



# Foundation Update

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### Who We Are

Quality Texas focuses on an assessment and feedback process, education, training, and recognition to help businesses, schools, hospitals, non-profits, and government agencies improve performance. The Foundation administers the Texas Award for Performance Excellence program (Based on the Baldrige Criteria), the state's highest recognition for Quality.

### Vision

**What we're striving to do**  
Engage all Texas organizations in a journey toward the achievement of world-class performance excellence.

### Mission

#### Why we exist

Quality Texas helps organizations achieve performance excellence using the Baldrige Criteria as a framework for improvement.

## NOTES FROM THE CEO



Bill Denney  
Quality Texas Foundation

Dear Fellow Travelers on the Road to Excellence:

### Those Who Act and Those Who Hide

It is one of my observations in life that when any crisis hits, there only two types of people. And, it isn't surprising that there are more of one than the other.

As a guide for these trying times, I recommend a little book, *Culture Shift*, by Price Pritchett.

In his thirty-five page advice on how to deal with the type of challenges we face today, he tells us to not give in to fear, not shrink from challenges, not put our heads in the sand, not avoid the opportunity that difficulties create.

To make his point, he identifies 16 comparative opposites—what we shouldn't do and what we should do. A few of them are:

Slow Down	<b>Speed Up</b>
Wait	<b>Take Initiative</b>
Get Ready	<b>Get Going</b>
Play it Safe	<b>Take More Risks</b>
Don't Break Things	<b>Welcome Destruction</b>
Avoid Mistakes	<b>Make More Mistakes</b>

I've read and heard a lot of comments about all the things we should fear. Pull back. Don't grow. Be careful. Play it safe. Don't take risks. Go slow. Keep your head down. Avoid change.

My life's experience, both in and out of the military, has taught me that when there's a crisis, there are those who show initiative and those who duck for cover.

Anyone can call themselves a leader, but what we need are leaders who act. Leaders who drive change in the face of adversity. Leaders who continue to grow organizations to prepare for the future. Now is the time to take bold steps. Organizations that create new opportunities for customers and stakeholders today will be stronger when the economy recovers. While others sleep, real leaders are hard at work creating the future.

**We have a special healthcare event planned**

**See page 13**

**Aligning Baldrige and the Agency for Healthcare Research  
and Quality Criteria for Creating a Culture of Patient Safety:  
A Convergence to Create a Winning Culture**



**Deborah M Flores,  
RN, Ed.D, MBA AVP of Quality and Patient Safety Services,  
Driscoll Children's Hospital, Corpus Christi, TX.**

The Wall of Silence (Gibson, 2003) presents, in its early pages, the visceral phrase,  
"So much harm, so little done."

In spite of careful clinical practices, adverse events occur. At best we try to determine what occurred and why; none of us wants to relive a mistake. At worst, we have short-term memories: we forget why we implement safe systems of care.

Though healthcare facilities may protest, the Joint Commission has implemented challenging patient safety initiatives which help achieve consensus on patient safety issues. Some hospitals have implemented AHRQ's *Culture of Patient Safety Survey*-in 2009 there will be a major emphasis on the use of this tool.

An Introduction to the Culture of Patient Safety and Why this is important:

AHRQ includes the following expectations for a healthcare system to gain insight into its level of commitment to patient safety: *Governance/Leadership* must own the accountability for organizational performance, the actual *culture* that defines the organizations approach and response to safety issues must be defined, the *Patient Safety Program* to support strategic focus has to be complete and well communicated, *process design and re-engineering* will have to be continuous, *measurement and monitoring* of performance must take precedence, and a *safe, learning environment* for staff has to be created.

The actual survey to assess patient safety from the Agency for Healthcare Research and Quality ([www.ahrq.gov](http://www.ahrq.gov)) assesses work area/environment, management, communications, systems for error reporting, and perceptions of outcomes relative to patient safety overall.

As if on queue, these words produce a familiar imprint in our minds as we read them and note their similarity to the Baldrige Criteria.

Tools, established by The Malcolm Baldrige National Quality Improvement Act of 1987, include a structured self- assessment framework that advocates performance excellence through continuous improvement. Highlighting role model performers in various industries ensures credible criteria for evaluating improvement and sharing of best practices. Since 1999, when the criteria were expanded to include healthcare, eight healthcare systems have earned this award. [www.nist.gov/baldrige](http://www.nist.gov/baldrige)

***Bless this house, oh Lord, we cry. Please keep it cool in mid-July. Bless the walls where termites dine, while ants and roaches march in time. Bless our yard where spiders pass, fire ant castles in the grass. Bless the garage, a home to please carpenter beetles, ticks and fleas. Bless the love bugs, two by two, the gnats and mosquitoes that feed on you. Millions of creatures that fly or crawl, in TEXAS, Lord, you've put them all! But this is home, and here we'll stay, So thank you Lord, for insect spray.***

***-Unknown Texas author.***



Hammering home the pursuit of excellence, both of these lighthouse organizations require honest self assessment; both position leadership as a major driver in this quest. Stakeholder and market voices drive strategic plans. Attention to the creation and maintenance of a positive workforce environment are foundational. Finally, a goal of systemic transformation through process review and improvement and the data to document that journey are by-products of these challenging criteria.

The Agency has determined that medical error often occurs because of human factors and teamwork /communications breakdown. Cultural barriers emerge as a major contributor to this alarming and disarming medical reality.

(Denney, et al, 2009) states that it is no surprise that Baldrige award recipients often demonstrate “stronger patient safety outcomes compared with their peers.” Use of the Baldrige criteria to strengthen an organization will strengthen patient safety efforts.

Malcolm Baldrige National Quality Association (MBNQA) brings a focused approach to AHRQ’s survey responses and provides a more proactive path to organizational effectiveness.

The *Wall of Silence* speaks again and questions if “So much good, (is) good enough?” When it comes to patient safety, our mantra must be, “good enough is never good enough” even one error is one too many.

Leading an MBNQA Award winning Team, Sister Mary Jean Ryan says “Baldrige is the best way to get better faster.”

Focused on “So little harm, and so much done,” these combined improvement tools challenge us to do the hard but worthy work of keeping our patients safe. Maintaining a, “laser like” focus on excellence is our only choice for the sake of our patients, our organizations and ourselves.

Edited by: Nancy Jo Clem, MS, Process Improvement Coordinator, Driscoll Children’s Hospital, Corpus Christi, TX

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## QUALITY TEXAS CUSTOMERS IN THE NEWS

### **Space and Airborne Systems Advanced Products Center (APC), located in Dallas, Texas Picked as 2009 Finalist by Industry Week’s Best Plants in North America**

The SAS Advanced Product Center in Dallas, Texas is a top 20 finalists in Industry Week’s magazine Best Plants annual evaluation event. While the total companies in this years evaluation has not been released by Industry Week, the field historically has had between 400 and 500 plants participate. (Canada, U.S. and Mexico)

Criteria for selection was based on the success of a plant’s productivity improvements and results in all areas of the business. APC’s implementation of “Lean” manufacturing concepts, which are intended to make it operate as efficiently and competitively as possible is proving to be a core competency and is maximizing efficiency, as we enforce our “No Doubt” guarantee to our customers.

“Our selection shows that APC exceeds the performance of most plants in North America,” said Dan Burke, director of operations. “It also demonstrates that APC provides excellent products to our customers and manufactures the products with great efficiency versus the rest of industry.”

The magazine conducts its survey each year with two purposes in mind. The first is to recognize plants that are leaders in increasing operational efficiencies, overall competitiveness, enhancing customer satisfaction, and creating stimulating and rewarding work environments. The second is to encourage other manufacturing managers and teams to emulate the honorees by adopting world-class practices, technologies and improvement strategies.

In evaluating plants, judges look for evidence of a strong operational performance/productivity, excellent overall business management practices, strong quality systems, low defects rate, excellent results in cost, and schedule obtainment. Overall plants must demonstrate excellent product control, as well as a customer focus, including formal customer-satisfaction results, customer involvement in product design, and employee contact with customers.

A second round of questions and a site visit by editors of the magazine will precede the selection of a final top 10 from the 20 finalists. Profiles of the winners will appear in the January edition of Industry Week. They also will be honored at the magazine’s Best Plants conference in April.

## Note to the C-suite: Communicating quality is more important than ever



**Douglas Monroe, M.D.,  
Wellspring Partners, Consultants**

Some time ago I met with the CEO of a major network provider. The exchange went like this:

Author: "What makes you think that payers will ever agree to increased compensation—even for gold-standard quality metrics?"

CEO: "Because they said so."

I envy his faith. However, the chilling possibility is that in the near future top-tier compensation will be set to match current levels, not exceed them. If that happens, falling short on performance metrics may mean collecting even less than you do now. Whatever your political persuasion, the president has a consistent message. He marries quality and performance metrics to public policy, clinical practice and reimbursement.

