgeons for a particular procedure; the average amount of time the O.R. is reserved for each patient; the total cost; and the outcomes. The data compares surgeons internally, and also makes external comparisons with other hospitals. Insights will soon follow that pinpoint which surgeons and hospitals achieve the best outcomes at the lowest costs. A robust set of data will further analyze the

care processes of these cases—and even the line item expenditures to identify if lower performing physicians or facilities are ordering unnecessary supplies.

Reduce variations while maintaining or improving outcomes. Identifying the sources of variation is a tremendous breakthrough for hospitals. The next step is to end the variation for good. Two powerful methods to eliminate and prevent further variation in a process are “standardizing work” and “mistake proofing.”

Standard work defines the most efficient and effective method to deliver a service or perform a procedure. By developing and adhering to an established standard, variations in process that have the potential to negatively impact quality, safety and cost are minimized or eliminated. Driving adherence to standard work is one of health care's greatest operational challenges unless visibly championed by leaders. However, once implemented, virtually any qualified individual will perform the work at a very high level of efficiency and quality, and without unneeded variance.

Mistake proofing is any mechanism in a process that prevents operator error or mistakes; especially those resulting from lack of attention, skill or experience. Process engineers, aided by a close study of workflow to identify where error is most likely, can develop effective mistake-proofing mechanisms. This can be as simple as removing variable choices, such as a certain supply deemed unnecessarily expensive compared to another supply that works just as well. Or it can be more involved, such as reducing a complicated chain of communication by several steps in order to avoid incorrect orders.

Industry example: reducing non-value-add clinical variation

An integrated Catholic health care delivery system cares for patients throughout California, Texas and New Mexico. It provides a full range of care facilities, including 16 acute care hospitals, home health agencies, hospice care, outpatient services, skilled nursing facilities, community clinics and physician groups.

Post-implementation of an electronic health record (EHR) system, clinician productivity and patient satisfaction dropped. However, a subsequent analysis revealed there was more going on than the launch of a new EHR. Care processes within the EHR were lengthy, with widely varying utilization. Clinical charting was

taking place in three or four locations, while emergency department-related services had proliferated to a cumbersome degree.

The health system ultimately redesigned a number of workflows in the EHR, standardizing three models of care. This removed at least 50 clicks and 12 to 18 minutes per patient chart. A single location for event charting was also designated, while in an additional measure, the team consolidated several services under one umbrella.

Simplifying and streamlining soon paid off. The health system ultimately returned more than 50,000 hours from unproductive interaction back into patient care. In turn, this drove 20 to 50 percent reductions in door-to-physician time, along with 15 to 20 percent reductions in length of stay, in half of the health system's hospitals.

Optimize service line performance: becoming a successful system of care

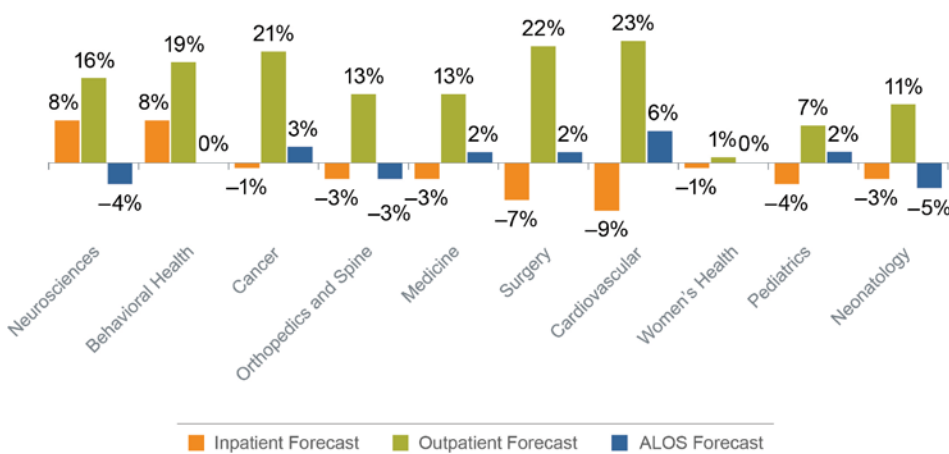
An effective service line strategy plays a crucial role in a health system’s ability to strengthen operational, clinical, and financial performance. Indeed, the future of care delivery is largely about optimizing service lines, along with care coordination and location of care delivery. The anticipated outcomes are the same that health care organizations presently target: improved profitability by service line, and most importantly, improved patient experience per service line—defined as receiving the right care at the right time at the right place.

