Eliminating Unwarranted Variation in Care

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Introduction

“The higher-cost areas and hospitals don’t generate better outcomes than the lower-cost ones.”
– Peter Orszag, President Obama’s former Budget Director

Back in 1938, J. Alison Glover, M.D., discovered that tonsillectomy rates in school children in certain school districts in England and Wales were in some cases eight times the rates of children in other districts. And, he paused – and asked: Why?

The answer to the question was troubling, to say the least – as Glover learned that the increase in tonsillectomies did not improve the health of adolescent patients. As a matter of fact, he noted that these procedures were performed “as a routine prophylactic ritual for no particular reason and with no particular result.”

Similar unwarranted variation has existed here in the United States for decades as well. With a payment system that allowed – some might say encouraged – this inconsistent delivery of care, the American healthcare industry chugged along, with little bottom-line motivation to change the status quo.

Now, however, the Affordable Care Act that went into effect in March of 2010 is driving payment reform to rapidly move from a pay-for-volume to a pay-for-value model, one that is based on quality of care. As a result, providers will be incentivized both clinically and financially to reduce unwarranted variations in care in the quest to achieve improved outcomes.

A look at the scope of the unwarranted variation in care problem, how the stage has been set for change and the challenges that lie ahead clearly point to the fact that healthcare providers will need to adopt a comprehensive clinical transformation approach – one that is empowered by advanced information technology tools to effectively reduce unwarranted variations in care (see sidebar).
The Current State of Unwarranted Variation

Unwarranted variation still runs rampant in healthcare, despite the fact that the issue was identified many decades ago. And with it come sub-optimal clinical outcomes and significant financial burdens. Consider the following: Up to 30 percent of all care delivered in the United States is unnecessary. What’s more, all this unwarranted care comes with a hefty price tag, adding some $700 billion in costs to the nation’s cumulative healthcare bill. (See graphic 1).

A look at diabetes care in the United States illustrates just how damaging variation can be. Diabetes is one of the most prevalent chronic conditions in America, affecting about 25.8 million children and adults in the United States—8.3% of the population. Not surprisingly, clinical guidelines for diabetes care are well formulated and stipulate that patients receive several important tests and a vaccination for influenza annually.

But variations in care are common, according to the National Healthcare Quality Report:

- Nearly half of all people with diabetes do not receive a vaccination for influenza annually as recommended by diabetes care guidelines. Furthermore, the vaccination rates across the States vary tremendously—from 17 percent to 64 percent, according to state data from the Centers for Disease Control’s Behavioral Risk Factor Surveillance System.
- Nearly one-third of diabetes patients do not have a retinal or foot exam annually. Across States, the rates range from 50 percent to 83 percent for retinal exams and 50 percent to 87 percent for foot exams.

The result of this variation: Patients are at risk. Only 37 percent of adults diagnosed with diabetes have HbA1c levels in the optimal range, a number that would likely increase if all patients received the best practice care.

According to Healthcare Quality and Variations in Care, a recent report published by the Alliance of Community Health Plans, if all providers participating in health plans performed at the same level as the top 10%, they could collectively save about 89,000 deaths and $3.5 billion in costs each year. (see Graph 2)

Source: Overtreated: Why Too Much Medicine is Making Us Sicker and Poorer, Sharon Brownlee

Source: Overtreated: Healthcare Quality and Variations in Care, ACHP, 2011

Source: Healthcare Quality and Variations in Care, ACHP, 2011
No Time Like the Present

“It’s game time now.”
– Don Berwick

The time for change is now, however, as many factors are prompting healthcare organizations to reduce this unwarranted variation in care.

Consider the following:

The changing payment landscape. The healthcare system traditionally operated under what Sharon Brownlee, author of the bestselling *Overtreated: Why Too Much Medicine is Making Us Sicker and Poorer*, called a “paradox of plenty” paradigm, where higher utilization rates and more costly care exist but don’t translate into better care. “You get what you pay for. We pay doctors and hospitals to do more. We don’t pay them to do better,” she points out.6

Now, however, health reform is moving the industry toward the adoption of payment models that will no longer support this unwarranted variation in care. Instead of being reimbursed – and rewarded – for hospital readmissions and for excessive tests, clinicians will be penalized under emerging pay-for-performance and accountable care models.

Shifting perceptions surrounding standardization. Traditionally, many clinicians have held on to the thought that the reduction of unwarranted variation could result in the practice of standardized, and hence, mediocre medicine. Now, healthcare leaders and clinicians are increasingly recognizing that reducing unwarranted variation is a necessary step in the move toward innovation – and, therefore, improved care.