If you are paying attention to the national discourse, our future becomes clear: outcomes-based compensation will focus leadership on quality performance. In fact, the CMS has been talking about the notion of value-based purchasing for almost two years: on Nov. 27, 2007, in their report to Congress, industry leaders got their first glimpse of Medicare's value-based reimbursement model.

Almost exactly one year later, with the Medicare Hospital Quality Improvement Act of 2008, Congress jumped on board the healthcare value train. If Sens. Max Baucus (D-Mont.) and Chuck Grassley (R-Iowa) get their way, the current annual Medicare withhold—between 2% to 5% of your total inpatient payment from Medicare—may be tied directly to quality performance across measures such as process of care, clinical quality and patient response. And yes, the bill has bipartisan support. Just the kind of support needed to give Congress the statutory authority to keep funds from poorer performers and allot increased payments to quality trailblazers.

In short, quality is about to become a lot more important to a lot more important people. Quality people often talk about being frustrated by ambivalent commitments, limited resources and lip service. They may be in for a pleasant surprise.

However, their new status will be mitigated by intense scrutiny. New quality initiatives and their related payment schemes will tie quality to the bottom line. Performance metrics will become real-world methods of capturing and sustaining a potentially shrinking pool of revenue. If you are a chief financial officer, don't expect to remain hands-off for long. You will soon be e-mailing your chief quality officer with alarming frequency.

Competition based on quality may be intense. Some hospitals may be relative winners, and others beggared by insufficient compensation for care that costs the same to provide regardless of cholesterol levels or follow-up attendance statistics. Metrics in the red require planning and action now, or you risk falling behind your competitors in a system that will reward the strong and punish, or even eliminate, the weak.

### **Gold standard quality metrics: Not enough**

Question: Is a handsome green dashboard, quietly presented at the monthly operating report, enough to distinguish your efforts? In short, does "performance metric perfection" by itself maximize your relationship with the four P's (patients, payers, physicians and policymakers)? The simple answer is no.

Your dashboard is only one piece of the quality puzzle. You also need to establish systems and processes that drive quality throughout your organization like a virus. Continuous performance improvement should infect every nook and cranny, from clinical services to supply chain to human resources. In order to fully leverage your efforts (especially with payers, government or otherwise) quality experts must be let loose on the whole of your operations. You must be able to show that you are driving those efficiencies to the bottom line, and then to the bedside.

The point is that if quality—clinical and otherwise—is what you are paid for, then investing in quality, and the communication of quality, is a simple break-even analysis. That is why an increasing and record number of hospitals and systems, in spite of the economy or maybe because of it, are seeking unbiased assessment and recognition for their quality efforts.

Green dashboards are increasingly common for some, but remain perplexing and elusive to others. However, whether your goal is receiving the respect you already deserve, or earning the respect you'd like to deserve, improving performance requires documenting and communicating your efforts in a systematic, sophisticated and compelling way.

### **Communicating quality**

Communicating this message internally is a major challenge, and a key first step, for providers on the road to performance excellence. Moreover, external communication of performance achievement is the crucial, final step for a hospital or healthcare system that believes it has achieved quality excellence and is seeking recognition.

As a Quality Texas (Baldrige National Quality Program) examiner, I have noted that the quality message permeates the most successful, sustainable and award-winning cultures from top to bottom. This is the commonality that runs across industries, and what examiners are trained to root out: the cultural evidence of deliberate and continual improvement of systems and processes, and the approach, deployment, learning and integration that supports that evolution.

It's not enough for a phlebotomist to be able to rattle off the five core pillars, and it may not matter to the examiner if they can. The question is: do they understand why it is important, and do they engage in activities that reinforce and improve that each and every day?

As you can see, metrics are just one piece of the puzzle.

### **Beyond the dashboard**

President Barack Obama, Baldrige, the CMS, the Institute for Healthcare Improvement and the National Quality Forum and others won't focus that much on the color of dashboards once everyone's dashboard looks the same. They care about the impact those metrics, and your strategy, tactics, implementation, surveillance, continuous improvement and efficiency have on each and every patient under your care.

Moreover, they are fostering an environment where patients can make informed decisions based on hospital performance. HospitalCompare.com, just one way HHS is increasing industry transparency, may become an increasingly powerful tool for administrators rightfully concerned about the fair allocation of Medicare dollars.

As the Obama administration targets its \$155 billion cap on Medicare reimbursement cuts to providers, Hospital Compare has published readmission rates for patients experiencing heart attack, heart failure and pneumonia. Nonreimbursement for readmission of such patients is just one way federal officials expect to provide insurance for up to 95% of Americans.

While you might expect patient volume increases with the passage of a bill resembling the Senate Health, Education, Labor and Pensions Committee's current proposal, the potential effect on revenue is less clear. It seems that the premium placed on the right, most efficient course of care is at its zenith; hospital leadership should manage this message carefully.

The insight required to send that message can never be gleaned from the faint glow of the dashboard light. It comes from the people in your trenches. They are usually happy to share, and you will need their help going forward. This will have to be a combined effort—not a unilateral one.

The numbers are an important component of our efforts, and should receive the scrutiny they deserve. However, unlike the financial crisis, our successes and failures are measured in something more valuable than derivatives, interest rates or credit availability. That is why we must share the human element of what we see, and communicate the complexity and gravitas of our crisis, efforts, successes and, importantly, failures in a way that everyone can understand. That is the key to quality, performance improvement, recognition and our much-needed, and tragically overdue, evolution as an industry.

To weather the approaching storm, make sure your message, and your methods, reflect the best interests of your most important stakeholders: the patients who have entrusted you with their care. If the decision-makers get it right, your compensation will depend on it. Maybe it already should.

**“Quantity of ideas leads to quality of ideas.”**

***The Medici Effect; Breakthrough Insights at the Intersection of Ideas, Concepts & Cultures***

**By Frans Johansson**

**Interested in innovation? This is the book!**

## Education: An Important Checkpoint on the Road to Excellence



**Milton Krivokuca**  
MSQA Program Coordinator  
California State University, Dominguez Hills

For those of us engaged in various aspects of the quality profession, a common theme that underlies most all quality programs and improvement processes is *Organizational Excellence*.

These two critical words have been included as part of the body of knowledge for the ASQ Certified Quality Manager and its current designation, Certified Quality Manager / Organizational Excellence. The ASQ has also used Organizational Excellence as the basis for its "good to great" corporate theme, which establishes the organization's conferences and educational programs.

Education is critical for organizations and individuals seeking to elevate performance levels to those of recognized world-class status. But how do individuals and companies identify the education that will provide the most benefit? The long established norm of career employees who retire with a gold watch after 30 years or more of service is quickly vanishing. The rise of global competition and decline of the world market has presented very complex challenges to organizations striving to remain world-class competitors. Organizational success can not be accomplished by technology alone. A team of skilled employees must be in place and utilized both effectively and efficiently.

This situation presents a challenge to organizations. Can the organization survive while it invests in developing this skilled talent through internally supported programs, if the talent they develop continues to churn? Although the tightened job market should reduce this turnover rate, the advances in technology and product diversification will continue to stimulate individuals to seek more rewarding employment opportunities.

For these reasons, both organizations and professionals, especially quality professionals, must make informed decisions before engaging in educational endeavors. Education can be expensive, but most importantly, it is time consuming. The time spent in learning cannot be recovered, so the decision, both for an organization and for an individual must be an informed one.

There are numerous options available in formats that can range from the very basic, to highly specific and complex customized to an individual product or service.

The following summary provides a brief overview of the most common educational offerings available today:

**Masters Degree** - This high level of accomplishment generally encompasses the numerous elements of quality and organizational systems. The concepts studied in a masters program provide a general understanding of the concepts from a managerial and decision-making perspective. Most masters programs are designed for working professionals in a two-year completion format.

**Masters Certificate** - This program is designed for those quality professionals who want to improve their skills in a particular area of quality such as management, auditing, or engineering. Three masters level classes are required with a culminating capstone experience course. Generally, the certification exam preparation courses are developed using the ASQ CQE, CQA, and CMQ/OE body of knowledge. Certificates can be completed in less than a year and the professional will gain advanced specialized skills.

**Bachelors Degree** - This program follows the traditional college format for persons who desire to enter the quality profession and do not have a college degree or are recent high-school graduates. The bachelors program provides a combination of theory and practical application of the skills and concepts necessary to perform any of the numerous quality related functions found in any manufacturing or service organization. Please note that service industries now utilize quality improvement methodologies that were once considered unique to manufacturing. A full time student generally completes this program in about four years.