In simplest terms, an optimized service line provides cost-effective, patient-centered care with superior outcomes for a condition or specialty. Care is organized around the patient’s needs at every point of the care journey—and increasingly, this includes beyond the four walls of the hospital to address what happens before admission and after discharge.

To improve an existing service line, health leaders must focus on both clinical and financial performance across the continuum. To that end, clinical and cost data are essential to assess where value is missing. Transparent sharing of this data with physicians is also crucial. Physicians drive significant spending, and must have insight into what supplies actually cost. Many have no idea and are shocked when they discover a favorite supply costs five or 10 times more as one from a different brand, or that post-acute care services are key drivers of total cost.

For some physicians, this will be reason enough to change to the less expensive version. But what will truly compel most physicians to change is also comparing their costs and outcomes with other physicians. Sharing this data regularly with physicians is one of the most effective strategies to reduce widespread variation in supply ordering and utilization.

Figure 4: Service line growth rates in US Market, 2017-2027

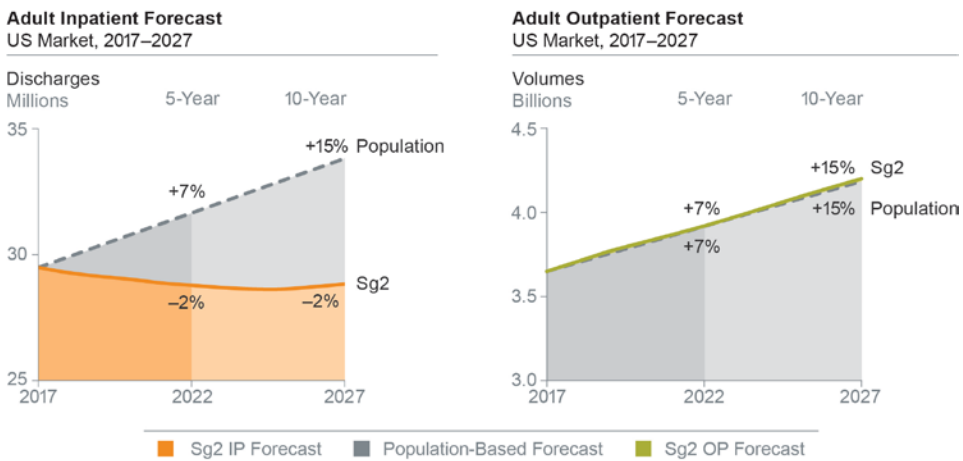


Hospitals must understand current and future demand for service lines and procedures to make informed service line strategy and investment decisions.

Note: Cardiovascular includes cardiology and vascular service lines. Medicine includes allergy and immunology, dermatology, endocrinology, gastroenterology, general medicine, infectious disease, nephrology, pulmonology, and rheumatology service lines. Surgery includes burns and wounds, general surgery, ophthalmology, ENT, and urology service lines. Neurosciences includes the Brain Cancer CARE Family. Behavioral health includes the psychiatry service line group.

Sources: Sg2 Impact of Change®, 2017; HCUP National Inpatient Sample (NIS), Healthcare Cost and Utilization Project (HCUP) 2014. Agency for Healthcare Research and Quality, Rockville, MD; OptumInsight, 2015; The following 2015 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2017; Sg2 Analysis, 2017.

Figure 5: Inpatient declines level off, outpatient volumes mirror population estimates



Note: Forecast excludes 0–17 age group.

Sources: Sg2 Impact of Change®, 2017; HCUP National Inpatient Sample (NIS), Healthcare Cost and Utilization Project (HCUP) 2014. Agency for Healthcare Research and Quality, Rockville, MD; OptumInsight, 2015; The following 2015 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2017; Sg2 Analysis, 2017.

Whether retooling a service line for new market needs or building a new service line altogether, hospitals must have a firm grasp of current and forecasted demand, local market demographics and existing patient flow through the care continuum.

Action steps to optimize service lines

Whether retooling a service line for new market needs or building a new service line altogether, hospitals must have a firm grasp of current and forecasted demand, local market demographics, and understand existing patient flow through the care continuum. These are foundational to building an invest-and-divest strategy that improves profitability and quality. The following steps outline key tactics.

Identify which service lines enable the health care organization to competitively serve its market.

Demand forecasting and trends analysis, along with risk stratification expertise, provide a detailed picture of a market’s patient populations and a hospital’s ability to deliver care to them.

Identify the resources, technology or capabilities to invest in. Building out a system of care profile helps a health care organization understand its operating footprint—for example, the organization’s portfolio of services and degree of integration across the care continuum. This insight enables the organization to prioritize capital investment requirements, coordinate care locally and across the system, and strengthen partnerships. In doing so, the expectation is improved outcomes, increased patient satisfaction, and superior operational and financial performance.