To move forward with true innovation, unwarranted variation must be eliminated from the equation. As clinicians adopt standardized best practices, they can then can introduce new variations and monitor these innovations to see if they actually improve or enhance care. Working without a standard makes it impossible to move forward – because it’s difficult, if not impossible – to measure if the innovations being introduced are making a difference in outcomes.

The call for clinical quality. Clinical quality has always been a concern for all players in the healthcare industry. Recently, however, it has become a mantra — as the National Quality Agenda has been pressing healthcare providers to deliver safer and more effective care to patients across the country. Indeed, the National Quality Forum is bringing together 28 different stakeholder organizations, under the National Priorities Partnership, to improve the quality of American healthcare by setting national priorities and goals for performance improvement; endorsing national consensus standards for measuring and publicly reporting on performance; and promoting that attainment of national goals through education and outreach programs.

Overall, the effort is seeking to reduce disease burden, eliminate harm, remove waste and eradicate disparities.7 In addition, the federal government, through the American Recovery and Reinvestment Act, has allocated 1.1 billion dollars for comparative effectiveness research to support continued evidenced based practice and minimize unnecessary care variation.8

Increased transparency. Unwarranted variation and its negative impact on quality outcomes is also much more front and center than ever before. Public rankings of providers and payers (i.e. through U.S News & World Report, Baldridge National Quality Award, Leapfrog, HealthGrades, NCQA’s Quality Compass/HealthPlan and others), consumers have a much better access to quality data and hence a better understanding of performance. In addition, state and federal mandates that demand public reporting are contributing to this increased transparency – while consumers are more apt to tap into all of this information via social media and mobile technologies.
Challenges Along the Reduced Variation Route

With all of these forces combining to shine an unforgiving spotlight on unwarranted variation, provider organizations are finally ready to embrace change. What’s needed: A comprehensive approach that includes the leadership, programs and technologies that can work in concert to effectively reduce unwarranted variation.

While many providers are getting on the road toward positive change, they can expect to encounter some bumps in the road. To start, organizational leaders must distinguish between intended variation in care, which can result in improved care for specific patients – and that of the unwanted (i.e. unwarranted) variety. Brent James, M.D., Executive Director of the Intermountain Health Care Institute for Health Care Delivery Research, Salt Lake City, suggests that there is a need to balance consistency of care with intended variation.

“It is easy to scientifically demonstrate that, for most clinical conditions it is impossible to build an evidence-based best practice guideline that perfectly fits any patient. As a result, achieving 100% performance on most quality measures means that a subset of patients received substandard care,” says James, who is widely recognized as a quality improvement trailblazer and an adamant proponent of variation reduction.9

Therefore, healthcare provider organizations should not seek to eliminate variation all together. Instead, the goal should be to first determine which variations are or are not acceptable – and then target the variations that lead to undesirable outcomes.

Even with such differentiation, other challenges prevail. For example, although payments are moving toward performance based models, this is a process that will take time. As a result, true change may evolve accordingly at a slower pace.

What’s more, no matter how much providers believe in the eradication of unwarranted variation, some are apt to cite malpractice concerns as the reason why they continue to practice defensive medicine, thereby introducing significant variation.

For example, some emergency department physicians order CT scans as a matter of course, each and every time a patient presents with head pain – even though they realize that the tests are not needed in many instances. The risk of litigation associated with an undetected head injury or stroke simply prompts these clinicians to do all that they can to avoid any potential legal action. Indeed, 76% of providers cite malpractice concerns and their fear of being sued as the reason why they continue to practice defensive medicine. These primary care providers would order 83% fewer tests if they had lower malpractice risk.10

Another challenge stems from the fact that it is difficult to share information across providers. So even if provider organizations have best practice protocols in place, it is difficult to share these practices in the community in a timely, consistent fashion – within institutions, across institutions, across regional and national boundaries. More specifically, provider organizations struggle to connect disparate and non-standard data from fragmented IT systems, access relevant and timely information and identify root causes that lead to unwarranted variation.
Leveraging the Right Approach, Right Technology

“...Start building a culture of rapid innovation and continuous improvement”

– Kathleen Sebelius, Secretary of HHS

Provider organizations can overcome these challenges by adopting a comprehensive clinical transformation approach. Such clinical transformation enables organizations to drive improvements that are repeatable across the enterprise.