**ASQ Certification** - For professionals with existing experience in various areas of quality such as auditing, management, engineering, customer service, software, Six Sigma, and reliability, the ASQ has established a body of knowledge specific to these areas. By taking and passing the exam, the professional demonstrates an advanced level of skill that receives international recognition for accomplishment. For each of the certifica-

**Platinum Level  
Supporters  
\$75,000**



**Gold Level  
Members  
\$25,000**



tions, ASQ requires a defined amount of education and experience to qualify for the particular certification.

Seminars - Many one day to one week seminars are presented each year that provide education. These include everything from refresher courses of basic quality skills to the latest developments of improvement processes. Seminars provide the advantage of learning new concepts that have not been through the publishing process to be included in textbooks or business best-seller lists. These seminars can also be customized to fit a specific company or industry need to keep employees current with their skills and knowledge.

This brief list is by no means meant to be all-inclusive, but a general sampling of the educational offerings available to individuals and organizations today.

So how do you select the right program for the organization or for yourself?

This is a difficult question and should be given careful thought and analysis. Whether selecting a personal or organizational training program, a personal or organizational self-assessment should take place. Existing skills and knowledge should be examined, as well as industry or competitive best practices to determine where gaps might exist. Once these gaps have been identified, then the short and long term goals for both individuals and organizations need to be studied in detail.

With this information, a basic starting point has been established. Before enrolling in an individual program or contracting for an organizational education program, one additional consideration should be determined: Is the organizational or individual ready to move forward? For example, a manager might be ready to take the next step in career advancement to a masters program, but not have attended college for several years. The initial 'culture shock' of returning to school could be too overwhelming. In this case maybe taking a less demanding ASQ certification or masters certificate, then entering the masters program would ease the transition back to the educational process.

One final checkpoint to perform before enrolling in any of these educational programs is to contact a program administrator or advisor and discuss your personal or organizational needs to determine the best fit to your specific needs. By doing this up front research, the educational experience and results will be much positive and beneficial.

## Shift Happens: Managing at the Speed of Change



**Brian S. Lassiter**  
President, Minnesota Council for Quality

It seems like today we're all focused on the economy. While it's certainly relevant, I'd like to offer some thoughts about the bigger picture – about how the world is changing in ways that we cannot fully comprehend and most certainly cannot fully predict, let alone manage. Doesn't it feel like – daily struggles aside – the world is accelerating? We are changing at rates never before experienced and probably only represent the proverbial tip of the iceberg. In fact, many experts predict that the pace of change will only accelerate, drastically impacting our businesses, our schools, our healthcare system, our communities, and certainly our personal lives.

It may ultimately lead to what some futurists call "technological singularity": the point at which accelerating technology becomes so advanced that it surpasses the capabilities of the human brain. Basically, technological change could accelerate to a point at which humans can no longer proactively manage it...it manages (and changes) by itself. I'm not sure I completely buy it, but if it's true, it's a frightening notion. However, in many ways, the pace of our change represents a tremendous opportunity for economic, political, social, and professional development. And what it means for our organizations is compelling...

In 2006, Karl Fisch, a high school technology teacher in Colorado, developed a video and slide presentation called "Shift Happens" (you can easily find it on YouTube). Consider some of his thought-provoking findings regarding the pace of change in the world:

- The 25% of the population in China with the highest IQs is greater than the total population of North America. Translation: they have more honors kids than we have kids.
- China will soon become the number one English speaking country in the world.
- Name this country: richest in the world, largest military, center of business and finance, strongest education system, world center of innovation and invention, currency the world standard of value, highest standard of living? England in 1900. [Probably could be said, too, of Rome and Greece before them.]
- The US Department of Labor estimates that the average US worker will have 10-14 jobs...by age 38.
- There are 540,000 words in the English language – that's five times more than during Shakespeare's time.
- There are 3000 books published every day.
- A week's worth of NY Times contains more information than a person was likely to come across in their lifetime in the 18th century.
- It is estimated that 40 exabytes ( $4.0 \times 10^{19}$ ) of new unique information will be generated worldwide this year – which is more than

in the previous 5000 years combined.

- Third generation fiber optics are now being used that can carry 10 trillion bits per second down a single strand of fiber. That's 1900 CDs or 150 million phone calls every second. It is currently tripling every six months and is expected to do so for the next 20 years.
- Predictions are that by 2013, a supercomputer will be built that exceeds the computation capability of the human brain. And while technical predictions further out than about 15 years are hard to do, predictions are that by 2049, a \$1000 computer will exceed the computational capabilities of the entire human species.

Basically, his premise is that the world is changing in significant and pronounced ways. In fact, to alter a familiar saying: the more things change, the more they change (rather than stay the same).

Sure, we've had significant changes before – the agricultural revolution (which allowed us to more efficiently feed a growing human population), the industrial revolution (which facilitated higher productivity, growth of cities, new forms of transportation, and new standards of living), and the information revolution (where the speed of information transfer facilitates accelerating communication, knowledge transfer, problem solving, and commerce).

But the pace of this change is what is fascinating. Consider this: based on population growth, the worldwide economy doubled every 250,000 years from the Paleolithic era (2.5 million years ago – the “Stone Age”) until the Neolithic Revolution (about 10,000 BC – the Agricultural Revolution), at which point the economy began doubling every 900 years. That's a considerable increase! And the Industrial Revolution of the mid-1800s caused the world economy to double every 15 years (that's 60 times faster than the agricultural era).

If the expansion of technology – which really is responsible for the previous significant changes – continues to accelerate and we witness similar revolutions in the future, some experts predict that the economy could double every quarter and possibly every week! In fact, one statistic I found says that the worldwide economy could increase between 60-250 times what it is today sometime in the next 40-60 years (Robert Hanson, “Economics of The Singularity,” 2008). Mind blowing.

But see the pattern? Every major period of change has led to an accelerating pace of change.

Ray Kurzweil (inventor, futurist, author, and MIT-trained scientist) claims that the rate of change itself is growing exponentially. While change has always been accelerating (witness the statistics above), we certainly notice it more today.

There's even a phrase for it: Moore's Law (named after the founder of Intel, Gordon E. Moore). This phenomenon describes a long-term trend in computing hardware, in that since the invention of the integrated circuit in 1958, the number of transistors that can be placed inexpensively on an integrated circuit has increased exponentially, doubling approximately every two years (Moore, “Electronics Magazine,” 1965).

We really see this phenomenon all around us. The Minneapolis Star-Tribune had an article on Singularity a few months ago (Karen Youso, February 21, 2009) that illustrated a few compelling examples. One is the telephone. Since its invention in 1875, it took over 100 years to go from a crank-style to push button. Then the transformation accelerated – from cordless (but still on landlines) to headphones and speakerphones to cell phones (a different technology altogether) and from analog to digital to 3G to 4G. The hardware – the phones themselves – continued to get smaller and smaller, and smarter and smarter. Now your phones take pictures, play music and videos, send texts, show GPS, connect to the Internet, keep your calendars, play games, even serve as construction levels – they've basically become 3x5 personal computers that also place phone calls.

You could probably come up with hundreds of similar examples – from changes in travel (horse to chariot to train to car to plane to jet to whatever's next – personal transport devices?); changes in medicine (herbs and natural remedies to penicillin and antibiotics to new forms of bio-pharmaceuticals and stem cell solutions); changes in computers (from massive supercomputers to mainframes to personal computers to integrated smart phones and netbooks to whatever's next)...you get the picture.

Technical knowledge today doubles about every two years, and some predict that technical knowledge may double every 72 hours in the next 3-5 years.

That's incredibly fast change. So “...survival, naturally, depends on innovation, especially in times of economic uncertainty,” claims Youso in the Star-Tribune article.

And Fisch states: “The corporations that survive and go on to excel are going to be the ones that use this time to increase their use of technology and data gathering, and find new and innovative way to use it.” Youso expounds: “They are the ones who will be bringing us more and increasingly sophisticated robots; medical treatments delivered directly to cells, turning on and off as needed; instant information so you'll know who the person is who just waved to you across the street and why you know them...avatars [little virtual images of yourself] that try on jeans [at the store, allowing you to] never leave the house.”

Sound ridiculous and far-fetched? So was the smart phone 10 years ago. Or the Internet 20. Or landing on the moon 50. Or getting from Minneapolis to Paris in seven hours 100.

“We aren't going to experience 100 years of progress this century,” says Kurzeil. “Rather, we will witness on the order of 20,000 years of progress this century – at today's rate, that is.”

