

Five steps every hospital CEO should start today

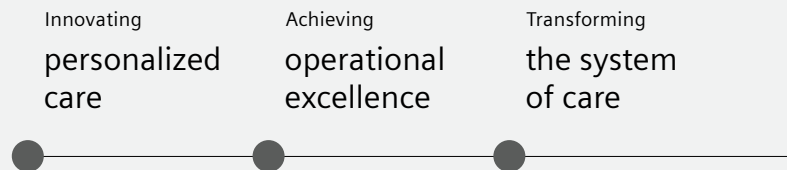
A thought leadership paper on
'Innovating personalized care' with Brent James, MD, MPH
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Preface

The Insights Series

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Five steps every hospital CEO should start today

Executive summary

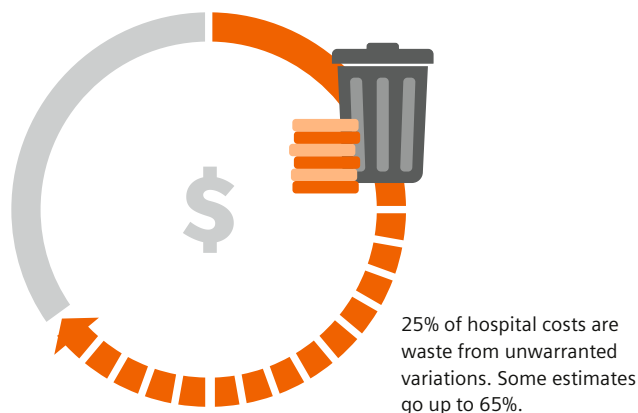
Today, hospital executives hold the key to unlocking the value of reducing variation. Hospitals are an indispensable part of the communities they serve, so it is imperative that hospital executives continue the hard work of cutting waste while improving quality.

To do this, hospital leadership must tackle unwarranted variations. Addressing this issue hasn't resulted in the widespread success it promises because it hasn't typically been approached with strong executive leadership. We think it's time for that to change. Hospital executives around the world have never been under more financial pressure than they are today, and face numerous challenges including:

- an ongoing shift to a value-based care model,
- margins at a 10-year low, falling below levels seen during the last recession (Moody's, April 2018);
- revenue growth hindered by declining reimbursement rates

One of the biggest opportunities to improve outcomes while significantly – and sustainably – reducing costs is for hospital executive leadership to address unwarranted variations in a meaningful, comprehensive way. This paper offers a guide for executives looking for an overall understanding of how to lead sustainable change in reducing unwarranted variations, including:

- role of the top executive
- identifying opportunities for action
- planning for execution
- measuring results



It is important to note that reducing variations creates precision in hospital operations. Achieving this precision is critical for hospital leadership to be able to deliver increased certainty, predictability, and consistency in clinical and financial performance. For sustainable and systemic change – the sort of change that creates measurable improvements in outcomes and potentially adds tens of millions of dollars to a hospital's bottom line – unwarranted variations must be viewed as a hospital-wide initiative and be led by a hospital's executive management team.

We provide hospital executives a specific roadmap to unlock the enormous potential of reducing unwarranted variations. With the proliferation of precision medicine, tools and processes now exist for hospital leaders to address this problem in a thoughtful and successful way. There are two paths forward:

Action – Potentially tens of millions of dollars in savings, as well as improved outcomes and better patient satisfaction

Complacency – Fall behind competitors that are leading change, sacrifice improved margins, hinder predictability in financial forecasting, and increase waste in costs

“By adopting best-known standards of care and a relentless focus on eliminating unwarranted variations, we’ve been able to consistently improve our clinical outcomes and population health – and do so at some of the lowest healthcare costs in the country.”

Charles Sorenson, MD, CEO Emeritus
Intermountain Healthcare

The challenge

The sources of unwarranted variations are systemic by nature and widespread across healthcare systems.

Efforts to reduce wasteful spending by hospitals and health networks are nothing new. Many seasoned hospital executives have achieved sustainable success in driving out unnecessary expense from labor and supplies costs. As with most such efforts, the big savings are achieved early on with diminishing returns over time.