The approach can be broken down into the following distinct steps (see graph 3):

1. **Connect the data.** During this phase, providers can amass and integrate as much intelligence about the care process as possible by harvesting all the relevant care process data. The more relevant data collected, the better – as this information serves as the foundation.

2. **Draw insights.** Based upon the data collected, organizations can begin to assess what works well and what doesn’t work well in the care delivery process. Most importantly, organizations can create a shared baseline – basically their preferred standard of care or best practice for a particular condition or procedure. With the shared baseline serving as a marker, variations can then easily be identified and classified as either intentional (good) or unwarranted (bad).

3. **Redesign care.** After identifying an unwarranted variation, leaders can then reconfigure clinical process to support the delivery of evidence-based care – and, thereby, eradicating unwarranted variation. During this stage, leaders can model care processes around evidence and then validate that these processes are, in fact, being implemented correctly.

4. **Embed change.** Clinical processes can then be embedded into the care culture in an effort to avoid any future unintended variation. Simultaneously, as organizations and caregivers realize the benefits of evidence-based care delivery, the motivation to deliver such care will naturally grow stronger.

Information technology is a crucial element in supporting this clinical transformation model by making it possible to integrate data across silos of care and delivering as Sebelius states “the right information to the right person at the right time – each and every time”. Technology can support this process through data generation and capture; data integration and transformation; and decision-support.

The following technology solutions are foundational:

- **Clinical surveillance dashboards** to enable quality improvement by providing timely and actionable information at the point of care
- **Health information exchanges** that connect IT systems across a community to create a longitudinal medical record; such exchange helps to fill in the gaps where traditional systemic boundaries occur
- **Population health management tools** to coordinate, simplify, and optimize the delivery of care across systems and populations
- **Connectivity tools** tie together multiple IT systems, creating a comprehensive view of the patient condition
- **Analytics (retrospective, predictive, and prospective)** to evaluate patient data to determine and assuage risk factors (e.g. for readmission)
- **Patient portals** to engage patients in their own care, assuring adherence to the standardized, optimal treatment protocols
With such innovative IT tools in place, organizations can enhance:

- **Patient outcomes** by empowering patients to become more involved in the care process and providing clinicians with real-time insights to enable better decision-making
- **System outcomes** by seamlessly linking transitions across the continuum of care and improving operational efficiency and financial performance
- **Population outcomes** by simplifying and optimizing the delivery of care across populations and proactively managing chronic illness with preventative care

**Variation Reduction: The Right Results**

Adopting a process change initiative supported by such innovative technology can enable healthcare providers to effectively use guidelines and protocols that can result in the ultimate win-win: improved care and reduced costs.

Case in point: Implementing guidelines for the management of community acquired pneumonia has reduced the average cost per case by nearly 50 percent at Intermountain Healthcare. At the same time, the implementation of the guidelines has reduced mortality rates by about 2%.12

Although unwarranted variation in care has been recognized for many decades, the problem took on a “pink elephant” persona. Now, however, the time to recognize and address the issue has arrived. As payment models continue to evolve and support value-based reimbursements while eschewing volume-based payments, providers will increasingly become motivated to deliver optimal care – and, therefore, reduce unwarranted variation. To do so, healthcare providers are likely to develop comprehensive clinical transformation initiatives that are powered by innovative information technology to provide them with the intelligence needed to eradicated unwarranted variations in care. As a result, providers will begin to see improved clinical care, reduced mortality and a healthier overall bottom-line.

**Defining Variation in Care**

Quite simply, variation in care occurs when like patients receive dissimilar treatments for the same or similar presenting illnesses or conditions.

Essentially, there are three types:

- **Omissions** can be defined as the failure to provide a necessary treatment, procedure or intervention. Factors leading to omissions include lack of time, staff to patient ratios, material resource availability, scheduling availability and communication breakdowns.

- **Underusage** can be defined as the failure to provide a medical intervention when it is likely to produce a favorable outcome for a patient. For instance, the failure to provide flu vaccines to elderly patients is frequently cited as an example of underuse in health care.

- **Overusage** refers to tests and procedures that do not result in traceable benefit for the patient. For example, prescribing antibiotics for probable upper respiratory infections is commonly pointed to as an overused – yet ineffective – intervention.11

Unnecessary care is a common phenomenon. According to a study in the Archives of Internal Medicine, 42% of PCPs surveyed believe that patients receive too much care while only 6% believe patients receive too little care. In aggregate, they believed more than 50% of patients received unnecessary care.10
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References


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Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world.
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