

# The Power of Transparency in Clinical Analytics

Remove the road blocks to rapid performance improvement with transparency in benchmarking and methodology

by Beth Godsey, senior director, Vizient data science, methodology and national imperatives



Two of the first questions every trustworthy news story must answer are "who" and "how." These questions should be just as critical in clinical analytics benchmarking and risk adjustment. Who are hospitals comparing themselves to and how are the results calculated?

Two truths regarding transparency in clinical analytics are clear:

- 1. It's vital for hospitals to truly know where they stand among their peers and how underlying methodologies are calculated.
- 2. This transparency doesn't exist in most performance improvement solutions available today.

## Transparency in benchmarking

When clinical leaders, physicians and other decision-makers are presented with benchmarking and performance improvement opportunities compared to their peers, the conversation often begins the same. Those stakeholders immediately question the data validity and comparisons. Do the comparison hospitals see similar patients? Do they perform similar procedures? Some will say they just don't believe or trust the data until these two critical questions are answered.

Such questions and objections aren't necessarily bad, but they are giant road blocks in your organization's performance improvement journey because they take time, effort and expense to overcome. People are much more likely to respond to benchmarking data and corresponding opportunities if they clearly understand which organizations they're being compared to. The Vizient™ Clinical Data Base (CDB) allows you to:

- Identify and select which organizations you want to benchmark against from a list of every hospital in the data base for individual- or aggregate-level reporting
- Choose your comparison hospital(s) based on performance by clinically similar cohorts or by hospital characteristics such as bed size, location, trauma center status, etc.
- Understand the transparent risk-adjustment methodologies which dovetail to the nuances that differentiate pediatric risk-modeling from adult, as well as academic medical centers (AMCs) from community hospitals

### **Testimonial**

The CDB users can see data to set goals for performing better than like peer hospitals, or even aspire to reach for benchmarks set by top hospitals. Blessing Health System in Quincy, Illinois, looked to the CDB to see how they benchmarked against other community hospitals. With the CDB, the 307-bed system can select specifically which hospitals to compare against and a risk methodology that aligns more closely with its patient population—resulting in usable data appropriate for the size, location and patient demographic factors it deems necessary to improvement efforts. "We've showcased the power of Vizient analytics throughout our organization by sharing our results and reports with senior leaders and showing them how the solution works," said Lance Privett, director of performance excellence at Blessing. The senior leaders have confidence in the data because they can see who they're comparing themselves to, reducing the time to buy-in for performance improvement opportunities.

## Transparency of methodology

Most performance improvement solutions that offer risk adjustment don't include insight into their calculations. What specific weights or importance do they give to certain clinical conditions over others? It's a risk-adjustment black box because you can't see how they arrive at their calculations. Naturally, that makes the resulting data less trustworthy.

Clearly understanding risk-adjustment calculations allows health care organizations to better understand how their patients compare to other patients in areas such as mortality, length of stay and direct cost. The transparency of calculations helps level the playing field between a hospital with a high comorbidity versus a hospital with a lower comorbidity, or two hospitals that may be similar in size but treat different patient populations.

To implement sustainable change, physicians and decision-makers need the ability to focus on the patient rather than the method. Full data transparency and a complete understanding of how the CDB calculates results provides for that.

The CDB allows for comparisons by accounting for patient-level risk at the individual clinical cohort level. Its methodology for annual risk models is completely transparent, allowing members to see exact variables that contribute to the model, as well as their level of significance.

Each variable definition for both the AMC and community hospital risk models are available for member review. For instance, the Vizient sepsis mortality model has variables such as acute kidney failure and malnutrition as significant predictors along with the specific ICD-10 diagnosis codes that define these—and all other predictors are transparently provided to members.

With the CDB, not only are the risk and cost methodologies 100 percent transparent, but Vizient members provide feedback and future direction on the variables and clinical components through a member-facing, member-driven task force. Participants review Vizient progress and provide feedback and insights—allowing the CDB to more closely align with how our members view patients from a clinical perspective.

For example, members requested evaluation of more procedure specific risk models for cardiac surgery, such as valve repair or replacement procedures and orthopedics models for hip and knee procedures to support a more refined clinical view. Vizient is currently evaluating these models for its risk adjustment update scheduled later in 2017.

Vizient also leverages the expertise of world-renowned subject matter experts to further improve the performance improvement solution. After specialists from Harborview Medical Center reviewed the CDB extensive burn models, they suggested creating a risk-adjustment component to adjust for certain age demographics. The result was an improved, more stabilized the CDB burn model—which will aid all the CDB users. Vizient also incorporated feedback from other specialty groups, such as cardiac surgery, neurosciences, trauma and neonatology.

## Vizient Clinical Data Base

The Vizient Clinical Data Base is the definitive analytic platform for performance improvement, trusted by 97 percent of academic medical centers, more than 160 community hospitals and more than 50 health care systems nationwide. For more than 30 years, it's served as the foundation for performance improvement efforts.

Using our Clinical Data Base, you focus on cost and quality of care through a single platform. The CDB highlights opportunities for improvement by combining risk-adjusted encounter data and line-item transactional detail to yield information on patient outcomes and resource utilization.

