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## **ASQ White Paper on Health Reform**

**June 19, 2009**

## ASQ On Health Reform

The American Society for Quality (ASQ) is a community of more than 90,000 quality experts in all sectors of the economy whose members are dedicated to the promotion and advancement of quality and process improvement tools and practices in their workplaces and in their communities. By making quality a priority, an organizational imperative, and a personal ethic, ASQ has become the community of choice for all who seek quality technology, concepts, or tools to improve themselves and their world. ASQ also administers the Malcolm Baldrige National Quality Program (MBNQP) under a contract with the National Institute of Standards and Technology (NIST).

As America engages in a long overdue dissection, analysis, and restructuring of the ways in which we prevent disease, receive, provide, and finance healthcare, and manage and utilize health care technology, ASQ stands as a valued partner for those struggling to control runaway health care costs, deploy useful technologies, make health care safer, and improve accessibility to high quality, cost-efficient care.

Put simply, and paraphrasing a well known advertising slogan, “We do not provide healthcare. We help those that provide healthcare, do it better.”

In commenting on the health reform undertaking now underway, ASQ is in agreement with the observation made in the 2005 Joint Report of the National Academy of Engineering and the Institute of Medicine entitled “Building a Better Delivery System: A New Engineering/Health Care Partnership” that

“...relatively little technical talent or material resources have been devoted to improving or optimizing the operations or measuring the quality and productivity of the overall U.S. health care system. The costs of this collective inattention and the failure to take advantage of the tools, knowledge, and infrastructure that have yielded quality and productivity revolutions in many other sectors of the American economy have been enormous.”<sup>1</sup>

ASQ believes that there are many “root causes” for our nation’s current healthcare crisis. In keeping with a hallmark tenet of the continuous process improvement philosophy, we need to be about the business of

- identifying those root causes (with the emphasis on problem identification, not assigning blame),
- prioritizing their impacts on our society, and then
- relentlessly and sustainably identifying and implementing cost-effective solutions that will ensure maximum access to the highest quality healthcare.

We believe that our people are our country’s greatest and most precious resource and that we must wisely invest now in their health.

In making the recommendations that follow, we wish to point out the obvious: ASQ is not an organization of health care providers, health insurers, or vendors in the healthcare space. We do not purport to know and/or to communicate about the best methods for preventing, diagnosing, treating, or managing disease. Our expertise is in the science of process improvement and in systems for quality management. Our members are experts at developing, maintaining, connecting, and – when necessary – repairing the process infrastructure of a business or enterprise.

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<sup>1</sup> NAE-IOM Report

In that regard, among the items we find most troubling in the health care sector, and which we feel are most in need of serious attention, are the following:

- 1. WASTE**
- 2. INCENTIVE ALIGNMENT**
- 3. INFORMATION TECHNOLOGY IMPLEMENTATION**
- 4. SUSTAINABLE CULTURE CHANGE**
- 5. WORKFORCE EDUCATION AND PREPARATION**

## **WASTE**

Everywhere one looks in the healthcare sector, one finds one or more of eight types of waste [See Appendix A]. Some have estimated that up to 60% of every healthcare dollar spent goes for waste. Others have noted the high incidence of medical procedures for which there was no clinical justification. Still others have noted a high incidence of missed handoffs in care from one provider to another, variations from the evidence-based standard of care, etc.

All of these are in one way or another examples of waste that cannot and should not be tolerated if we are to reach our healthcare goals in the US.

For years the manufacturing industry, other service industries, the financial industry, government, and even academia have employed process improvement tools such as LEAN and Six Sigma to

- identify waste,
- conduct problem solving exercises (using validated tools such as DMAIC, FMEA, Seven S, and others) to remove waste, and
- institute appropriate culture-changing practices to sustain the waste removal.

