Why TQM Can't Stand for "

THE PHRASE "MANAGED CARE" is to the health care industry of the 1990s what the term "quality" was to the auto industry during the 1980s. The quality principles taught to the Japanese in the 1950s by William Edwards Deming and Joseph Juran have been transformed into a quasi-religion known as total quality management (TQM), which has become the rule for virtually every product and service in the marketplace.

The troubled U.S. health care system is no exception. In the evolution of managed care structures and protocols, TQM has often been used as a guide to improving the quality of health care delivery while simultaneously lowering costs. And why not? If it worked in a factory in Detroit, why can't it work equally well in a hospital or doctor's office?

Unfortunately, health care delivery in general—and managed care in particular—does not lend itself to many of the basic TQM principles, for two key reasons. First, many TQM principles are violated when applied to health care delivery. Second, the TQM principles that *are* applied correctly are likely to have little or no relevance to health care.

Top-Quality Medicine

Self-Control, Self-Inspection

American factories traditionally have been plagued by excessive supervision of workers, overkill in product inspection, and a dearth of individual worker responsibility. One TQM principle, the "artisan concept," defines three fundamental assumptions about any task:

- The worker knows the job.
- The worker knows when the result is unacceptable.
- The worker has the requisite knowledge and authority to bring unacceptable performance within the tolerance of acceptable performance.

Not only does managed care grossly violate the principles underlying the artisan concept—it turns the idea upside down in the process. Utilization review (UR) is a structure of checks, barriers, and supervision of physicians and hospitals—the primary providers of health care. Under UR, physicians must obtain approval to proceed at each step in the health care delivery process: ordering a diagnostic test, admitting a patient into a hospital, performing a surgical procedure, or keeping a patient hospitalized for an extra day to stabilize recovery from surgical complications.

It's bad enough that physicians, like workers on the assembly line, can't be trusted to practice their profession without being continually badgered and molested. To compound the problem, the people in UR are (1) usually less medically qualified than the attending physician in the area in question and, (2) since they're on the other end of a phone line, always remote from, and therefore less knowledgeable about, the actual situation. This process, then, is a polar opposite to the fundamentals of TQM, and no other business operates on this principle.

What makes managed care so unique that the wrong principle, applied in the wrong way, will somehow produce desirable results? Like other professionals, physicians have always "managed" their practices and the care they delivered. The "managed" part of "managed care" actually means that health care delivery is now being managed by administrators who have no knowledge of medicine and no contact with the patients—i.e., customers.

The artisan concept has two corollaries. The first says that if a factory worker doesn't know more than anyone else about the confines of his work space, then he's unqualified and shouldn't be there. This rule is usually invoked to discipline managers prone to heavy-handed supervision of their blue-collar work force; but it applies double to work delegated to expert professionals.

The second corollary states that the strategy for reaching higher levels of quality is to stop relying on inspection; in other words, "you can't inspect quality into a product." To improve quality, you have to retrain the workers or improve the production process in some way. Hiring more inspectors just adds costs at a point where it's too late to make improvements. The result is a lose-lose situation: More inspectors have been added, at an additional cost, with no reduction in defects. Just as you can't inspect quality into a product, a utilization review gatekeeper can't inspect health into a patient.

You Get What the System Delivers

One of Deming's maxims says that you'll eventually get whatever your system is designed to deliver, regardless of its effect on quality. If a system provides a worker on an assembly line with defective parts, the final products will be defective, too. If you design a system to admit fewer people into the hospital, that's what you'll get. Whether this approach translates into quality health care is anyone's guess.

The key driver in the Japanese system of worker supervision is *trust*. And trust seems to come naturally to Japanese managers, while Americans continue to struggle with the concept. The best way to ensure that a job gets done right isn't to step up worker supervision; instead, you need to educate, empower, and trust the persons you've delegated the job to.

This notion of trust has filtered down to nearly every sector of the U.S. economy—except the medical profession. Now, an assembly worker for an American auto company with a sixth-grade education is entrusted with the power to pull a cord and shut down the production of an entire plant, thereby putting millions of dollars at risk, if he thinks he's detected a quality problem. Yet, because of the infamous Stark amendment, a physician can't refer a patient for a routine test to a lab facility if he has a financial interest in it.