So what are implications for our organizations and our society? I believe there are several major implications for our accelerating technological change:

**Implication #1:** Organizations must change – to keep up (and indeed perhaps create) some of this discontinuous change, organizations must:

- Have flexible operations – more adaptable processes; more fluid work systems where materials, resources, and activities quickly transfer between suppliers, partners, and customers.
- Rely on closed-loop, data-based decision making – they must have the information technology to facilitate rapid access to data, must have agility in quick decision making and execution, and must be adept at making rapid transformations (starting new plants/sites, acquiring new technologies, identifying and developing new products and solutions, creating new work structures, building new capabilities, and so forth).
- Have quick planning cycles – be skilled at identifying shifts in their environments (new technologies, new competitors, new regulations, new market needs); be savvy at research and development (for products, processes, solutions); have responsive, proactive voice of the customer (VOC) methods to anticipate market changes; have systematic ways to innovate products, processes, and business models.
- Have a highly adaptable workforce – trained employees (and partners) in how to deal with and manage change; employees that have skills that are transferable – the “soft skills” of communication, leadership, conflict resolution, analysis, decision making, project management – that can apply to new situations and emerging environments.

**Implication #2:** The educational system must change – if technical knowledge is indeed doubling every two years, then half of what a student learns about technology as a freshman in college is out of date by the time he/she graduates. Former US Secretary of Education Richard Riley speculated that the top 10 in-demand jobs for 2010 did not even exist in 2004. John Moravec, director of the University of Minnesota's College of Education and Human Development's Leapfrog Institutes states: “We send kids to school, they move grade by grade, using the 18th-century model, and during that time, the whole world has changed so much. How relevant is that education? We're training them for jobs that existed 20 years ago, not for those that'll exist when they finish school...”

**Implication #3:** There will be massive implications on our society:

- People will live longer, thanks to accelerating improvements in healthcare and medical technology, which will impact our healthcare delivery system, our health insurance system (even more than today's debates are suggesting), and our long-term care system.
- Technology maybe used to better address community and social problems like pollution, energy, climate change, crime, poverty, hunger.
- Singularity, however, may have a negative side – a risk of institutional control, loss of privacy (remember the book “1984”?), more deadly terrorist attacks, or – as some futurists predict – a threat to human's existence itself (as machines begin to adapt themselves, challenging human's place as superior beings on this planet).

That's a bit far out for me, but the pace of technological change has significant implications on our social, political, and economic policies.

And all of that aside, there are major implications – and a major opportunity – for organizations that can harness, and indeed create, contribute, and manage the pace of change for their benefit. Companies (think Google, Apple, 3M) seem to be creating the change rather than responding to it. Therein lies the lesson probably for all of us.

## THE PARABLE OF THE RED BEADS MANAGING PROCESSES INSTEAD OF PEOPLE

Bill Denney  
Previously Published  
HR Magazine Online  
November 2001

“The individual has been crushed by our style of management.”  
- - - W. Edwards Deming

By December 1993 when W. Edwards Deming died, he was well known as the expert on business management who advised Japan on how to rebuild its shattered industries after World War II – the guru responsible for the Japanese quality revolution. Unlike other well-known management and quality experts, Deming never built a formal organization. He preferred to communicate his ideas in public seminars, university courses, and private consulting.

He finished a seminar only ten days before his death. I had participated in one of his management programs the prior July. At that time he was already in a wheelchair, and although he was able to rise to lecture and use the overhead projector, at each break a nurse and associates took him behind the stage for oxygen and rest.

What he taught us was the same message he communicated his entire working life – most product and service problems result from management shortcomings rather than careless workers, and inspection after the fact was inferior to designing processes that would produce better quality.

That July he was obviously in poor health. I couldn't understand why he continued to teach. Certainly he didn't need the money. He had been a consultant to Xerox, Ford, Dow Chemical, Procter & Gamble, and a long list of other major corporations that begged to learn the secret of Japanese success. He was making more than \$100,000 a year from each client.

I reflected on this as I stood in line to have him sign my copy of his seminal work, Out of the Crisis. I thanked him and as I walked away I read what he wrote above his signature: "So much to do, so little time."

Deming knew he was nearing the end, but he saw himself at war against a disastrous management paradigm that he believed was crippling American business – control workers and inspect for quality. "We are being ruined," he said, "by the best efforts of people who are doing the wrong thing." He argued that enlisting the efforts of willing workers to do things properly the first time and giving them the right tools were the real secrets of improving quality – not teams of inspectors.

He delighted in telling CEOs, "Can you blame your competitor for your woes? No. Can you blame the Japanese? No. You did it yourself." Deming believed that only management should be held accountable for the broken processes that cause employees to fail. "Plants don't close from poor workmanship," he said, "but from poor management."

Deming's was a broad business philosophy based on a partnership between management and workers. He told managers to "drive out fear," so employees would feel free to make improvements to the workplace. He denounced management concepts like production quotas, stack rankings, and performance ratings, saying they were inherently unfair and detrimental to quality. He said business would prosper and customers would get better products and service when workers were encouraged to use their minds as well as their hands on the job.

While Deming's approach to management touches on many aspects of human nature, psychology, training theory, process knowledge, and what he called "understanding the organization as a system," the reason he came to his conclusions is based mainly on statistics and measurement of variation. His first book, *Elementary Principles of the Statistical Control of Quality* came out of his early work in Japan. It was from his experience as a statistician that Deming came to understand that employees shouldn't be held accountable for broken processes or variation in systems that management owns and operates.

Deming's theory of process versus people management is best illustrated by a demonstration he conducted in his seminars.

#### **THE RED BEAD EXPERIMENT**

Deming used what he called, "The Parable of the Red Beads" to demonstrate what he believed is wrong with American management's approach of holding workers accountable for what is in fact simple process failure.

In a typical session Deming would ask for volunteers from the audience. He took six willing workers. He also assigned one foreman (himself), an administrative staff of four, a chief inspector, and a recorder (Six actual workers and a support group of seven to supervise, inspect, double-check and record – typical overhead, Deming would say).

The production equipment included a plastic container holding 3,200 white beads and 800 red ones. A rectangular paddle with fifty holes was the only tool for the workers. The paddle was dipped into the plastic container and when raised it would be filled with beads. Management has established a factory error-rate quota of only two red beads per paddle.

Deming, acting as the serious foreman, would demonstrate the production technique. Each willing worker was to dip the paddle into the container of beads and draw it out. The chief inspector and administrative staff counted and recorded the number of red beads among the fifty on the paddle.

At the foreman's direction they would begin bead production. As an example, the first person may have three red beads on their paddle. Good but too high. The quota is two. But Deming would be encouraging. "If this person can make only three then no one should make more than three."

The next worker would put their paddle in the beads. Deming would advise them on the angle of their paddle and the importance of reducing errors. "We want the best workers," he would tell them. "We constantly strive for improvement." The paddle would be pulled out and this time the number of red beads would be six. A high number would make the foreman mad. "We do everything wrong in this company," Deming would blurt out, "except one thing. The inspectors are obviously independent." All they have to do is count the errors employees make.

The next worker would take their turn and produce thirteen red beads. Once again, Deming would chastise the workers "Weren't you paying attention? What kind of performance is this? This isn't acceptable."

After all six workers draw beads, Deming declares it the end of the first business quarter and delivers a performance review. He would praise the workers with the lowest number of beads and criticize the workers with the highest number. "Jim is in line for a promotion," he would say, "but poor Cathy. We like her but she just can't do the job. She's not living up to her ability. We may have to let her go."

The production cycle would be run through four times and after each there would be another performance review. But despite all the reviews, encouragement, criticism, and advice by Deming, error rates do not improve. He uses every cliché, dumps on workers who have a high number of red beads and praises those with low numbers. Despite all his efforts, each quarter a different worker is a high performer and a different worker is a low performer. But the overall errors don't change much. No one is meeting the quota.

The results of a typical red bead demonstration would look something like this:

	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Worker 1	3	13	8	9
Worker 2	6	9	8	10
Worker 3	13	12	7	10
Worker 4	11	8	10	15
Worker 5	9	13	8	11
Worker 6	12	11	7	15

From the nature of the red bead production technique it's obvious that the performance of each individual at any given time is due entirely to chance.

We acknowledge the existence of chance in everyday life. Yet most of us assume that chance is not responsible for differences in individual performance at work. With the red beads we encounter a situation where chance is responsible for 100 percent of the differences in performance. In many commercial situations where one might believe that the individual controls results, all or almost all the variation from person

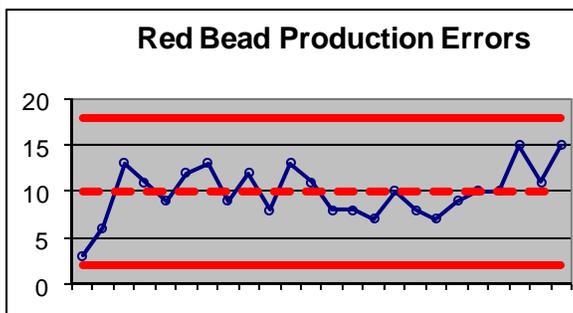
to person and from quarter to quarter may actually be due to chance.