In healthcare in the early 90's there were many efforts to replicate the successes in the automotive industry and elsewhere using TQM, the Crosby Method, and other interventions. While somewhat successful in individual and isolated environments (departments, divisions, etc.), this movement was not sustained due in part to the failure in healthcare to adopt an enterprise-wide culture of continuous improvement. These efforts gave rise to the Institute for Healthcare Improvement which is now a highly successful and staunch supporter of the "gospel of continuous quality" in healthcare. There are also a growing number of healthcare institutions and organizations adopting and spreading the message of waste reduction and continuous quality improvement. These include Virginia Mason Health System in Seattle, Virtua Hospital in New Jersey, Theda-Care Health System in Wisconsin, and the AAFP's TransformMed Program (for primary care practices). More recently, CMS has recognized the value of these tools by giving "deeming authority" for hospital accreditation to DNV Healthcare which uses the ISO 9001 quality management system as the basis for its requirements. In addition, the Joint Commission is moving rapidly in the direction of incorporating process improvement tools such as Lean and Six Sigma in its accreditation activities.

ASQ believes that there should be meaningful incentives and requirements for waste reduction imbedded in whatever health reform legislation emerges from Congress. Such measures should be aimed at minimizing or eliminating overuse, underuse, and mis-use of healthcare, and at creating a culture of sustainable process improvement and quality management throughout the healthcare sector. We believe that through such legislation resources and tools should be made

available to create and sustain a massive cultural shift, and that the use of such resources and tools should be, if not required, at least strongly recommended and incented.

We believe that while it may take many years, even generations, to complete this cultural transition, the first steps in this direction can and should be taken as part of the health reform process. Failing to do so could end up (as many previous attempts have done) in our asking ourselves 10 or 20 years down the road: “How can we get rid of waste?” or “Why are our costs so high?” or “Why is our quality below par?”

## INCENTIVE ALIGNMENT

ASQ agrees with the oft-quoted words of the Nobel Prize-winning economist, Milton Friedman: “You get what you incent.” We believe that that is the case throughout the healthcare sector. Providers are currently incented to see more patients [for less time] and to do procedures. Hospitals are incented to provide expensive ER services to maintain funding for their residency programs. Health insurers are incented to manage more and more claim reports which are what their income is tied to [not to promote efficient use of services]. These incentives are clearly not aligned with our emerging outcome expectations for a “reformed” healthcare sector, e.g. higher quality, fewer errors, less waste, lower costs, sustainability, greater access, etc.

In addition, few in the healthcare sector are currently held financially accountable for errors and/or waste (as the auto manufacturers have been for many years via warranties). Recently, however, there has been a call for actual warranties in healthcare:

*“Adding ‘warranties’ to care is an innovation that transfers risk to providers, because payment includes allowances for defects. How do such warranties affect patient care and bottom lines? We examine a proposed payment model to illustrate the role of warranties in health care and their potential impact on providers’ behavior and profitability. We conclude that warranties could motivate providers to improve quality and could increase their profit margins.”<sup>2</sup>*

This call comes on the heels of the now widely accepted CMS “Never Events” hospital reimbursement policies that have now been endorsed by payers and hospital associations, so there is at least recognition of the concept of holding providers accountable financially for performance.

Nowhere is the need for financial accountability in the provision of healthcare services more obvious than with respect to the administrative aspects of the provision of care in physicians’ offices. There are expertly crafted and validated, evidence-based guidelines and standards of clinical care for a wide variety of medical conditions. These have been widely used as the benchmarks or metrics against which clinical care is evaluated and/or incentivized [via PQRI and “Pay For Performance” Programs]. These clinical programs have met with varying degrees of success in improving clinical care. However, “some success” is indeed preferable to the very low level of success that we have achieved in reducing the errors, waste, redundancy, etc. that are due to the lack of standardization, quality, and efficiency of the administrative or operational aspects of care.

At present, there are no broadly recognized and validated metrics for success in the management and operation of physicians’ offices where a high percentage of all health encounters occur.

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<sup>2</sup> *Health Affairs* 28, no. 4 (2009): w678-w687 (published online 16 June 2009; 10.1377/hlthaff.28.4.w678)

Currently, no one is holding medical practices accountable for failed lab tracking, for long waits before one can get an appointment, for errors in transcription that may at times be catastrophic, for delays in processing patient forms needed for disability decisions, for patients having to wait endless hours in the office waiting room, etc.