So what’s next? The concept of unwarranted variations has been discussed for years, but it remains one of the biggest opportunities to improve outcomes while reducing waste – creating savings that can be reinvested into the hospital. Frequently we see hospitals tackle this issue with discreet initiatives that might yield results, but often not at the level of sustainable savings that will incentivize a continued focus in other clinical areas. Some estimates show reducing care variation would create an annual savings opportunity in the range of tens of millions for most hospitals. We have identified four key sources of unwarranted variations. Addressing all four is fundamental to realizing significant savings, as well as improvement in the delivery of care.

Craft of medicine

Traditionally, most physicians see themselves as experts who craft unique diagnostic and therapeutic experiences for each patient, based on their formal education and the subconscious, subjective evaluation of their own practice experience over time. Most often, they use a standard approach for each clinical problem, then adjust it to individual patient needs. However, physicians don’t often share their ‘standard’ approaches, even when they share a

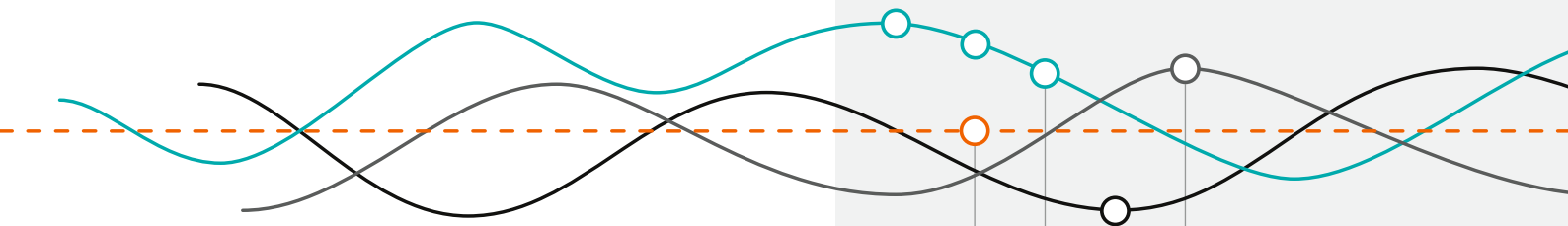
common practice environment with their physician peers. This variation produces high error rates, and an inability to learn from shared experiences. Physicians are unlikely to change the way they practice medicine unless presented with data that proves another way is better than what they have learned through their own personal experience. A classic example is the internal medicine service at any major academic teaching hospital. Attending physicians change regularly. Each time the attending physician changes, the idea of what constitutes ‘best medicine’ changes. The antibiotics that were ideal for the first attending physician are suddenly no longer ideal. Some diagnostic procedures are redone to satisfy the new attending’s practice style. Studies of physicians in non-teaching hospitals show similar massive variation. The variation is so large that it calls into question whether patients, even with full access to care, could possibly be getting good care.

Complexity of medicine

The overflow of new knowledge in medicine, driven by voluminous research and discovery, can exceed the capacity of the human mind to absorb and recall when needed. On average, there are 75 randomized controlled trials and 11 systematic reviews per day, overwhelming the medical industry and clinicians with new information. Research shows that the expert mind can address a maximum of between five and nine factors when making a clinical decision. Most areas of practice require that clinicians address many more than nine factors in diagnosing and treating patients.

Diagnosis variations

Variations in diagnosis can be attributed to three primary factors: technology poorly adapted to patients’ individuality, device-operator bias, and limited access to relevant patient results at the time of the diagnosis. Variations in



diagnosis are relevant because the incorrect identification of the patient condition creates a very high risk that all subsequent decisions will be inappropriate and potentially harmful for the actual condition that afflicts the patient. For example, diagnosis variation can be caused if screening and testing equipment doesn't account for a patient's individual weight, heart rhythm, or movement; or there is a manual operator error such as imprecise measurement of organs/lesions; and finally, the lack of integration and monitoring of data from different equipment creates a lack of access to patient data reported by those different devices.

Reduced transparency

Transparency in a clinical setting means that the right information is present at the right time to make the most-informed diagnosis or treatment decisions. The primary focus of effective transparency is the interaction between clinicians. The key question is this: How does a particular measure directly support a specific clinical decision? This requires data aligned along specific processes of care. It stands in sharp contrast to most clinical 'quality' measures currently mandated for oversight purposes, often by external agencies.

