

# Five Deming Principles that Help Healthcare Process Improvement

By Dr. John Haughom

“We all know healthcare is very complex, but it’s really not fundamentally different from other industries. Healthcare comprises simply thousands of interlinked processes that result in a very complex system. If we focus on the processes of care one at a time, we can fundamentally change the game and deal with the challenges facing healthcare.”

There are few people who have had more impact on the science and practical application of process management than W. Edwards Deming. His impact on the automotive industry is legendary, and many other industries have tried, with varying degrees of success, to implement his principles, as well. For years, I have followed and admired those who have tried to bring his [quality improvement processes to healthcare](#). I strongly believe that healthcare has much to gain by successfully implementing key Deming principles. Let me share five principles that I believe are making the biggest difference in healthcare process improvement.

## 1 Quality improvement is the science of process management.

When Deming and others developed their approach to modern quality improvement starting in the 1940s, they were basically developing a way for modern organizations to deal with the complex challenges that were confronting them. The approach they developed to improvement was remarkably simple, yet extraordinarily powerful. It was centered on the fact that quality improvement was really about process management. These quality improvement concepts and techniques have been used to transform almost every major industry in the world, with dramatic results. The last holdouts, the last bastions of resistance, have primarily been healthcare, higher education, and government. Now, it’s happening to healthcare. I believe higher education is imminent; it’s anyone’s guess whether government will ever succumb to these forces.

Now, we all know healthcare is very complex, but it’s really not fundamentally different from other industries. Healthcare comprises simply thousands of interlinked processes that result in a very complex system. If we focus on the processes of care one at a time, we can fundamentally change the game and deal with the challenges facing healthcare. Now, this may seem like a tall order, but Pareto’s principle tells us there are probably 20% of those processes that will get us 80% of the impact. So the challenge of every organization is to identify that 20%, roll up its sleeves, and begin the important work of addressing those challenges.

Managing care means managing the processes of care. It does not mean managing physicians and nurses. What Brent said is very true. One of the big mistakes made in the 90's with the "managed care" movement was naively thinking that managing care meant telling physicians and nurses what to do.

## 2 For quality control in healthcare, if you cannot measure it—you cannot improve it.

Deming clearly understood the importance of data. Meaningful [quality improvement must be data-driven](#). This is particularly true for quality control in healthcare. You're basically dead in the water if you try to work with healthcare providers and you don't have good data. I think everybody recognizes that.

I love this quote from Deming because he understood that reality. He said, "In God we trust...and all others must bring data." I've had physicians during my career tell me pretty much the same thing, only they're not quite so polite. They basically say, "Dr. Haughom, John, get lost. Bring the data. And then we'll decide whether or not we believe it." So, data is critical if we're going to have a meaningful impact in healthcare.

## 3 Managed care means managing the processes of care, not managing physicians and nurses.

My good friend, Brent James, put forward an important application, or clarification, of a Deming principle. Managing care means managing the processes of care. It does not mean managing physicians and nurses. What Brent said is very true. One of the big mistakes made in the 90's with the "managed care" movement was naively thinking that managing care meant telling physicians and nurses what to do. The reality is that you need to [engage clinicians](#) in the process because they understand the care delivery process and they are best equipped to figure out how to improve the process of care over time. And for this reason, I strongly believe that these changes will ultimately be very empowering for all clinicians who try to get involved.

## 4 The right data in the right format at the right time in the right hands.

If clinicians are going to manage care, they definitely need data. They need the right data delivered in the right format at the right time and in the right place. And the data has to be delivered into the right hands—the clinicians who operate and improve any given process of care.