In addition to managing the resources necessary to deliver care, a significant amount of medical practice resources are devoted to interacting with, authorizing or justifying care, and processing claims with insurers and third party administrators. In many practices, there are significant inefficiencies and waste associated with this work. While much can be improved by healthcare provider organizations, insurers and third party administrators should also be challenged to review and improve the efficiency of their processes and to partner with the medical delivery community to improve processes related to claims processing that are efficient, minimize errors and redundancy, are standardized, and deliver maximum value to all stakeholders, including and most importantly the patient.

ASQ believes that the health reform legislation being considered must address the lack of standards (and thus accountability) for excellence and cost-effectiveness in the administrative side of healthcare. With respect to physician services, ASQ is working with the Medical Group Management Association (MGMA) to define a pilot set of administrative/operational metrics that could serve as the basis for incentive programs like those based on clinical metrics. We feel that the new legislation should provide for the continuation of this and similar efforts either by requirement and/or incentives. Further exploration of the “comparative effectiveness” of such measures should also be supported. We believe that the payoff for activity of this type could be significant and could lead to reduced costs, improved processes and outcomes, and higher levels of satisfaction.

We also believe that there ought to be provisions in the health reform package to support demonstrations and rapid adoption of proven methods for incenting financial accountability for excellence in operations and results in all aspects of healthcare (clinical and operational). Whether it is through warranty-based concepts or other means, we believe that this should be an integral part of the healthcare industry of the future. If we can hold toy makers, car makers, and auto repairmen accountable for results, why not providers of health care services? Such accountability in the form of the afore-mentioned CMS’s “Never-Event” policies is already having beneficial effects on the ways and urgency with which hospitals take corrective and/or preventive action to mitigate their costs.

Finally, we feel that there should be a way of continuously recognizing and rewarding the successful efforts of individuals and institutions to adapt their cultures, lean their operations, and achieve clinical and operational excellence. This is the intent of the existing Malcom Baldrige National Quality Award which could be the basis by which achievement in these other areas is recognized.

## **INFORMATION TECHNOLOGY IMPLEMENTATION**

Healthcare is one of the last of this country’s major economic sectors to effectively and pervasively embrace and adopt the use of information technology. We believe that healthcare is now on a fast track to embrace, deploy and spread effective and efficient use of Health IT as quickly and completely as possible.

Much of the planning for health reform in this country will depend on our ability to effectively deploy HIT expeditiously and effectively. It is a situation not unlike that which obtained when John Kennedy promised America that we would have a man on the moon within ten years. In signing the ARRA (which provides considerable funding and logistical support for Health IT), President

Obama must have had similar thoughts in mind about the implementation of Health IT, only with a much shorter timetable! We believe that to fully and sustainably capitalize on the coming investment of Stimulus dollars in Health IT, the following steps must be taken:

- Thorough analysis, assessment, and—where necessary—re-engineering of the practice environments (including their cultures) for increased efficiency, quality, satisfaction, and optimum preparedness for the introduction of new information technologies;
- Provision of assistance to providers in making the right choices for practices and facilities from among the numerous genres of electronic functionality that exist;
- Thorough preparation of the environments receiving the new functionalities and their personnel for the technical and social changes introduced by the adoption of the correct technology for them;
- Provision of assistance in the process of comparison shopping from among the many brand choices for their chosen technology;
- Provision of assistance to insure successful negotiation with the vendors of such products, and, finally,
- Provision of assistance in monitoring the use and effectiveness of these important resources.