Transparency of peer groups and methodologies



"I can trust the data."



Clinical and physician leader buy-in



Rapid performance improvement

# Quality and accountability performance scorecard

The transparent data within the CDB makes reporting and monitoring easy. In 2005, Vizient developed its Quality and Accountability (Q&A) performance scorecard that combines the transparency of benchmarking and risk adjustment. Performed annually since that time, the study helps community hospitals and AMCs identify structures and processes associated with high quality and safety performance across a wide variety of patient populations and facets of care. Based on the Institute of Medicine's STEEEP (Safe, Timely, Effective, Efficient, Equitable & Patient Centered) analytic framework, Vizient developed a similar framework to support improved patient care. The Vizient Q&A leverages six domains of care (safety, timeliness, effectiveness, efficiency, equity and patient-centeredness), and the resulting data is timely, contemporary and actionable.

Vizient produces online scorecards for participating members compiled using data from various sources, including the CDB. The scorecards provide comparative ranking information for community organizations and AMCs, in each of the six domains, an overall star rating, and a list of the top-performing organizations in rank order.

## **Testimonials**

Blessing Health System relies on its scorecard as an incentive, largely because the data is recent (the previous quarter) and transparent. "The Q&A performance scorecard is our challenge to be better," said Gerri Buss, process improvement specialist. "This is as close to live data as we can get, and it puts us in a competitive mode to be a five-star organization." Vizient also releases a quarterly Q&A calculator that provides a pulse-check to organizations on their performance in the Q&A metrics.

The sky's the limit for Dartmouth-Hitchcock (D-H), in Lebanon, New Hampshire. D-H has relied on both the CDB and the Vizient annual Q&A scorecard ranking in recent years to accelerate its performance improvement efforts. The health system received the 2016 Vizient Rising Star Award for its significant progress in year-over-year rankings in the Q&A Study. D-H ranks at number 22 out of 102 Vizient AMC members. It stood at number 67 just five years ago.

# Identify, accelerate and sustain improvements

## Full transparency = faster buy-in

Full transparency is a cornerstone of the CDB. You can analyze hospitals by name, allowing you to benchmark against the hospitals of your choice. At the same time, you can clearly see the methodologies that are driving the benchmarking data.

That's why the CDB users experience a shortened gap between data acceptance and actual performance improvement. It accelerates the conversation with those who aren't willing to accept the data. There is less convincing and quicker action because physicians, for example, can see from day one exactly who they're comparing against.

## Slice and dice the data

Transparency also provides the ability to slice and dice the data to suit your specific needs. With the CDB, you can perform benchmarking analysis at the patient and physician levels, identifying opportunities that much faster. You have transparency within your own institution and benchmarking against your peers, allowing you to quickly see issues.

Here's an example: you identify that patients admitted through your emergency department into the intensive care unit stay longer than your compare group in the CDB. Why is this happening? That starts the conversation about what internal processes need to be put in place to address the issue. You can reach that level of granularity because the CDB is transparent not only with your peers but also with your own data. And though transparency is perhaps the greatest asset of the CDB, individual patient information is always protected. Participating hospitals cannot view each other's patient-level details.

#### Identifiable allies

Knowing specifically which hospitals and health systems your organization is comparing itself against allows you to take performance improvement to the next level. The CDB users regularly reach out to each other to ask questions, share best practices and strategize ways to improve specific measures.

The CDB also offers many member opportunities for both in-person and online interaction and idea-sharing throughout the year—all of which help speed up the performance improvement process. These make it particularly easy for new the CDB users to tap into user groups that can be most helpful to their specific initiatives.

These opportunities include:

- · The CDB list server
- The CDB annual meeting
- The CDB-specific networks and collaboratives on a wide range of topics
- · Monthly the CDB coordinator calls
- Training workshops

## Actionable analytics you can trust

It's downright difficult—and time-consuming—to hit the performance improvement nail on the head. Total transparency helps ensure you reach your target goals faster. The CDB allows you to cut through the questioning to confidently engage clinical leaders—who can quickly focus their improvement efforts, realize improvements faster and sustain improvements longer.

Transparency in your performance improvement efforts today is essential to your organization's ability to continue providing high-quality care to future generations. Transparency gives physicians permission to immediately trust data—leading to quicker buy-in and faster action.

## About the author



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As Vizient senior director of data science, methodology and national imperatives, Beth Godsey oversees analytical modeling, metric development, and the hospital ranking and scoring methodology and framework for Vizient members. Additionally, she supports member scenario and impact analysis regarding changes to the national landscape, including Centers for Medicare & Medicaid pay-for-performance program methods and publically reported measures and methodology.

Previously, Godsey was manager of quality analytics at BJC HealthCare in St. Louis. In that role, Godsey was responsible for statistical support, including case-control analysis, risk prediction, and multifactorial analysis across BJC.

Godsey has 15 years of statistical analysis and modeling experience. Her key experience includes providing advanced analytical and systemwide support for major hospital strategic initiatives.

Godsey holds two master's degrees—in predictive analytics from Northwestern University and business administration from Webster University in St. Louis. She earned her Bachelor of Science in statistics from the University of Tennessee at Knoxville and is a Six Sigma Black Belt.