To continue his experiment, Deming tells his workers that because of the high errors the plant may have to close. But management has decided to first keep the high performers and fire the low performers (The usual "lifeboat" technique of stack-ranking employees before layoffs). The three above average workers are then directed to do two more production runs. These "best" workers have mixed results and some of their attempts are the worst recorded.

Of course, there is no reason to expect that production will be better using the presumed best workers. When variation in performance is due to chance, past performance is neither a guarantee nor an indication of future performance.

The management of the bead factory held the workers responsible for their individual production. They blamed the workers for the problems of the system. Why?

When management looks at information on output or performance, it is confronted with a series of numbers. The usual assumption is that each number is due to one specific cause, such as the effort or lack of effort of an individual. But in a system like the bead factory all the variation is due to chance, which means it is caused by the system not the workers. Management is responsible for the system. Why then blame the workers?



Although there would appear to be little consistency in the number of red bead defects produced, Deming would use a control chart to demonstrate that despite the variation, errors were all +/- 3 standard deviations. That is, they were all within standard production control limits and clustered around an expected mean for all the production runs. None were above or below upper or lower control limits. Workers were performing as best as could be expected under the circumstances.

Deming's point is that in the red bead case (and in many real situations) workers have no control over their production. The obvious solution is to better manage the raw material process coming into the bead plant to make sure there are fewer red beads. That kind of improvement to the system, Deming would say, is the responsibility of management and not the production workers.

### **THE DEMING MESSAGE**

Although the core of Deming's method was the use of statistics to detect flaws in processes, he developed a broader management philosophy that emphasized problem solving and continuous improvement based on cooperation.

In the real world, not all process problems are as obvious as his example of bead production. But, we all work within processes and larger organizational systems that have inherent variation. It's that variation that we must seek to understand and remove by constantly working to improve the processes. In that quest for process improvement, management and employees have to work as partners.

Deming demonstrated that his theories about process versus people management were correct through his successes both in Japan and the United States. In the 1980s he literally saved companies like Xerox and Ford from extinction. He tried to turn management attention away from measuring and managing employee performance, to measuring and managing the interrelated processes of the entire organization (the system). "The performance of an individual," he said, "can only be judged in terms of their contribution to the aim of the system not on their individual performance."

Companies that followed his guidance became very successful. At one time, statistical control charts blossomed at Ford and in the 1980's it led the domestic auto industry in quality improvements. His work at General Motors gained Cadillac the Baldrige Quality Award. Xerox reclaimed their market share in a very competitive industry.

But leadership changes and organizational memory fades. We would do well to look closely once again at Deming's message. If as managers we don't understand systems thinking, measurement of variation, process improvement, and employee involvement, then we may suffer his warning that in the management of organizations, "there is a penalty for ignorance."

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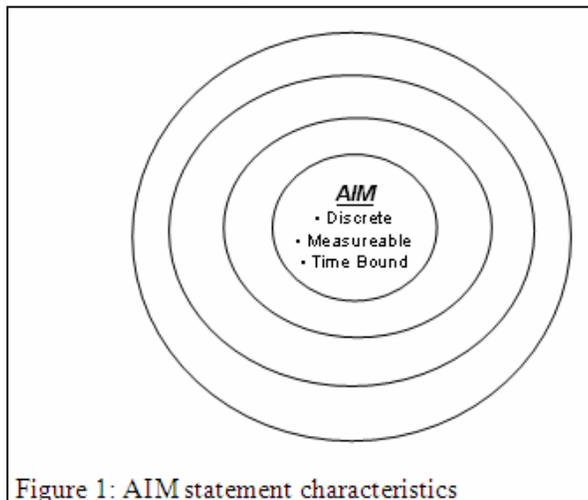
## Ready, AIM, Problem Solve FOCUSING/ISSUE/PROBLEM STATEMENTS – A QI INITIATIVE



**L. Beitsch, MD, G. Duffy, and J. Moran**

Public health QI problem solving teams often flounder from the lack of an initial clear and concise problem statement. The authors have noticed that once teams narrow their problem statement down to a discrete issue they are able to focus on and effectively apply QI tools. When teams lack focus on the real issue, they lose valuable problem solving time. Team members become disenfranchised from the process since they seem to be going in circles without making any progress.

When developing the AIM of the problem solving team, think in terms of concentric circles as shown in figure 1. The concentric circles represent layers of decreasing control from the center, where the problem solving team is in complete control, to the outside layer, where the team has little or no control over events or resources. The outer layers of the circle represent global rather than discrete issues. The farther away from the center, the more difficult it becomes to directly influence the outcomes of an issue. Starting at the inner most circle helps the problem solving team develop issues that are discrete, measurable, and time bound. It is likely that as the team gains experience and confidence it will want to tackle issues in the more distant concentric circles, because that is where the larger payoffs in terms of community health improvement lie.



**Figure 1: AIM statement characteristics**

One tool the authors have found useful is a Focusing and Issue Statement. The Focusing and Issue statement consists of the following seven steps:

1. Define the current state
2. Move to the future state
3. Describe the components of the focusing/ issue statement
4. Write the problem statement
5. Develop measures
6. Set the time frame for implementation
7. Establish a communication plan

**1 – Define the current state:** In this step we describe the background of the issue or problem that has been selected. Defining the current state is usually completed for those working on the issue/problem by the team sponsor or team leader. Some of the questions to answer are:

- What is the current state?
- Why is this important?
- What is it costing us – time/dollars/staff/etc?
- What is the impact on our clients?
- What is the impact on our division/agency?
- Other questions specific to the particular situation

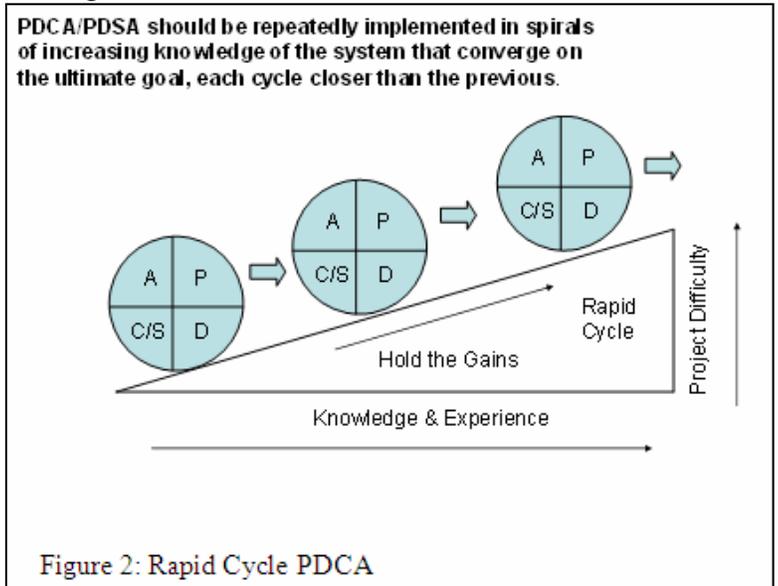
**Example of current state:**

*XYZ Health Department has not been collecting or using health outcome or health status data in a systematic way. We have anecdotal evidence of increasing economic need—overgrown lawn complaints on vacant houses, increased food pantry usage, feedback from Rotary and Ministries, but not a comprehensive profile of our at-risk populations.*

**Why this is important:**

The outer layers of the circle represent global rather than discrete issues. The farther away from the center, the more difficult it becomes to directly influence the outcomes of an issue. Starting at the inner most circle helps the problem solving team develop issues that are discrete, measurable, and time bound. It is likely that as the team gains experience and confidence it will want to tackle issues in the more distant concentric circles, because that is where the larger payoffs in terms of community health improvement lie.

Defining discrete issues helps a problem solving team complete the PDCA cycle quickly. This early success allows the team to gain experience and knowledge with the QI process. Once the teams experience success they can begin another project. This is known as Rapid Cycle PDCA through which problem solving teams are able to tackle increasingly difficult projects. This Rapid Cycle PDCA is shown in figure 2.



**Figure 2: Rapid Cycle PDCA**

The community enjoys high social and economic standing and has perceived itself as immune from needing social and health services for many years. However, declining real estate values, while not causing abject destitution, have caused many people to be “upside down” in their mortgages so they cannot pay for other things (like dentistry or glasses).

Foreclosures are resulting in property maintenance issues. Also, in a search for affordability in a high-cost area, more people are crowding into available apartments causing rental property maintenance issues. In the past, our residents in need have been drifting to the next town’s outpatient clinics, so they haven’t been “counted” as our residents. This neighboring clinic is scheduled to relocate to XYZ in 3-5 years, creating access issues for our residents who have been traveling to that location for services.

**What it is costing us:**

Since we don’t have data, we don’t know what the best response is, beyond an educated guess. We may qualify for grants, but we don’t have data to support a grant request. We could request funding as a budget line item, but don’t have data to justify the request.