These recommendations are based on the experience of our ASQ members in dealing with IT implementations in and out of healthcare and on the extensive ASQ Quality Body of Knowledge (QBOK), and they center around a few principles that we believe are key:

- HIT and related technologies are potentially effective tools to be used in the quest for better, more cost-effective, and more accessible health care. They cannot and should not be expected, by themselves, to achieve those results.
- Consultation and assistance in healthcare environments should strive first to create fertile ground for the sowing of the seeds of health IT. The best health IT modalities will not work if the business environment into which they are placed is operating in an earlier century. In some cases the most effective thing to be done in a practice is to rationalize the process flow of the work.
- Change is difficult, and nowhere more so than in medical practices that are overburdened with waste, paperwork, thinning profit margins, and inadequate time to provide care. Those assisting practices to implement anything new, be it HIT, patient-centered medical home, or anything else, must spend time understanding the environments they are working in and the people who work in those environments, and helping them to adopt and embrace change and to adopt new cultures, e.g. cultures of quality, continuous improvement, patient-centeredness, patient safety, etc.
- The proven and validated tools, philosophies, and methodologies of quality management, change management, and process improvement can be of immense help in the work of the RHITEC Program (ARRA) and other efforts supported under the health reform legislation. ASQ and its 90,000 members have been using these tools effectively for decades and stand ready to assist the ONC and others to incorporate them successfully into the work of health reform.
- A primary goal of implementing HIT should be to effectively connect as many points in the continuum of healthcare as possible so that all those with a “need to know” have full access to appropriate information. An EMR in a medical office that is not linked with other points of care and relevant data, though helpful, is not as useful as an EMR (or other HIT modality) through which the provider can get lab and radiology results, see what other medications the patient is on, check the patient’s eligibility [and/or deductible use], etc.

Availability of such connectivity will go a long way toward reducing waste, eliminating errors, improving care and reducing costs.

## **SUSTAINABLE CULTURE CHANGE**

ASQ believes that the most critical need of all in health reform is for meaningful, lasting changes in the deeply embedded cultures related to health and healthcare in this country. To achieve lasting success in improving care, reducing costs and waste, improving patient and worker safety, improving customer satisfaction, and in improving long-term financial viability of this critical sector of our economy we will have to re-think, re-learn, and re-define who and what we individually and collectively are with respect to health and health care. It is an effort not unlike (but perhaps much larger than) the “cultural revolution” that occurred worldwide around the environment issues.

We will all need to adopt different behaviors and attitudes regarding our own personal health, placing more emphasis on prevention of disease, effective self-management of our chronic conditions, and taking more responsibility and a much more active role in our own health care. Providers at all levels will need to shed their paternalism and acculturate themselves to the role of coach and partner in the health care of their patients. They will be increasingly required to make their practice more “patient-centric.”

In addition, providers will have to undergo a profound cultural change from the “guild” and apprentice model of healthcare with the added feature of the view of the provider as the “captain of the ship” to one of a participatory, team-based model focused not on blame for wrong-doing but on joint problem solving to avoid repetition.

Another necessary culture change will be the rapid evolution to a culture of quality and continuous improvement such as that now extant at Virginia Mason Hospital. To achieve this all healthcare providers will need to avail themselves of learnings and training in the science of continuous improvement and quality management so that they are aware of the potential of these tools and are equipped to use and/or advocate for their use to maximally improve their processes and to effect optimum outcomes. ASQ, in cooperation with its geographically-based Sections and the National Business Coalition on Health and selected regional health coalitions across the country, is working to make available the process improvement and culture-change skills, expertise, and resources of its members at no cost for a limited time to medical providers to assist and coach them in re-engineering their practices for future success.

The plan is that under this program volunteer process improvement professionals from other industries would, after comprehensive training about the medical practice environment, and using a standardized work plan, assist practices and their staffs in interested communities to analyze and improve practice process flows, eliminate waste, reduce costs, and seamlessly introduce new functionalities such as HIT, Patient Centered Care, patient safety, etc. One such program in Michigan has already resulted in a reduction in one primary care practice of \$90,000 annually in just one of their office processes, giving them 2 more hours of physician time and 6 more hours of medical assistant time each day. This was achieved by the staff themselves in two short days after a brief orientation to the process improvement tool that was used: value-stream mapping (VSM). VSM is familiar to every process engineer in industry.

We are calling this program the modern-day “Marshall Plan. Such a program could be of assistance in the implementation of the RHITEC’s and/or other programs supported by the health reform legislation and aimed at providing assistance to providers in meeting the desired objectives of the legislation. A hallmark of this program is that the volunteers are there not as consultants, but as coaches and mentors. They are giving the practices they help a “fishing pole”

and teaching them to fish, not “giving them fish to eat”. Sustainability of the positive changes made is the goal.