Why are physicians the one and only occupation in the economy that can't be trusted to practice their craft in the interest of their employers, customers, and society? When you buy your car from General Motors, the dealer will finance the car through GMAC, and its service department will install AC Delco replacement parts—both wholly owned subsidiaries of—surprise!—GM.

It makes no sense to trust a physician, in some cases with your life, while simultaneously deeming him too crooked to refer a $75 diagnostic test. If physicians, as a group, are that untrustworthy, they shouldn't just be barred from practice; they should be behind bars as well.

Eliminate Numerical Quotas

One of the common traps that derails TQM efforts is equating numerical measurements with quality outcomes. Quality does not reside in precise abstract numbers but, rather, in vague and temperamental perceptions that reside within the customers' minds. Deming called this trap "a denigration to counting": accumulating and adding up numbers because they're available, and relying on those numbers because it's the path of least resistance. To reverse the natural tendency to fall prey to this error, Deming continually reinforced the notion that "the most important numbers in any business are unknown and unknowable."

The medical profession is full of examples of denigration to counting: rates of Caesarean deliveries, hysterectomies, and hospital admissions. Regardless of what the numbers turn out to be, managed care entities invariably strive to lower them. But what level of Caesarean deliveries or hysterectomies denotes quality health care? If the answer is always "more" or "less" (as with welfare or defense spending), then you're operating in the realm of politics, not quality measures.

How many phone calls should a customer service representative handle in an hour? That's the wrong question. Phone representatives should not be measured not against numerical quotas, but in terms of satisfied customers. How many Caesarean deliveries should an obstetrician perform each year? As many as circumstances call for. Counting merely measures usage; it doesn't indicate value. The value of fire extinguishers and nuclear weapons is measured not by how often they're used, but by their presence and accessibility.

Reducing Variance in Outcomes

With inanimate substances and mechanical parts, performance can be measured and controlled to a high degree of precision. This is why TQM is a science: The circumstances that produce a single quality part, if replicated, will continue to produce quality parts until the system or process is thrown out of balance. Likewise, the circumstances that produce a defective part can be traced back to causes that can be corrected.

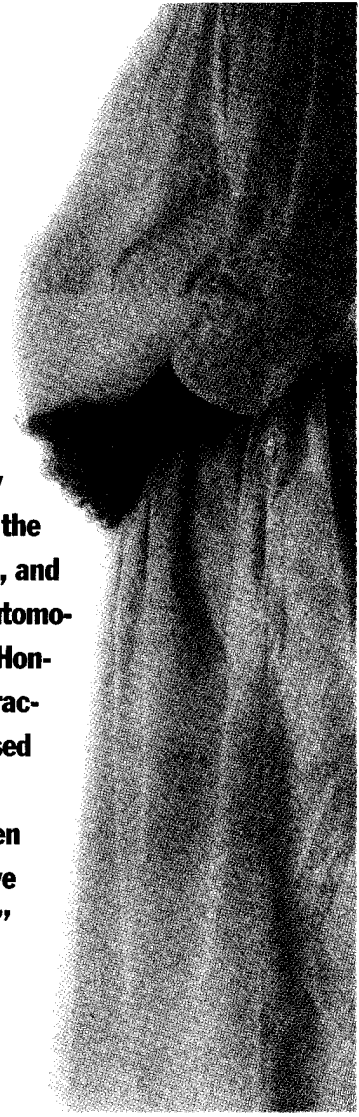
The objective of TQM is to reduce the variance of the system parameters, so that all the parts are produced to uniform standards. This can be done on an assembly line, working with inanimate substances to produce standardized products because, unlike prescription drugs, chemistry texts don't enumerate adverse reactions to heating water to 212 degrees, and physics texts don't speculate on the side effects of dropping a bowling ball from a rooftop.

Basic chemical elements can be made to conform to exact standards under controlled conditions; human beings cannot. This brings to light another basic in TQM: Quality in manufacturing and service industries is achieved by preventing and eliminating exceptions and outliers. Yet health care delivery involves the diagnosis and treatment of *sick* people—exceptions and outliers to the natural state of health. In other words, much of the practice of medicine, by definition, lies outside the domain of TQM.