We have been shifting the cost of providing services to ABC Health Care Systems and other service providers that we don’t fully acknowledge. The result is we are under-reporting what is being provided by others and under-“assuring” that the services are being provided to those in need.

**2 – Move to the future state:** In this step the team leader or sponsor describes what they see as the future state of the problem or issue once a solution has been implemented. This will be the ideal state for the team to work toward. In this step the sponsor or team leader should give the participants working on the issue some thinking, in broad terms, of what the future state should look like. This vision should include an overview of what needs to improve, change, or be created. When developing the future state, stay at a strategic level in the explanation. Try not to get too operational; let the participants move to the details as they develop the problem statement. Also, try not to suggest or imply any solutions. In short, the Move to the Future State describes the “what.” The team will develop the “how.”

In the future state description we want to describe:

- What are the important aspects of the future state?
- What is driving us to this future state?
- What might be the consequences of not moving to the future state?
- What might change?

What is the proposed timeline?

Example:

**Important aspects of the future state:**

In the future state we will receive data from all our community partners on service utilization and unmet needs/problem identification. We will identify people in need of services and link them to those services. We will identify the real costs of the needed services and means required to cover the costs of providing those services.

**What is driving us to the future state?**

It could be things like:

- The poor economy which impacts budgets and creates more people in need
- Practice Standards which require evidence based programs: or
- It is morally right to care for the most vulnerable in our community

**What might change?**

Today the main item is the economic uncertainty. We know that a strengthening economy will reduce the pressure and a weak economy will increase the pressure for our services. Universal Health Care would alleviate most of this specific problem, but should not be assumed to be forthcoming.

**Consequences of not moving to the future state:**

If we do not take actions to improve the way we do business we could become irrelevant and disappear. Others will drive the agenda. We know from past experience when others drive the agenda the people in need will continue to struggle.

**3 – Describe the components of the Focusing and Issue Statement:** In this step the team leader or sponsor describes major components that comprise the current and future state of the issue statement in discrete high level elements, as shown in the left most column of figure 3. The more control we have over the situation the more likely we will have a discrete problem statement. Figure 3 shows the level of control the team has on defining a discrete, measurable and time bound problem statement decreasing as the issue under consideration moves farther from their immediate function. The less control the team has over events and decisions related to the issue, the more the team must rely on influencing others to assist in reaching the future state.

During this step we want to answer the questions listed below and record the responses in the appropriate column of the table shown in figure 4.

- Do we as a group have complete control over the element?
- Can we implement a solution to this element when we finally develop it?
- Do we have to involve and influence others to get the element resolved?
- Is this element outside our control and influence ability?

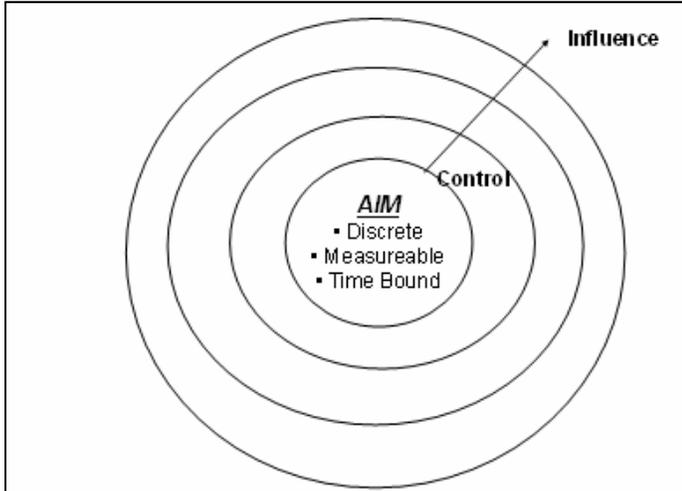


Figure 3: Layers of team control and influence

of external requirements for which the team must involve others.

Choosing the elements that are totally within the control of the team may not be the best option, however. The Issue Statement Components table provides a summary view of elements to be prioritized for overall impact to reach solution of the issue. But education may not be the element that will make the most difference to the future state. If “Same Water” is identified as a stronger root cause of inconsistencies in mosquito trapping, the team has identified in the fourth column that they will need to secure assistance from other parties who have stronger control or influence to assist them in their efforts. The fifth column answer to the “Same Water” element indicates that this influence is likely to be secured, should the team choose to pursue it.

**4 – Write the Problem Statement:** In this step, the team uses the information from steps 1 – 3 to develop a problem statement that is discrete, measurable, and time bound. An issue involving a single department, project or operational unit is generally easier to control than one that has cross functional impact or involves many different groups. The more internal the issue, the more discrete the problem statement tends to be, as shown in figure 5. In addition the more discrete problem statements are operational rather than strategic as shown in figure 6. An example of such a statement is:

The answers to the above questions will help guide the team in developing a problem statement that will be workable for them. For example, as shown in the table in figure 4, the first element related to reducing the inconsistency in the health department approach to mosquito trapping, education, is considered within the control of the team filling out the table. The team is empowered to implement education about mosquito trapping and sees the implementation of education to be within their purview. The team does not need to involve or influence others to perform the education activity. Educating on the subject of mosquito trapping is within the team’s control and influence. Other elements listed in the left-most column of the table have varying levels

**Components of the Issue Statement**  
Example: Reduce Inconsistency Mosquito Trapping

Element	Control	Implement	Involve & Influence	Outside Our Control & Influence
Education	Within	Within	Within	In
Same water	Within	Within	Need influence	In
Batteries	Out	Within	Need influence	In
1 night trapping	Within	Out	Need influence	In
Motivation	Out	Out	Need influence	Outside

For each element, check which column(s) apply  
From this, select the area(s) of focus, develop a ranking of the elements to focus on, and write the problem statement for the Quality Improvement project to be started

Figure 4: Components of the Issue Statement

For the “Same Water” element indicates that this influence is likely to be secured, should the team choose to pursue it.

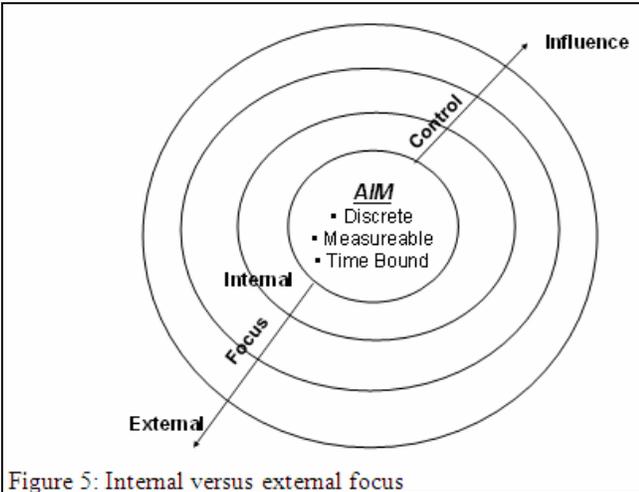


Figure 5: Internal versus external focus

The focus of the above statement is internal to the health department and within their control or influence to address. If the problem statement encompassed long term trends for broad community services beyond the mandate of the health department, the focus would be more strategic, involving external partners such as other municipal agencies and extending the timeline well beyond the concise, thirty day deadline.

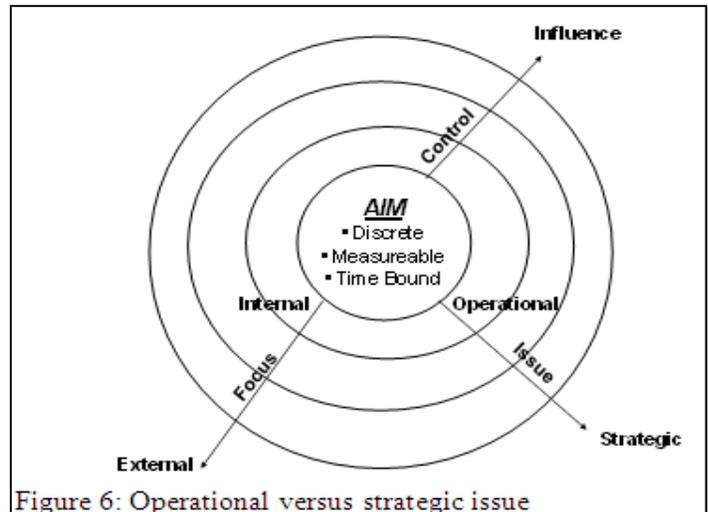


Figure 6: Operational versus strategic issue

Figure 6 adds the dimension of Operational to Strategic related to the issue under consideration. An internal issue totally under the

control of a single business unit is generally more short term or operational. As an issue encompasses more cross-functional processes, outside suppliers or community partners, the scope tends toward a longer term resolution or a strategic approach for problem solving.