Another required culture change will be the evolution from a focus solely on the individual patient to a co-focus on the population of patients for which they are responsible. Such a change will, of course, be supported and facilitated by the use of new information system tools such as registries but will require a revision in the thinking of providers. We believe, however, that the benefits of adding this focus will be considerable especially in reducing the costs and morbidities that invariably result from the failure to effectively and systematically prevent disease and/or to adequately identify (early enough) and manage chronic health conditions.

We believe that wherever and whenever possible the health reform legislation should provide positive incentives, opportunities, training, evaluation, and resources for all of these necessary cultural changes as well negative incentives for the failure to evolve in this way at the individual or organizational levels.

## **WORKFORCE EDUCATION AND EXPECTATIONS**

Another item that needs to be addressed in and by the health reform legislation is the preparation of the healthcare workforce of the 21<sup>st</sup> century for their new realities, roles and responsibilities. The changes that will need to occur in healthcare in this country if the sector is to survive and meet the goals and objectives of whatever health reform legislation emerges are truly revolutionary. It will indeed, no longer be “your fathers healthcare sector”, but rather will have to be much leaner, better, and re-focused for success in the new economy and in the new global arena. Among its new goals will be those outlined in the NAE-IOM Report:

### **BOX ES-1**

#### **Six Quality Aims for the 21st Century Health Care System**

The committee proposes six aims for improvement to address key dimensions in which today’s health care system functions at far lower levels than it can and should. Health care should be:

- Safe—avoiding injuries to patients from the care that is intended to help them.
- Effective—providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).
- Patient-centered—providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- Timely—reducing waits and sometimes harmful delays for both those who receive and those who give care.
- Efficient—avoiding waste, including waste of equipment, supplies, ideas, and energy.
- Equitable—providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Source: IOM, 2001, pp. 5–6.

As such and as alluded to above, the training of most, if not all, providers will have to be overhauled to insure a work force with the right skills, behaviors, and knowledge base to succeed in what will be their “Brave New World”. This will necessitate curricular re-engineering to accommodate not only new clinical thinking and procedures but a new focus on the patient, on populations, on culture change, on process improvement and quality management, on team-based care and thinking, on cost-containment, on cultural competence, on prevention and chronic

care management (especially in primary care), and on the widespread and pervasive use of health information tools and devices.

This will be no small undertaking. In many ways, it could be dubbed as the “Industrial Revolution” of healthcare in the US. Unfortunately, failure will not be an option.

## SUMMARY

ASQ agrees wholeheartedly with the observations of Berwick, et al that “Improving the U.S. health care system requires simultaneous pursuit of three aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care.”<sup>3</sup> We believe that taking advantage of the opportunities and addressing the challenges referred to above in the health reform legislation will go a long way toward successful and sustainable achievement of these aims.

ASQ further subscribes to the observation made by the Institute of Medicine in its landmark report *Crossing the Quality Chasm*<sup>4</sup> that there is “chain of effect” that links health systems at four different levels as the interrelated determinants of health care quality that must be aligned for reform to yield the desired results:

1. The first level is aims, i.e. the so called triple aim: better experience of care (safe, effective, patient-centered, timely, efficient, and equitable), better health for the population, and lower total per capita costs.
2. The second level is the design of the care processes that affect the patient — clinical “microsystems.” Health care microsystems are famously unreliable, variable in costs, and often unsafe.
3. The third level described by the IOM — is the health care organizations that house almost all clinical microsystems and can ensure coordination among them.
4. The IOM’s fourth level is the environment, which includes the payment, regulatory, legal, and educational systems<sup>5</sup>.

We at ASQ are looking forward

- to working at all of these four levels to improve the health of Americans and the quality, accessibility, affordability, and acceptability of the health services they receive,
- to contributing our expertise and resources and those of our 90,000+ members in the content areas outlined above to this important undertaking which is of vital concern to our country and our people,
- to addressing at a minimum at least three of the five major elements identified in one of the first of the Health Reform bills to be introduced, the Affordable Health Choices Act:
  - Cost reduction
  - Prevention
  - Health system modernization, and
- to the successful implementation of this historic and monumental legislative effort.