Craft of medicine

- Physician experience
- Lack of standards/protocols
- Physician subjectivity

Complexity of medicine

- Overflow of new knowledge
- Limitations of the human mind
- Lack of high-quality evidence

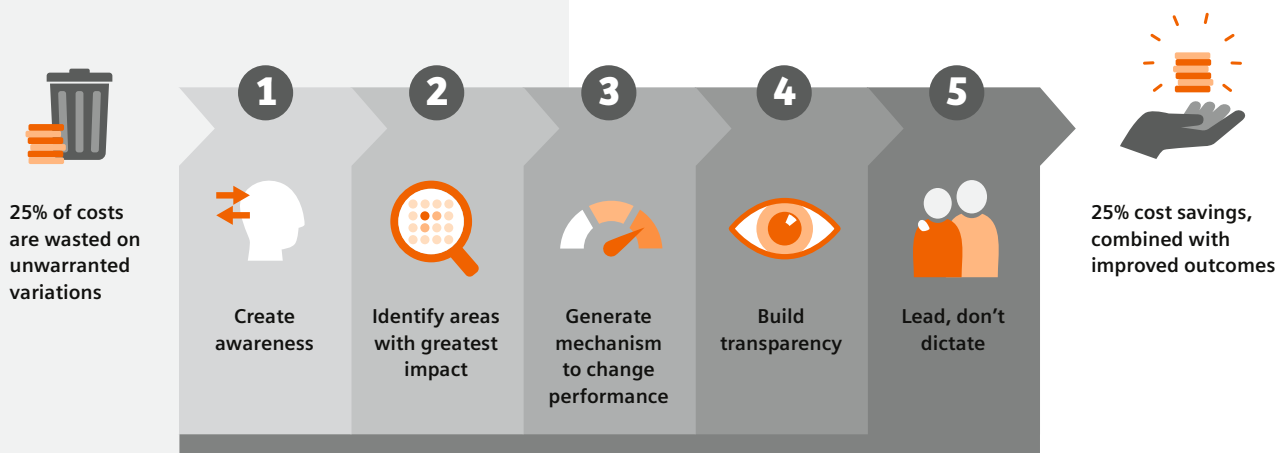
Diagnosis variations

- Technology not adapted to patients
- Operator/user bias
- Limited access to relevant patient diagnostic data

Reduced transparency

- Limited access to pathways and peers' information
- Poor digitalization on site
- Restricted access to information

Five-step roadmap how hospital executives successfully address unwarranted variations



The solution

CEOs have a key, unique role to play in achieving the high value of reducing unwarranted variations. We recommend this five-step approach:

Most of the literature available today on this subject is intended for clinicians. Although clinicians clearly play an important role, that shouldn't diminish the critical role of healthcare provider executives. The solution for a sustainable reduction of variations involves a systemic change and must include active support and participation from the CEO. The specific solution is not going to be one-size-fits all, nor is 100 percent compliance an obtainable goal, but the positive impact to the hospital is significant and achievable if certain steps are covered. Our customizable five-step roadmap – to be led by a hospital executive – will create sustainable change in their organizations.

“We were able to demonstrate that optimal clinical and cost outcomes are inseparably linked – but not in the way most Americans thought.”

Charles Sorenson, MD, CEO Emeritus
Intermountain Healthcare

1 Understand and create awareness

Hospital CEOs and their leadership teams need to fully understand the concept of unwarranted variations and its impact on hospitals. This goes beyond the impact to specific areas of the hospital such as radiology or cath labs – although it should include such areas. Armed with concrete knowledge of how unwarranted variations are impacting the hospital, the CEO (or other C-level executive) needs to lead the effort to address variations, and build a coalition of executives, physicians, and nurses to drive sustainable change.

Learning

Consider starting a clinical quality improvement training program. Have key clinical and administrative leaders attend, and require a successful clinical project as part of the course. This is a primary way to generate deep understanding of variations and possible solutions, both intellectually and functionally. The projects make variations “real” in the minds of those who attend. Projects should be selected based on the strategic needs of the organization.

