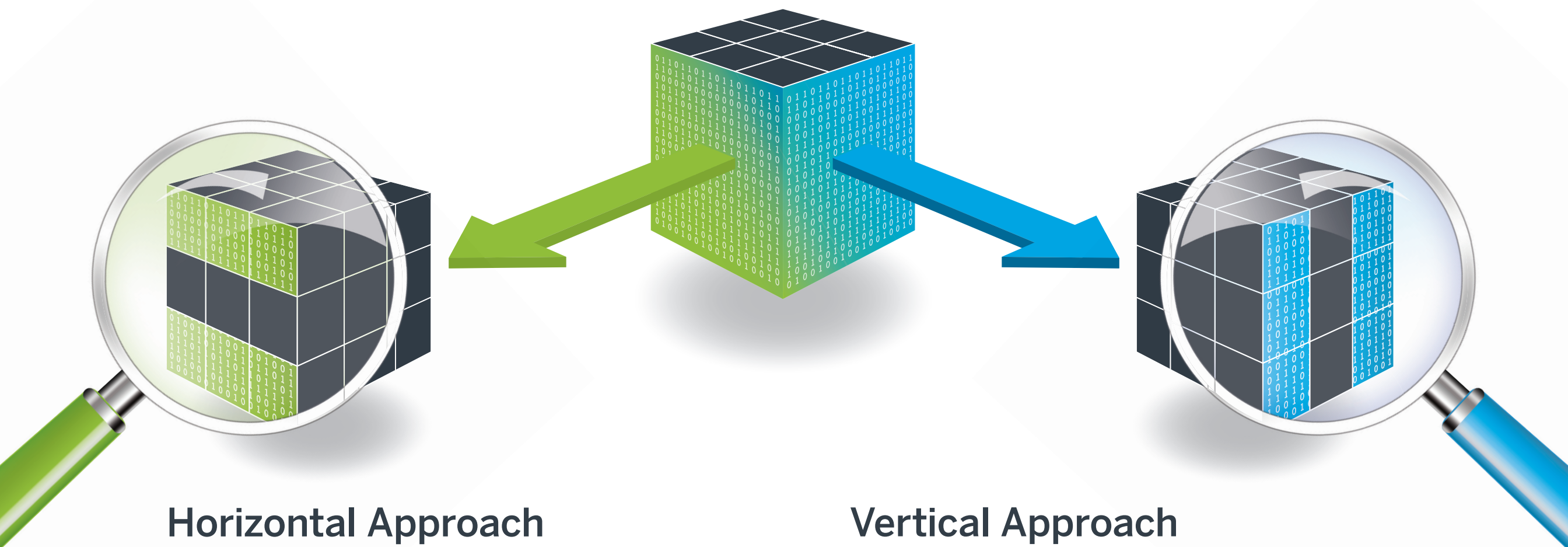


TWO WAYS TO IDENTIFY Clinical Variation

Prioritize Different Variation Reduction Opportunities

There are many opportunities to reduce care variation in hospitals today, but a common challenge is how to prioritize. Hospital leaders can start by examining variation in two ways, “horizontal” and “vertical.” A horizontal approach focuses on the use of costly resources across multiple conditions, while a vertical approach analyzes performance within a particular condition or patient population to develop a consensus-based standard.



Horizontal Approach

Analyze by charge type

Horizontal analysis focuses on variation in high-resource charge types that cut across DRGs, such as pharmacy costs and imaging.

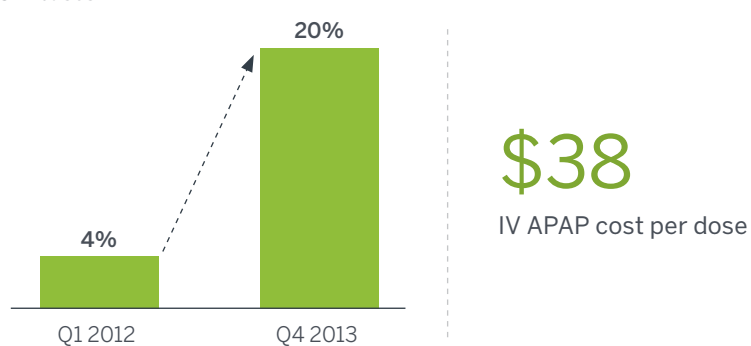
Example: Assessing the Value of IV Acetaminophen (IV APAP)

IV APAP Utilization and Cost Increasing

Clinical leaders are concerned with both the rising cost and utilization of IV APAP, a drug increasingly used in multimodal post-operative pain management. The Advisory Board ran a horizontal analysis of Crimson Continuum of Care data across surgical DRGs to answer the question: “Is IV APAP yielding benefits in proportion to its costs?”

