American Autos Circa 1970 and Healthcare

By Barry P. Chaiken, MD, FHIMSS

The Ford Pinto was a really terrible car. The gas tank was positioned such that, in a collision, protruding differential bolts would puncture the tank, leading to frequent car fires. This defect led to the death of more than 27 people and many others maimed. Other cars representative of this defect-filled era of U.S. auto manufacture include the Ford Fairmont, AMC Gremlin, and Chevy Vega. Cars made in the United States in the 1970s and 1980s were poorly designed, cheaply assembled, and reliably unreliable. Rather than designing for quality, American manufacturers relied on fixing problems after assembly. Is it any wonder that consumers soon abandoned these terrible cars and purchased Japanese models instead? American car makers lost an entire generation of car buyers.

Japanese manufacturers followed the quality rules created by W. Edwards Deming in their pursuit of the U.S. car-buying public. Deming's principals allowed Japanese companies to manufacture high quality automobiles at lower costs and with fewer defects than their American counterparts. Only recently has an American car manufacturer, Ford, topped Toyota in number of cars sold in the United States.

With the rapid shift from volume-based reimbursement to value-based reimbursement, organizations must change the way they deliver healthcare, with Deming's quality rules offering clues as to what needs to be done. In the 1970s, U.S. automakers fixed defects in their cars *after* they

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rolled off the assembly line. Until recently, hospitals received reimbursement for readmissions within 30 days of hospital discharge. The penalty for the defect—failure to properly treat a patient before discharge – was non-existent and these readmissions often led to increased total reimbursement.

This approach to healthcare—fixing defects, not measuring quality, ignoring processes, and shunning transformation and change—cannot survive the new realities inherent in the shifting of reimbursement rules. Perhaps a few of Deming's 14 key principles for transforming business effectiveness can provide a roadmap for what our organizations need to do to prosper in the years ahead.

1. **Create constancy of purpose toward improvement of product and service, with the aim to become competitive, stay in business. provide jobs, and break down barriers between departments.** People in research, design, sales, and production must work as a team, in order to foresee problems of production and usage that may be encountered with the product or service. Perhaps it

is time for a team rather than an individual to deliver healthcare to patients. Instead of focusing on narrow activities and roles driven by historical titles, tasks are assigned based upon individual skills, licensing, and availability. Social network communication models, similar to Facebook, Twitter, and LinkedIn, provide a means to coordinate activities, facilitate efficient teamwork, and drive quality and efficiency.

2. **Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.** Change management may be the hardest task when introducing new technologies. Most organizations struggle to affect change and often do not invest adequate resources to achieve their goals. Change originates from the c-suite, the only part of an organization that can take on entrenched powerful special interests and rally individuals to embrace change for the benefit of the organization and its staff and patients.

3. **Cease dependence on inspection to achieve quality. Eliminate the need for massive inspection by building quality into the product in the first place.** In the words of Dr. Paul Batalden, "Every system is perfectly designed to get the results it gets." Delivering care without using standardized evidence-based processes leads to poor quality and higher costs. Health information technology offers tools to monitor and evaluate processes, allowing for intelligent process and workflow redesign.

4. **End the practice of awarding business on the basis of a price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.** The shift to value-based reimbursement finally moves the healthcare marketplace away from a sole focus on cost. Evaluating the entire "supply chain" of inputs producing a particular clinical output is the only way to understand the value of each of the activities provided in delivering care to patients.

5. **Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.** Although expert opinion provides useful guidance, it is science that really matters. Collecting outcomes data and analyzing processes allows for an objective approach that constantly works to improve care delivery.

6. **Institute training on the job.** Currently utilized clinical education tools fail to provide much proven value. Little data exists demonstrating that continuing medical education either changes behavior or improves quality. Sophisticated online learning management systems, offered at the point of care to healthcare professionals, offers an opportunity to provide timely and meaningful educational moments spread throughout the entire work day and within a framework of efficient clinical workflow.

7. **Institute leadership. The aim of supervision should be to help people and machines and gadgets do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.** Healthcare delivery lacks in its focus on teams. The failure to perceive care delivery as a shared responsibility prevents proper management of the professionals providing care. In addition, the clinical silos of physician, nurse, pharmacist, and other health professionals prevent a unified approach to patient care, adequate supervision, and coordination of those providing the care. A team approach utilizing effective, easy-to-use Web 2.0 technology facilitates communication and care coordination, leading to more effective and efficient care.

8. **Drive out fear, so that everyone may work effectively for the company.** Malpractice concerns only drive overutilization and defensive posturing while doing little to prevent errors or improve care. Monitoring outcomes through analytics helps identify best practices and areas for improvement. Effective communication of this information to all care team professionals, without focusing on placing blame, allows the team to collectively work towards improvement.

9. **Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job.** To move from the 1970s American auto industry model for healthcare delivery to a high quality, efficient one embraced by current U.S. automakers requires every person in a healthcare delivery organization to embrace change and facilitate both business and clinical transformation.

Healthcare information technology tools exist to allow organizations to thrive within the emerging healthcare marketplace. Lessons are available from other industries that embrace the teachings of Deming and now deploy information technology to achieve desired outcomes. Organizations led by leaders who seek new solutions to problems and embrace necessary change will sprint far ahead of those relying upon ineffective answers utilized in the past. ∎

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