2 Identify areas with greatest impact in your organization

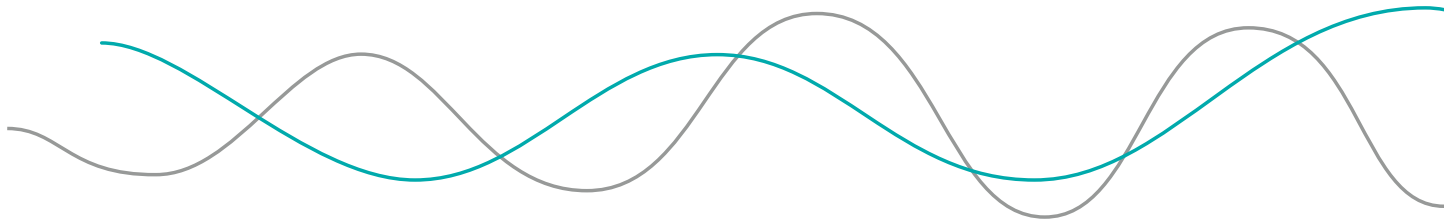
To build momentum for the effort, there must be some quick wins with measurable impact. Start with one area – or two maximum – that will create a demonstrable return on investment while building expertise and competency for future efforts.

Learning

Methods for identifying areas to address can include, among others, key process analysis and gap analysis. An organization is a system of processes interacting together. However, the processes that make up the organization do not have equal impact, value, or weight. One way to pick priorities is to fully understand your hospital as a system of processes, then prioritize those processes for variation management interventions. This “key process analysis” is an analytic method that identifies an organization’s most important and impactful processes that becomes a list of priorities for process design, management, and improvement.

- From a patient perspective, key processes are associated with health problems or conditions such as labor and delivery, treatment of a heart attack, artificial hip joint surgery, etc.
- Other important clinical processes that are not condition-specific are in areas like pharmacy, laboratory testing, or nursing services. These clinical services often roughly correspond to existing hospital departments.
- Administrative processes provide another set of essential services for care delivery operations.

For an organization that is relatively nascent in a quality transformation, a second approach often works – one that involves finding respected clinicians who are deeply engaged around a particular clinical service. Based on their experience, these individuals can often identify gaps in care – differences between current clinical performance and possible clinical performance. A leadership team can then extract estimates of those gaps and use them to choose high-priority targets. This has the added advantage of building around a natural physician ‘champion’ to lead clinical change.



3 Generate mechanisms to change performance, measure and share impact

We recommend that once the specific process to reduce variations is identified, the executive sponsor can guide the operational team-leader to look for similar experiences in other hospitals. Assess the area of care selected by identifying case studies, researching existing literature, and reaching out to an informal network of leaders. Ask your peers and look for what worked for other hospitals and for what has not – failure can be a great source for learning. For each program, we recommend looking at the sources of variations mentioned above (page 5). Though the relevance of the different sources varies by organization, this approach provides a structure in which to consider natural sources of the variations in medicine. One relevant aspect that is not usually covered properly by hospital executives is the following: How to ensure your organization profits from the benefits of the program?

Hospital CEOs must create a hospital-wide management system that goes beyond project-based reporting. It is critical to tie the initial identification of the benefits to the hospital, and how the savings positively impact the bottom line of the organization. This needs to be done before the execution is in place and fully designed. Hospital CEOs are uniquely positioned to do this with the support of finance and strategy colleagues. This step must be managed directly by the organizations' financial experts, and not be led by the clinical experts.

Learning

Be proactive in seeking out information. There are many case studies and much research on the topic, so there is often no need to reinvent the wheel.

4 Build transparency

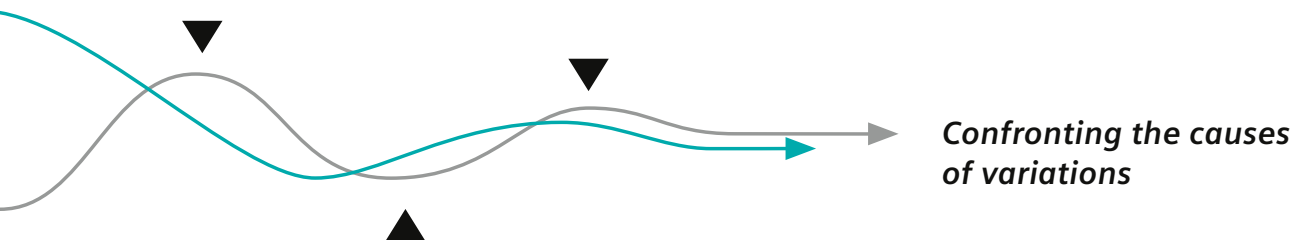
The right information must be transparent across the hospital, that is, the right information is provided to the decision-maker at the time decisions are made about minor and major treatment choices for a particular patient. Missing information may make the difference in prescribing care that improves the well-being of a patient or does the opposite.