Percentage of Cases Using IV APAP Increasing

n=2,569,321 cases



Two Observations from IV APAP Analysis¹

- High-opioid approaches yield unnecessary complications.
A lower-opioid approach:
 - Reduces complications by 36%
 - Shortens length of stay by 29%
- To see a benefit from multimodal regimens, clinicians must **reduce overall use of opioids.**
 - However, the increase in IV APAP did not have a corresponding reduction in opioid use or dose
 - Without a reduction in opioid dose and use, the value of IV APAP is obscured, making prioritization difficult

Challenges with a Horizontal Approach

- It's difficult to understand the relative value of a particular resource without further analysis
- Analysis may uncover other questions about variation, making prioritization of opportunities difficult
- Analysis risks alienating physicians by focusing on reducing utilization

Vertical Approach

Analyze by clinical condition or patient population

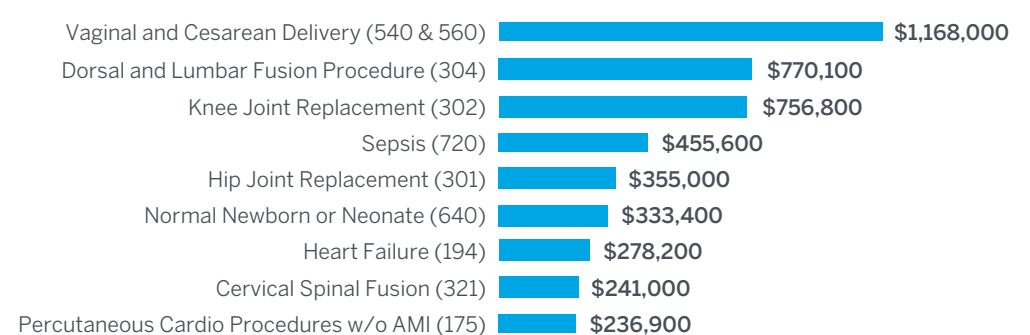
Vertical analysis focuses on setting a consistent standard of care for a particular clinical condition or population.

Example: Assessing the Potential Impact of Reducing DRG²-Specific Variation

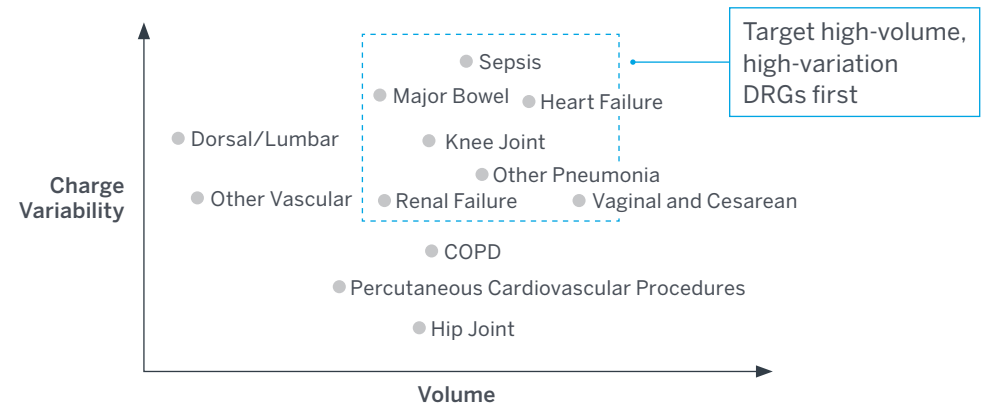
Two Ways to Assess DRG-Specific Variation Impact

- Outlier Reduction:** Changing the practice patterns of a small group of physicians whose practice patterns are far outside the facility norm
- Shifting the Mean:** Getting groups of physicians to make small changes to their practice patterns to improve overall outcomes

Average Hospital Opportunity to Reduce Outliers³ by Severity-Adjusted DRG



Comparing DRGs by Size of Opportunity of Shifting the Mean⁴



Benefits of a Vertical Approach

- It's less complex to demonstrate potential value of reducing variation for a particular clinical condition
- It's easier to engage physicians to reduce variable outcomes in similar patients with similar conditions