## 5 Engaging the "smart cogs" of healthcare.

If quality improvement is going to work in healthcare, if we are going to realize value, it means we have to engage clinicians. To use Deming's term, clinicians are healthcare's so-called "smart cogs." They are the frontline workers who understand

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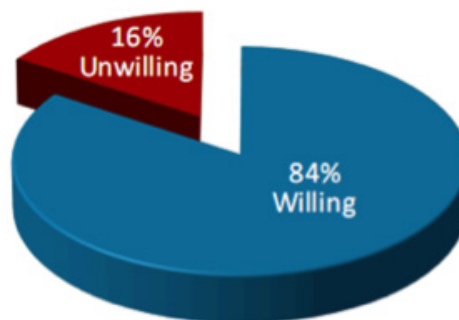
and own the processes of care. I believe we're very fortunate in healthcare because we have a workforce dominated by clinicians who are extraordinarily committed, very intelligent, and highly educated.

But we live in a pristine time. I received an email once from a fellow physician leader at a leading national delivery system. I'm going to withhold the name of the delivery system, but if you ask knowledgeable people to list the top 10 delivery systems in the country, almost everyone would put this organization on their list. Notwithstanding, this physician wrote to me lamenting how difficult it was for him to get his peer physicians to see a new future. And in his email, he succinctly described the problem by saying that his physicians were "historically encumbered and demoralized." And I love the succinctness of his description because he is basically saying they're clinging to the past and are demoralized because they don't see a new future. And in that short phrase, this very excellent physician leader pretty much encapsulated the problem and points us toward the solution.

## Are Physicians Willing to Change?

Yes...

Physician Willingness to Change



Source: McKinsey Physician Survey, 2011

### Are Physicians Willing to Change?

A McKinsey survey done about two years ago clearly demonstrates that the majority of physicians are, in fact, willing to change. McKinsey surveyed a large number of physicians and found that 84% said they were willing to change as long as a reasonable argument could be made that change was necessary.

So, how do we reconcile this? I believe we need to help clinicians learn how to give up the past by seeing a new future. And we need to help them understand their role in creating and sustaining that new future. I believe one can make a very strong case that the future will be very empowering for clinicians of all types if we can successfully inform them, engage them, and inspire them. By applying these key Deming principles to healthcare process improvement, every healthcare organization can show the workforce why change is necessary, what they need to understand in order to participate in meaningful change, and how success will ultimately look. 📌

## Resources

- 3 Steps to Prioritize Clinical Quality Improvement in Healthcare <https://www.healthcatalyst.com/clinical-quality-improvement-in-healthcare>
- Quality Improvement in Healthcare: Where is the Best Place to Start? <https://www.healthcatalyst.com/quality-improvement-in-healthcare-start-with-healthcare-data>
- 7 Tips for Increasing Physician Engagement <https://www.healthcatalyst.com/7-tips-engage-physicians>

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## About the Author



John Haughom, MD is an experienced healthcare executive with proven expertise in technology-enabled innovation, developing results-oriented strategic plans, leading multifaceted organization-wide change, and directing complex operations. He has a strong record of turning vision into effective strategies and successfully implementing initiatives resulting in value including higher quality, safer care at the lowest possible cost.

His broad knowledge of healthcare and emerging healthcare technologies is coupled with his recognized leadership abilities, strong communication skills, and demonstrated ability to contribute to organizational goals such as improved clinical outcomes, lower costs, improved access to care, and increased profitability. After practicing for 15 years as an internist and gastroenterologist, Dr. Haughom assumed a senior executive role with responsibilities for system-wide automation, budgeting, customer support, database administration, healthcare delivery, information technology, quality control, research, safety, and strategic planning. Dr. Haughom became President and CEO of a firm focused on health care transformation through consulting, strategic planning, mentoring inexperienced physician leaders, involvement in regional and national reform movements, membership on boards of leading edge organizations committed to improving the value of healthcare, and partnership with other like-minded organizations with similar aspirations and goals. As Senior Vice President of Clinical Quality and Patient Safety for the premiere health care system in the Northwest spanning three states (Oregon, Washington and Alaska), Dr. Haughom developed and implemented a system-wide quality improvement strategy, comprehensive patient safety plan, and comprehensive system-wide information technology strategy.