Sick people can get better without any medical intervention. Some even get well *in spite of* medical intervention. This never happens with machines. Your car's ability to stop won't improve if you continue to ignore warnings to replace the brake pads. And, unlike wine and certain illnesses, spark plugs and motor oil do not improve with age.

This is why there is medical quackery, but not engineering quackery. As soon as someone claims to have discovered a new mechanical process, the scientific community demands that the results be replicated exactly as prescribed. And should the advertised results fail to materialize on a uniform and universal basis (remember the rapid rise and equally rapid demise of "cold fusion" several years ago?), the originating scientists are exposed as a fraud and ostracized from the scientific establishment. Yet in medicine, clinical trials will claim success in treating some disease by stating that, under certain loosely controlled conditions, mild levels of success can be obtained a certain percentage of the time. This is considered to be valid medical research.

In the manufacturing of products, any variance in results is anathema. In medicine, it's an acceptable way of doing business. Honda expects all of its fuel injection systems to perform to exact specifications, uniformly. Honda's ultimate objective is to produce cars of superior quality that are in-



But obstetricians don't measure the duration of a mother's labor against a single standard, any more than they expect every baby they deliver to be the same size, weight, and sex. Unlike the automotive engineers at Honda, a physician practices his craft based on the principle, "When you've seen one patient, you've seen one patient."

distinguishable from each other. They want the car-buying public to think, "If you've driven one Honda Accord, you've driven them all."

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Finger Pointing and Counter-pointing

Two of the most contested points in the implementation of managed care are the incidence rates of hysterectomies and Caesarean deliveries. That the incidence rates of these procedures vary widely by geographic region is cited in particular as evidence of sloppy medical practice and poor quality.

This argument rests on three assumptions:

- People are the same all over the country, and therefore, health care delivery should be similarly uniform.
- Wide variances in medical practices are evidence of sloppy, and perhaps even aggressively unethical, medical practice.
- The practice patterns and health care delivery in areas with lower incidence rates are, by definition, the areas with higher-quality care.

But these assumptions are dubious at best. First, the geographic distribution of the population of the United States is most definitely not uniform. Areas vary by ethnic composition, age distribution, lifestyle, and standard of living. Moreover, all of these categories of geographic variances can have significant effects on the numerical quantification of aggregate health care delivery data.

Second, though the financing and payment system doesn't reflect it, health care delivery is a consumer service, subject to limits in the capital resources of the sellers and the personal preferences of the buyers. While a hysterectomy or Caesarean delivery may be considered an indiscriminate commodity that can be bought or sold on a trading floor by an HMO or insurance company, it's a matter of professional judgment and expertise for the physician and a personal evaluation of cost, risk, and rewards to the patient. If these "soft" personal and professional factors don't allow room for variance, what does?

The insurance industry certainly, against its own standards, doesn't measure up any more favorably. Insurance rates, cost structures, and profit margins vary from company to company just as much as, if not more, than health care as delivery measures. Actuaries and health care administrators, now so bold as to question the practice patterns of physicians, are not about to let physicians turn the tables on them and dictate how to underwrite employer groups, price health insurance, or pay claims.

Who, Whom?

It makes no sense to give the local TV weatherman a raise for a nice sunny day or, conversely, to hold him accountable for the damage done by a tornado. Similarly, the medical profession is often helpless to reverse the progression of certain diseases. The best doctors can do is provide an incomplete, informed professional opinion and recommend alternatives, the outcomes of which cannot be ensured.

Physicians, like everyone else, are only responsible for the outcomes they can control. They can't control variables like self-destructive lifestyles, noncompliance, and birth defects. Still, it's usually a physician who bears ultimate responsibility, simply because he was the person closest to the situation and the last one to touch the patient.

TQM confines itself to inanimate objects and solidifies proven processes and products. In stark contrast, medical science operates in an unproven realm—the interaction between the human mind and body—continually pushing against the envelope of the unknown.

So, before any "quality" measures are introduced into the practice of medicine and before physicians agree to be measured against any "quality" standards, the basic terms governing this process must be defined and goals agreed to.

Finally, physicians should be left in peace to practice their craft, just like any other profession, from accountant to auto mechanic. As well, they should be judged and held accountable according to standards that reflect the uncertain and unavoidably experimental nature of the environment in which they practice. □

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