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Address all communications to the JOURNAL OF CLINICAL ORTHODONTICS, 1828 Pearl St., Boulder, CO 80302. Phone (303) 443-1720. The Journal of Clinical Orthodontics is published monthly by JCO, Inc. Subscription rates: INDIVIDUALS—U.S.A.: \$102 for one year, \$185 for two years; all other countries: \$125 for one year, \$225 for two years. INSTITUTIONAL (multi-reader, hospitals, clinics, libraries, schools, government agencies, businesses)—U.S.A.: \$135 for one year, \$245 for two years; all other countries: \$160 for one year, \$295 for two years. STUDENTS—U.S.A.: \$51 for one year; please provide student status verification. SINGLE COPY—\$11 U.S.A.; \$12 all other countries. All orders must be accompanied by payment in full, in U.S. Funds drawn on a major U.S. bank only.

THE EDITOR'S CORNER

Deming's Fourteen Points for Orthodontists

In 1947, as Gen. Douglas MacArthur reconstructed war-ravaged Japan, he called on an obscure U.S. government statistician to help with the census. Thus began a career that would make the name of W. Edwards Deming synonymous with quality.

In addition to his census duties, Dr. Deming began to hold seminars for industrialists and engineers on the statistical quality controls pioneered in the United States by his mentor, Walter Shewhart of Bell Laboratories. Deming taught and proved the validity of his concept of Total Quality Control in Japan, but he remained an honorless prophet in his own country until it finally dawned on some American managers that many of our products and services had lost their competitive edge because of poor quality. Although many alibis have been offered and fingers pointed over the past decade or so to explain America's loss of market share, serious managers now realize that quality counts, and that consumers will absolutely insist upon it in choosing goods and services.

Deming is now 91, but he still lectures several times a year. I had read several books and articles about his Fourteen Points and recognized their relevance to virtually any enterprise. But reading isn't the same as hearing first-hand, so I made the effort to attend one of Deming's famous four-day seminars. Apparently a number of other people felt the same way, because the more than 500 conferees represented a wide array of professions—police chiefs, school superintendents, telephone company executives, physicists, the commandant of the U.S. Marine Corps, and many more.

Deming's Fourteen Points must be considered as part of a complete concept that makes the customer the final arbiter, seeks to limit variation, and nurtures constant improvement. At first glance, some of the points may not seem applicable to orthodontics, but after I listened to Deming's seminar, they took on new significance for me. The points can be summarized as follows:

1. *Establish constancy of purpose.* For orthodontists,

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this means dependable service for our patients and referring dentists. Constancy of purpose underlies innovation, which results in the acquisition of new skills, therapies, and equipment. Without innovation, we become enmeshed in today's problems, merely improving the efficiency of procedures that may not need to be done at all.

2. *Adopt the new philosophy.* Everyone in the organization must enthusiastically endorse the training, equipment, and changes necessary to implement the new era. This requires that everyone be involved in planning and decision-making. People don't resist change nearly so much as they resist *being* changed. Managers need input from their staff members because these people have to make the new system work.

3. *Cease mass inspection.* Obviously, this applies more to manufacturing, but for orthodontists it implies defining office tasks so precisely and with such a minimum of variance that wholesale inspection by the doctor becomes redundant. Inspection is then done on a random basis only.

4. *End the practice of awarding business on the basis of price alone.* This point clearly indicates the establishment of long-term, trusting relationships between the orthodontist and suppliers who are as committed to quality, innovation, service, and dependability as the doctor is. Changing suppliers solely on the basis of price may be of short-term benefit, but such a custom seldom delivers the other features that are so important in the production of quality.

5. *Improve constantly and forever the system of production and service.* The Japanese call this process *kaizen*. It not only calls for streamlining and refining the treatment we offer to patients, but it involves every feature of our offices—location, building, equipment, furnishings, decor, and even more important, the selection, placement, training, and retention of exceptional employees.

6. *Institutionalize training.* Deming remarked, "The greatest waste in America is failure to use the abilities of people." The need to eliminate such waste carries with it a profound responsibility on the part of managers to understand how people learn in different ways. The dyslexic

can't learn easily from reading. The dysphasic has trouble learning from the spoken word. Others learn best from modeling. In orthodontics, training, probably the most neglected aspect of practice, is usually conducted by the "see one, do one, teach one" method. The last person trained instructs the next person hired, which guarantees the dilution of instruction and perpetuates less-than-optimal performance. Good training is expensive and intangible, but its results more than compensate for its cost.