**5 – Develop Measures:** In this step the team develops measures for the elements of the problem statement that will help the team know (and share with others) that the changes proposed and implemented have had a positive impact. The most common measures are process, capacity, and outcome as shown in figure 7. Process measures are the most operational. They are taken as work is performed. Capacity measures have a longer window for gathering data. The outcome of several processes may be required to assess the capacity of a program to provide services to the community. Finally, outcome measures are the most strategic. Figure 8 offers examples of common measures in a public health department for each of the three categories.

In the example of mosquito trapping in figure 4, the process of educating the public on the need for mosquito trapping may take one hour to perform. The capacity of the health department to set traps for the mosquitoes may involve a number of different processes over a period of time. Achieving the outcome of reducing the inconsistency of mosquito trapping with the final goal of controlling the mosquito population may take months and the involvement of multiple departments within the county.

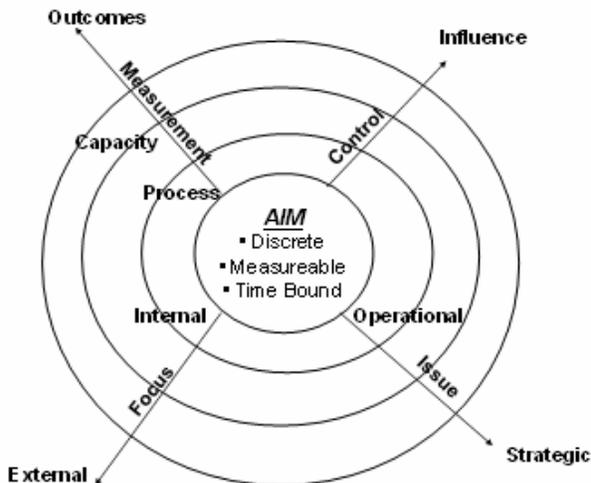


Figure 7: Process, Capacity, Outcomes Measurement

team is addressing.

**6 – Set the time frame for implementation:** In this step the team should begin to develop some best estimates of what an implementation time line would look like in broad terms. The time line will become more specific as the team identifies alternative solutions and implements the best option to solve the problem. Initially the team may establish an end date for the project, time for team meetings, problem solving training, meetings with team sponsor, etc. Once the problem solving is complete and the solution approved they can then schedule specific implementation tasks. Figure 9 is a time line or Gantt chart developed by the Saginaw County Department of Public Health for an improvement project undertaken in 2008. The chart can be as simple as a calendar on a white board in the office, or a fully developed Microsoft Project workbook with links to backup data.

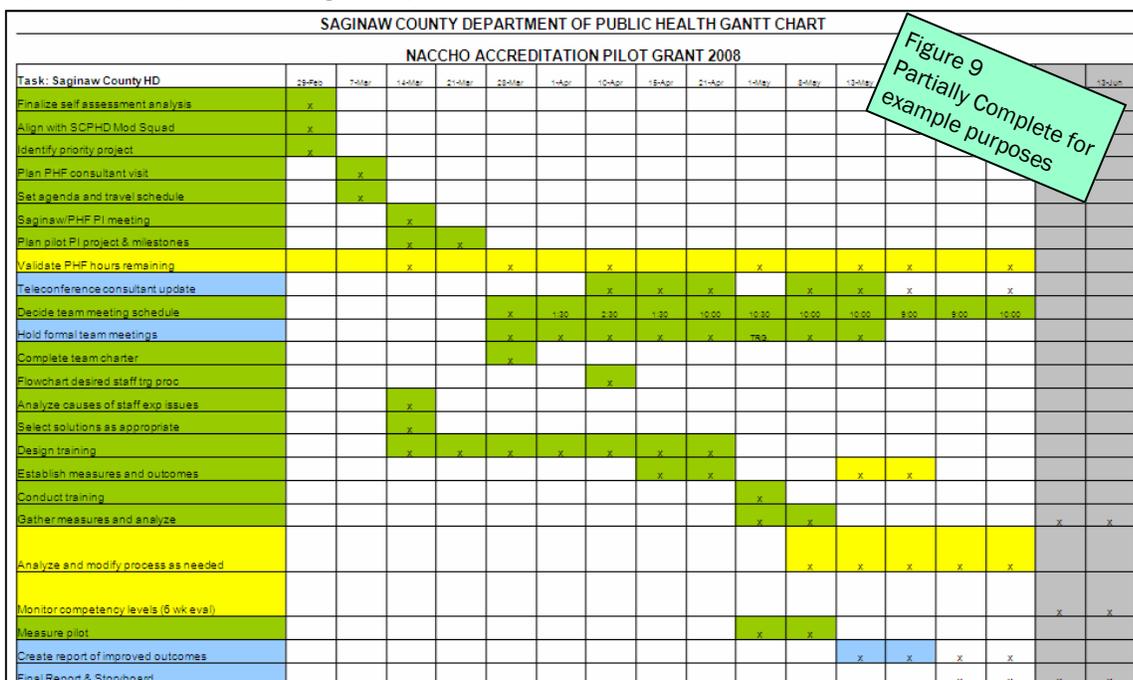
**7 – Establish a communication plan:** In this step the team, sponsor and champion come together to identify the people who will be involved in or affected by the project. This may be as partici-

When developing measures, the team should make sure they are easy to calculate/collect, aligned to the change wanted at all levels, promote accountability, and hopefully change behavior to what is desired. Examples of some currently used measures at health departments with which the authors are engaged are shown in figure 8. Each of these measures can be tied directly to a function within the health department. They are discrete, measurable and can be bound by an appropriate time frame for the scope of the issue the

Measurement examples for short term and long term performance targets

- |  |   |  |
|--|---|--|
| <b>PROCESS</b>   | <b>CAPACITY</b>   | <b>OUTCOME</b>   |
| <ul style="list-style-type: none"> <li>■ No-show WIC appointments</li> <li>■ % women who receive adequate prenatal care</li> <li>■ Education on consistent mosquito trapping techniques</li> </ul> | <ul style="list-style-type: none"> <li>■ Health dept. workforce turnover</li> <li>■ Completion of annual health profile by every LHD</li> <li>■ Lobby wait times for client services</li> </ul> | <ul style="list-style-type: none"> <li>■ Influenza deaths</li> <li>■ Multi-drug resistant tuberculosis cases</li> <li>■ Reduced obesity in target population</li> <li>■ Improved water quality in county reservoirs</li> </ul> |

Figure 8: Measurement examples for performance targets



pants, subject matter resources, advisors or customers of the future state process. The team must consider what these stakeholders' concerns may be around the activities or results of the project. Team members must make some preliminary decisions about how to keep these individuals and groups informed throughout the project. Actions should be included within the project to address stakeholder concerns and resolve these issues to the satisfaction of the individuals impacted. The communication plan should include standard updates as well as special information on issues that may arise affecting short or long term outcomes related to the project.

When people are involved in decisions affecting them, they are more likely to support change because they feel more in control and are more likely to understand the reasons for the change or what they have to do differently to be successful. A communication plan is often part of the overall project plan. Figure 10 is an example of the communication plan included in the project charter for the Saginaw County Public Health Department in a 2008 accreditation preparation project.

Communication plan: MAPP training development		
Who	Main Concerns	Communication Notes (when and how you will communicate with them)
E-Team and staff	an introduction to CQI processes	received training
ditto	Quality terminology is unfamiliar	received training
Governing Entities (BOC, BOH, Advisory Boards)	involvement and updates	receive the report after 05/31/08
Mod Squad	the strategic planning process	Update monthly.
NACCHO and the PHF	receive updates	via the Health Officers report
The community	community health assessment	is completed after May 2008

### Summary

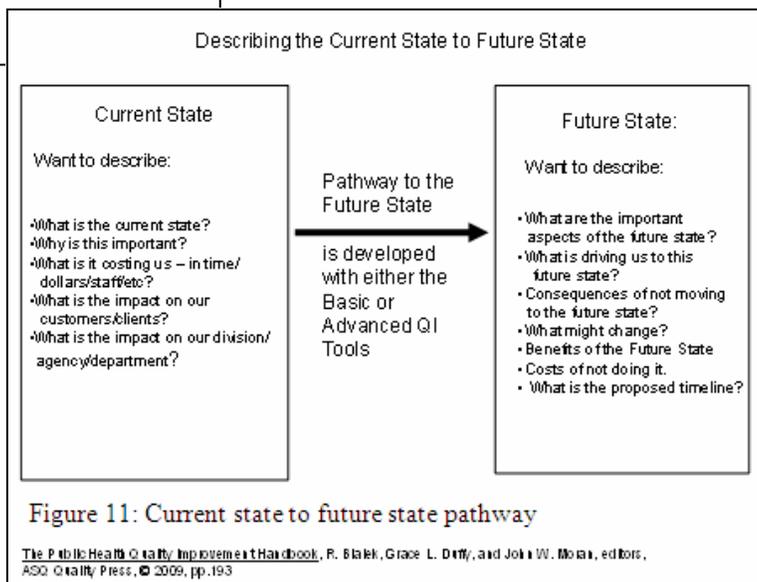
The AIM of the problem solving team is movement toward the vision of the future. Without a clear picture of the end result, most teams have difficulty clearing a path to move forward. The AIM statement comes from the project sponsor and team leader. This paper offers a set of 7 steps designed to guide the problem solving team from a Focusing statement, to an Issue statement, and finally to a Problem Statement, which is discrete, measurable and time bound. Figure 11 provides a summary of the questions to ask about the current state. These questions will help start a team on the pathway to meeting the requirements of the future state envisioned by the project sponsor. The future state can be effectively described by another set of questions also listed in figure 11. The pathway from the current state to the future state is through the 7 steps and by using either the Basic or Advanced QI tools. Continuous quality improvement is possible through the