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<sup>3</sup> **The Triple Aim: Care, Health, and Cost**, Donald M. Berwick, Thomas W. Nolan and John Whittington, *Health Affairs* 27, no. 3 (2008): 759-769

<sup>4</sup> **Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century**, Institute of Medicine (U.S.), Institute of Medicine (U.S.). National Academies Press, 2003

<sup>5</sup> **Achieving Health Care Reform — How Physicians Can Help**, Elliott S. Fisher, M.D., M.P.H., Donald M. Berwick, M.D., M.P.P., and Karen Davis, Ph.D., *NEJM*, Vol. 360:2495-2497, June 11, 2009, no. 24

## APPENDIX A

### Examples of Waste In Healthcare

| Waste   | Healthcare Explanation/Example   |
|---|--|
| <ul style="list-style-type: none"> <li>■ Rework and Repair</li> </ul>   | <ul style="list-style-type: none"> <li>■ <b>Excessive variation or process centered off nominal.</b></li> <li>■ <b>Failure to prescribe the right medication, apply treatment to the right patient or provide care at the right time.</b></li> <li>■ Results in reapplication of care and poor clinical outcomes.</li> </ul>   |
| <ul style="list-style-type: none"> <li>■ Inventory</li> </ul>           | <ul style="list-style-type: none"> <li>■ <b>The excessive level of material at any stage of production which hides any of the other wastes.</b></li> <li>■ <b>Excessive and/or inadequate bed assignments, pharmacy stocks, samples, specimens, paperwork and patients in beds.</b></li> <li>■ All lead to other wastes resulting in excessive costs and stress on patients, facility and medical staff.</li> </ul>  |
| <ul style="list-style-type: none"> <li>■ Delays</li> </ul>              | <ul style="list-style-type: none"> <li>■ <b>Unnecessarily waiting for materials, labor or machine time.</b></li> <li>■ <b>Often found in waiting for bed assignments and admissions to urgent/emergency care.</b></li> <li>■ Also in testing, treatment, laboratory testing results and discharges</li> </ul>  |
| <ul style="list-style-type: none"> <li>■ Conveyance</li> </ul>          | <ul style="list-style-type: none"> <li>■ <b>Unnecessarily long movement of parts throughout the process stream.</b></li> <li>■ <b>Often found in moving samples, specimens, patients for treatment and testing.</b></li> </ul>   |
| <ul style="list-style-type: none"> <li>■ Overproduction</li> </ul>      | <ul style="list-style-type: none"> <li>■ <b>Leads to the waste of inventory. It is making too much of what is not needed at any point in time.</b></li> <li>■ <b>Often found when patients are given procedures or medicine prior to the designated time in order to support care giver's timing. Testing ahead of time to support the laboratory's schedule.</b></li> <li>■ Treatments performed to balance the hospital's staff or equipment to prevent overload.</li> </ul> |
| <ul style="list-style-type: none"> <li>■ Motion</li> </ul>              | <ul style="list-style-type: none"> <li>■ <b>The waste on unnecessary movement in the process.</b></li> <li>■ <b>Often found searching for patients, medications, charts, collecting tools, supplies and processing paperwork.</b></li> </ul>   |
| <ul style="list-style-type: none"> <li>■ Extra process steps</li> </ul> | <ul style="list-style-type: none"> <li>■ <b>Any unnecessary process step.</b></li> <li>■ <b>Often found in multiple bed moves, retesting, excessive paperwork, unnecessary procedures and multiple testing.</b></li> </ul>   |
| <ul style="list-style-type: none"> <li>■ Talent</li> </ul>              | <ul style="list-style-type: none"> <li>■ <b>The worst of all wastes.</b></li> <li>■ <b>The waste of not engaging and utilizing the people who work in the organization to run the enterprise as if they owned it.</b></li> </ul>   |