7. *Institutionalize leadership.* Deming believes the function of management is leadership, not supervision. To bring all employees to their fullest potential, leaders must understand *all* of the systems and work that they manage. Deming is convinced that systems and managers fail more often than employees. After considering this point, I wonder how many orthodontists really understand their computer systems.

8. *Drive out fear.* People don't flourish in a climate of fear. Fear can produce some spectacular short-term feats in endeavors such as sports and war, but orthodontists shouldn't rely on bullying and intimidation of staff members or patients to achieve results. Employees need to have confidence that failures won't be unfairly assigned to them, and that they can offer ideas without the risk of ridicule, rejection, or embarrassment. This lesson is a hard one to learn, because most managers have spent a good deal of their lives learning how to inculcate fear. In such an atmosphere, employees are likely to clam up, resent management, and resist any changes that management wants, simply as a reflexive response to fear.

9. *Break down barriers between departments.* I can't think of any principle that would do more to foster better staff relations in orthodontic offices than this one. Chairside personnel often feel that front-desk employees don't care how tightly scheduled a day may be, while administrative personnel are certain that chairside assistants can never know the emotional trauma they suffer at the front desk—answering the phone, trying to collect past-due payments, satisfying the scheduling requirements of unreasonable parents. And of course, the lab technicians know in their hearts that no one undergoes stress like

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theirs, when trying to meet unreasonable, if not impossible, delivery dates for appliances. Unless the orthodontist-manager can convey the whole picture to everyone, divisions inevitably occur. Some of the worst personnel problems I've encountered have come from my failure to break down departmental barriers.

10. *Eliminate slogans, exhortations, and targets.* Exhortation is used more and achieves less than any other behavior-modification tool known to humanity. Slogans mislead because they imply that quality depends on individual effort rather than on a well-functioning system.

11. *Eliminate quotas.* Although this point applies more to industries that produce widgets, orthodontists have the solemn obligation to make every team member aware that quality counts for more than quantity.

12. *Remove barriers that rob people of pride of workmanship.* With the liberalization of many state dental-practice acts, orthodontic personnel can now handle more tasks than ever before. This offers orthodontists a marvelous opportunity to enlist their auxiliaries as full-fledged partners in therapy. Such a commitment requires extensive training, but the payoff in pride of workmanship is immense. Chairside assistants who do little more than clean and sterilize instruments, pass instruments to the doctor, or chat with patients find it difficult to muster the interest in and passion for orthodontics held by someone who has high technical skills and uses them daily to create beautiful smiles.

13. *Encourage education and self-improvement for everyone.* This may seem redundant after all the preceding, but Deming insists that every team member should pursue enlightenment as a lifelong endeavor—and that it does not necessarily have to be directly associated with the job. Many insights and innovations in the workplace come from knowledge obtained in other fields.

14. *Take action to make the transformation.* This, of course, is the most difficult point to accomplish, because it requires not only the planning of sound clinical systems, proper administration, and carefully selected and trained staffs, but the daily dedication of managers and employees to the plan they have formed.

Does the commitment to Total Quality Con-

trol work? Well, several thousands of successful companies all over the world have staked their existence on it and are thriving, while those who haven't are watching market shares and customer satisfaction plummet. It's hard to see how orthodontists can ignore Deming's principles and continue to prosper in an age of intense competition, increased regulation, and greater patient expectations. LWW

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SIDNEY BRANDT, 1915-1992

With deep sorrow we have learned of the death of Sidney Brandt. Sid was the earliest and strongest supporter of the concept of JCO and made significant contributions to its acceptance in orthodontics. As a member of the Contributing Editors Board from the inception of JCO, he pioneered the interview as a journalistic and educational form in orthodontics, and made many memorable interviews of outstanding orthodontists.

In an orthodontic career of more than 35 years, Sid set a standard for dedication and integrity that was recognized around the world among the many orthodontists for whom he was teacher, mentor, and friend. In practice, he was an outstanding clinical orthodontist. In retirement, his restless energy forced him into a second career as a stock broker with a special expertise in municipal bonds. Once again he achieved great success, and earned the respect of his peers and the gratitude of those whom he served.

Sid was a staunch friend, a respected colleague, and an outstanding human being. Our hearts go out to his wife Janey and his daughter Barbara.

Memorial contributions may be sent to the Donald J. and Sidney Brandt Scholarship Fund, Ohio State University, 2400 Olen Tangy River Road, Columbus, OH 43210.