Figure 10: Sample communication plan

implementation of a series of projects using the Plan-Do-Check-Act cycle and the Rapid cycle PDCA concept. By engaging in a series of improvement projects of increasing difficulty, teams will move from the use of basic quality tools for small successes, to an integrated quality culture using advanced quality tools. Community and client needs will be met with the best possible service and the department will expend the least possible amount of resources to meet their goals.

***“To solve a problem or to reach a goal, you don't need to know all the answers in advance. But you must have a clear idea of the problem or the goal you want to reach.”***

**W. Clement Stone**



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## Using the Baldrige System for Performance Excellence to Improve the “Health” of Healthcare Organizations

Glenn Bodinson,  
Founder and CEO  
BaldrigeCoach®



In an era when Congress and American consumers are rightfully indignant and committed to solving problems with lead in toys; unhealthy substances in food products; and the economy, medical errors and waste in the healthcare system do not generate similar demands for improvement. Is it because the medical profession, insurance companies, the consumer, and Congress believe that medical errors and waste cannot be addressed and solved?

Hospital acquired infections, falls, medication errors, pneumonia caused by ventilators, urinary infections caused by catheters, and surgical errors including wrong-site surgeries and foreign objects left inside the body and other errors and waste are extremely costly in terms of human life and financial measures. According to a 2004 Healthgrades study, an average of 195,000 people in the U.S. dies due to potentially preventable, in-hospital medical errors and an annual cost of more than \$6 billion. With a widespread commitment to Performance Excellence by the healthcare community, the results could make a significant contribution to healthcare reform, lower insurance premiums, and ensure a healthier America.

What does that kind of commitment look like? Let's examine some attributes and results from some recent healthcare recipients of the prestigious Baldrige National Quality Award.

Did you know that Healthcare has accounted for over fifty percent of the Baldrige applications during the last five years? Why? Because it works! Organizations that pursue Performance Excellence are mitigating many of the top issues that keep healthcare executives awake at night. Exceptional healthcare leaders are achieving exceptional results. (See Table)

The nine Baldrige healthcare recipients have found ways of effectively dealing with the challenges of improving patient care and safety; increasing patient, staff, and physician satisfaction; and reducing costs simultaneously while achieving these goals in a way that is sustainable. This article highlights five best practices from two recent Baldrige Award recipients: the Poudre Valley Health System (PVHS) and the North Mississippi Medical Center (NMMC). (See best practices assessment offer below.)

**Recipients commit to performance excellence, to quality as well as efficiency.** Efficiency is the result of quality. Processes and protocols are designed to improve the quality of care as well as decrease costs. For example, NMMC by implementing best clinical protocols, called a care-based cost management approach, has led to more efficient and safer patient care processes, fewer complications, shorter lengths of stay and more than \$11 million in savings over the past six years.

**Recipients set high objectives and benchmark the best.** *With their vision of providing world class health care, they often define that as having results in the top 10 percent or 90th percentile of national comparative databases. So they say, "Who is doing it better?" And then they accelerate their own progress by learning from others.*

**Recipients make meeting employee needs their first strategic objective.** John Heer, CEO of NMMC, stated, "We like to think of it as a formula, the way we look at it is we have fired up, engaged, motivated employees coming to work every day, the service or the patient satisfaction is going to be better. The quality of the care that we provide is going to be higher. If we're doing those three things well, the financial results will take care of themselves. And if we're doing those four things well, then we'll have growth. So people are focusing on the employees and the physicians and their satisfaction and engagement is the most important part of our leadership system."

**Recipients use results to drive improvement.** *PVHS leaders sit down with employees in each of the departments and say, "Here are the results. Now what are those items we want to work on?" Then with the staff and employees, they develop action plans." PVHS has ten years of consecutive improvement in cost, in quality, in employee turnover. Their employee turnover rate has decreased every year for ten consecutive years. How could they have done this without a system like Baldrige?*

**Recipients save lives.** Rulon Stacey, CEO of PVHS, exclaimed, "It is no exaggeration to say that people are alive today because Poudre Valley Health System made the commitment to continuous improvement through the Baldrige process. We really are able to provide higher quality at a lower cost."

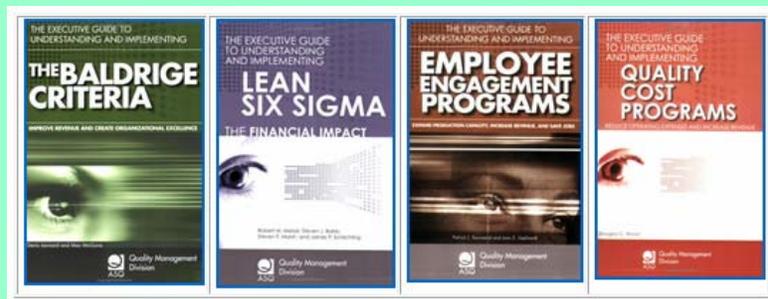
For example, in interventional cardiology the national average goal for getting patients' vessels open has been to be less than ninety minutes, this goal has not been met routinely. Brad Oldemeyer, MD at PVHS, reports, "We're now to the point where we have an average of about fifty to fifty-five minutes thanks to our teamwork and facility."

Implementing the Performance Excellence System is critical to the turnaround of healthcare in America. Jim Hall, former chairman of the National Transportation Safety Board states, "Because American medicine accepts error as inevitable consequences of treatment, our hospitals, insurers, and government do little to respond to unnecessary deaths. If we are to address the problem in a serious manner, we must first change the culture." Unlike many other quality improvement efforts that rely primarily on a set of tools and techniques, the Baldrige Criteria for Performance Excellence takes a systems perspective that emphasizes the importance of organizational culture in achieving and sustaining exceptional results. With all the debate over healthcare reform, isn't it time to implement a proven approach to deliver world-class healthcare?

Baldrige Systems Deliver Exceptional Healthcare Results		
Critical Results	Poudre Valley	NMMC
Employee Satisfaction	97 <sup>th</sup> percentile	90 <sup>th</sup> percentile
Employee Retention	> 92%	> 89%
Physician Satisfaction	99 <sup>th</sup> percentile	99 <sup>th</sup> percentile
Patient Satisfaction	80% Top Box	90 <sup>th</sup> percentile
Financial	Top 10% Financial Stability Top 10% Profit per Discharge	\$11 Million saved past 6 years

Glenn Bodinson is founder of BaldrigeCoach. Our System for Performance Excellence has been refined while working with 14 recipients of the Baldrige Award. For a free Baldrige one-page Best Practices Assessment contact [Glenn@Baldrige-Coach.com](mailto:Glenn@Baldrige-Coach.com) or (972) 489-5430.

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**The Quality Texas Foundation and the Texas Manufacturing Assistance Center (TMAC)** proudly work in partnership to enhance productivity and profitability for businesses in Texas. Performance Excellence methodologies combined with TMAC training will help you sustain and grow a competitive advantage. Many of the successful strategies used in highly competitive industries can now be deployed across other business sectors, including health care, financial services, and insurance. These TMAC courses, designed for your business, are proven cost-cutters:

- **Principles of the Lean Office 101:** This course improves an organization's productivity, quality, on-time performance and safety while reducing costs and raising employee morale. Participants learn in an interactive environment that teaches lean thinking, including recognizing non value-added work, understanding value streams, and identifying the eight waste of productivity and lead time.
- **Administrative Value Stream Mapping:** *Value Stream Mapping* is a tool for streamlining work and work processes, cutting lead times and reducing overhead. Participants will develop skills to analyze business processes from both the perspective of the process and the customer. This is an essential skill for identifying problem areas and creating a plan to improve business operations.
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For more information on how these programs can reduce costs, strengthen your business, and enhance your candidacy for the Texas Award for Performance Excellence, please contact Quality Texas or TMAC.

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