Learning

Avoid unwarranted variations by integrating and monitoring technology. This requires an appropriate IT support platform.

5 Expand efforts through leadership and vision

To manage systemic change in a hospital requires leadership and vision from the very top of the organization. Such change requires inspiration and motivation rather than directives and mandates. Getting early buy-in from various influencers within the hospital is crucial. But without passion and support from the CEO, the ability to unlock the potential of reducing unwarranted variations will never be fully realized.



Conclusion

The role of the CEO is inevitable and critical. An executive blueprint designed specifically for this role guides the required leadership actions for reducing unwarranted variations. This offers the potential to hospitals and health networks alike to unveil the full benefits of cost reduction and positive outcomes around the world.

Companies in other industries, especially those that are publicly traded, have long been incentivized to reduce waste and improve processes. Savings are reinvested into the company or otherwise passed on to the shareholders. Well-run companies rely on data and defined processes to evaluate and improve operational performance, reduce human error, and better predict financial performance. The same rigor, driven by robust data analytics, must be more universally applied to hospitals and health networks. Until then, the healthcare system will not reach its full potential while finally bending the elusive cost curve.



Suggested follow up on

[siemens-healthineers.com/news/expanding-precision-medicine](https://www.siemens-healthineers.com/news/expanding-precision-medicine)

- Harvard Business Review: "Expanding Precision Medicine – The Path to Higher-Value Care"
- The Economist: "Reducing Unwarranted Variation: Increasing the Value of Care"
- The Economist: "Standardisation in healthcare – What is the impact of standardisation on hospital efficiency, cost-savings and patient outcomes?"

About the authors



Brent James, MD, MPH

Brent James, MD, MPH is world renowned for his influence on and work to improve the quality of patient care while reducing the cost of treatment. He is a member of the United States-based National Academy of Medicine. He holds faculty appointments at the Stanford University School of Medicine, the University of Utah Eccles School of Business, the T.H. Chan Harvard School of Public Health, and the University of Utah School of Medicine. While leading Intermountain Healthcare's Advanced Training Program in Clinical Practice Improvement (the ATP), he trained over 5,000 senior physicians, nursing and administrative executives, drawn from around the world, in clinical management methods producing reduced care delivery costs through better clinical outcomes. Brent James also organized more than 50 sister training programs running in ten different countries.



Luis Lasalvia, MD, MIB

Vice President, Global Medical Officer
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Luis Lasalvia drives and generates unique executive insights for delivering high-value medicine, partnering with top thought leaders in the world. His know-how lies in multiple functions across healthcare (pharmaceutical, medical devices, clinical practice, leadership/consultancy and startups). He has also led numerous successful partnerships and teams around the globe, including more than 30 complex programs with various healthcare organizations. Luis Lasalvia has authored numerous peer reviewed papers and publications, submitted a number of patents in the US and Europe, and has been speaker at about 500 events and conferences around the world. He's a Medical Doctor from the Republic University in Montevideo, holds a Master in International Business from Pompeu Fabra University in Barcelona, and conducted postgraduate studies at The Wharton School of Business, New York University, and Harvard Business School.



Reto Merges

Global Head of Expanding Precision Medicine
Siemens Healthineers

With more than 10 years' leadership experience in healthcare marketing, he has a strong track record in building effective teams for clinical and innovation marketing. In addition, Reto Merges has four years of work experience in China, ramping up efforts for research collaborations in China and Korea. He holds an engineering degree in electrical engineering and information technology from the Karlsruhe Institute of Technology, Germany, and has studied at the Nanjing Normal University, China. His scientific background is in the field of medical imaging where he has authored many publications, while submitting multiple patents.

At Siemens Healthineers, our purpose is to enable health-care providers to increase value by empowering them on their journey towards expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare. An estimated five million patients globally everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine, as well as digital health and enterprise services.

We are a leading medical technology company with over 170 years of experience and 18,000 patents globally. With more than 48,000 dedicated colleagues in over 70 countries, we will continue to innovate and shape the future of healthcare.

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