Define how to effectively streamline operations for each service line to drive growth and achieve the best patient outcomes and patient satisfaction. Begin with a studied analysis of patient flow across the service line, and all the resources that come into play. When process engineers examine service lines, they often identify 45 to 60 percent of waste in resources. That includes the precious resource of time, which is often wasted in countless meetings. Rooting out the sources of waste, bottlenecks and other constraints on the service line can significantly streamline the service line as it presently exists—and help morph it into a system of care. This should be the ultimate goal as, done right, this model is highly profitable.

Engage physicians and leaders across the organization to improve profitability of key service lines. Comparative data is a powerful motivator. But as earlier noted, clinicians will only consider comparisons with similar hospitals valid. Charge-based patient data, paired with internal and external peer performance data, can convince a physician that there is a meaningful opportunity for change. However, the aim is to have physicians reach these conclusions on their own. The data can support, but should not supplant the physician’s ownership of which care delivery method to standardize.

Industry example: optimizing service lines

A large health system with numerous locations in the Southeast is a leader in patient care and medical research. Its physicians treat more than 1.6 million patients annually and perform more than 35,000 surgical procedures.

The health system was interested in comparing robotic bariatric surgery to conventional laparoscopy, and collected data on outcomes and costs for its top two bariatric surgeons. To identify practice variations, the system compared major cost drivers and other details for 95 separate procedures.

This intense data analysis ultimately revealed that robotic-assisted surgeries were 71 percent more expensive with no change in patient outcomes. Specifically, they added \$4,498 per case, increased O.R. time by 22 minutes and doubled the patient's length of stay.

Using these findings, clinical leaders devised a standard protocol to drive smarter utilization of the robotic-assisted surgeries based on type of patient and procedure, optimizing the patient experience. Substantial cost savings were also realized at \$4,500 per case.

Commitment to change: making care improvements last

Given that eliminating waste is a core strategy in improving care, it seems appropriate to conclude by cautioning that nothing is more wasteful than losing a hard-won success. To sustain improvements in care delivery, hospitals should follow a now-familiar series of steps: engage clinical leaders as a central catalyst; draw on reliable analytics and data to align leadership and clinicians to mutual goals; and use analytics and data to measure sustained success, improved quality metrics, and quality rankings or metrics. Here is a recap of the chief benefits of these strategies:

Continual use of comparative performance data. Such data is a powerful, proven feedback tool. Once you introduce clinicians to comparative data they understand and trust, they will accept—and embrace—this data as an essential tool for delivering the best possible care to their patients.

Accountability. Data also provides the accountability that is integral to sustaining success. But leadership also needs to designate the people who will be responsible for sustaining success; typically, these are the people who lead service lines or departments where an improvement is made.

Measure success. Metrics are key, along with regular updates of the latest numbers to all stakeholders.

Create a culture of continuous improvement. While this may sound like an arduous undertaking on its own, it is mostly fulfilled after implementing the above components. Data provides insights, for use by those in charge of maintaining success to continually measure and observe and maintain progress. This progress begets more

progress, which begets more improvements. At which point, physicians, nurses and other clinicians are no longer uncertain of the best way to deliver care. Now they are truly practicing it—and leading their peers to do the same.

Make progress toward achieving the Quadruple Aim. While the Triple Aim gives us the familiar goals of reducing cost, improving population health and enhancing patient experience, recent reports show widespread burnout and dissatisfaction among clinicians. Unnecessary variation is a key contributor to burnout, as clinicians and staff currently must keep track of a myriad of protocols and preferred products. Engaging physician and nurse leadership in discussions to reduce variation fosters a healthy relationship between the clinicians and administration, while contributing to the fourth goal of improving the work environment for clinicians and staff.

Contributors:

Eric Burch, RN, MBA, FACHE, associate principal, Vizient

Julie Cerese, RN, senior vice president, performance management and national networks, Vizient

Kristi Crowe, principal, Sg2, a Vizient company

Marty Lucenti, MD, PhD, senior principal, Vizient

Steve Meurer, PhD, MBA, MHS, executive principal, data science and member insights, Vizient

Aman Sabharwal, MD, MHA, CPHM, senior principal, advisory solutions, Vizient

Debbie Schuhardt, FACHE, principal, advisory solutions, Vizient

Bradley Schultz, principal, advisory solutions, Vizient



290 E. John Carpenter Freeway
Irving, TX 75062
www.vizientinc.com



For more information, contact us at
CareDelivery@vizientinc.com

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