Do Doctors Need Deming?

Amongst the relatively new group of health professionals concerned with evaluating the quality of care there is confusion with regard to the terminology of programs for assessing that care. The new terminologies of Total Quality Management (TQM) and Continuous Quality Improvement (CQI) certainly imply a greater involvement by "managers" of health care facilities. If this leads to the provision of more resources within a facility for evaluation of care, the change in terminology is a positive step for quality assurance programs etc. Quality assurance programs as we have been conducting them will fail if there is no commitment from the "top" to provide resources for the conduct of review programs.

In 1987 a review conducted by the Australian Institute of Health (AIH) [1] revealed that only 65% of Australian hospitals had a budget item for quality assurance, and from my observations of such hospitals not any of them (with one exception) did it reach a figure of 0.1% of a hospital's budget. It has also been my experience, in hospitals both in Australia and the United States, that unless there is a commitment from the heads of the clinical departments quality assurance programs will be ineffective as there is limited action taken when problems are revealed.

The call has thus come for a change in "culture" in a health facility towards the adoption of TQM and the CQI as suggested by Berwick [2]. I certainly agree that there is a greater need for commitment in the search for quality from administrative groups but I would argue that clinicians are constantly striving, admittedly with varying degrees of success, for continuous improvement. Of the fourteen points outlined by W. Edwards Deming [3], who revolutionized industrial output in post-war Japan, some already exist within a clinician's philosophy and some are not particularly appropriate (see Table 1).

Deming's first point is the need for a constancy of purpose. This already exists (for the vast majority of clinicians), namely the desire to heal sick people, and there is no need therefore for his second point, the adoption of a new philosophy.

Deming's third point is a recommendation to cease mass inspection. Such an inspection is not done and cannot be done in our health facilities. A large industrial firm such as General Motors concentrates upon the production of a limited number of items which are all expected to be identical at the end of the production line. A health facility on the other hand deals with an infinitesimal number of "products" and the outcome will vary, not only according to problems with the system of care or with the people providing the care, but also with the "raw materials" provided. These will vary according to the state of the patients at presentation, their age, anatomy, physiology and particularly their psychology, in other words their case-mix and illness severity. Deming highlights the importance of ensuring uniformity and quality in the raw materials prior to the processing of the product but such an advantage is not available to clinicians.

The fourth point is that price is not the best goal to success. However, the health care dollar, in Australia as in most countries, is limited and any particular health care facility is therefore limited in the control of its product price.

Deming's fifth point is to improve production and service. Certainly with regard to the latter health care facilities and their providers may be found wanting with regard to good communication and "hotel" services offered to patients, and production can be improved in...
Leading Articles

TABLE 1. Deming's 14 points

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<tr>
<td>1</td>
<td>Create constancy of purpose for improvement of product and service</td>
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<td>2</td>
<td>Adopt the new philosophy</td>
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<td>3</td>
<td>Cease dependence on inspection to achieve quality</td>
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<td>4</td>
<td>End the practice of awarding business on the basis of price tag alone. Instead, minimize total cost by working with a single supplier</td>
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<td>5</td>
<td>Improve constantly and forever every process for planning, production and service</td>
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<td>6</td>
<td>Institute training on the job</td>
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<td>7</td>
<td>Adopt and institute leadership</td>
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<td>8</td>
<td>Drive out fear</td>
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<td>9</td>
<td>Break down barriers between staff areas</td>
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<td>10</td>
<td>Eliminate slogans, exhortations and targets for the work force</td>
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<td>11</td>
<td>Eliminate numerical quotas for the work force and numerical goals for management</td>
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<td>12</td>
<td>Remove barriers that rob people of pride of workmanship. Eliminate the annual rating or merit system</td>
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<td>13</td>
<td>Institute a vigorous program of education and self-improvement for everyone</td>
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<td>14</td>
<td>Put everybody in the company to work to accomplish the transformation</td>
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relation to the avoidance of complications. However, in general current quality assurance programs address all of these issues. Considering production, from the point of throughput, the dilemma for acute health care facilities is that the highest costs occur in the first 14 days of a patient's admission so that a greater patient throughput increases costs. Of course it does not do so for the whole health economy as a greater throughput of patients in existing facilities will in the long run reduce the need for extra capital costs in establishing new hospitals, increased staffing etc.

Points six and seven are recommendations to institute training of staff and leadership and point thirteen is a recommendation for re-education and training. Vocational training is already an integral part of medical care and most hospitals recognise the need to allow staff adequate time for education and re-education. With regard to leadership most medical disciplines have a hierarchical structure which is in general a satisfactory one. Points eight and nine are to drive out fear and to break staff barriers. Inter-professional rivalry for example between medical practitioners and nurses is slowly being reduced as is fear of senior colleagues by junior staff, largely through the better education of the latter group allowing them to debate issues of care more easily at a technical level.

Point ten highlights Deming's abhorrence of slogans. However, a slogan or motto may capture, in a few words, an institution's philosophy. For example, the Australian Council on Healthcare Standards (ACHS) has as its motto "striving for excellence".

Deming's point number eleven is the avoidance of "quotas". I am in agreement with him in this regard for a high output or throughput, as outlined above, may increase costs for a health facility, but most importantly it has no regard for the quality of the outcome of care.

Point twelve is a recommendation to promote pride within an organization. I believe that existing quality assurance programs have the capacity to do that where they demonstrate that the standard of care is comparable or better than that achieved in other institutions (this will be one of the indirect benefits in the development of clinical indicators of care) and the awarding of a certificate of accreditation certainly promotes pride right throughout a health care facility. Deming's fourteenth point is the need for action at the top of an institution and this brings me back to the fundamental weakness of our current quality assurance programs, and that is a lack of commitment on the part of hospital administrative groups to recognise, in addition to a need to review their own performance, a need to provide sufficient resources for review programs within hospitals. If the only way to do that is to change the name of the game to Total Quality Management then so be it but from a clinician's point of view it will not alter his or her continuing efforts to improve the quality of the management and outcome of the care they provide to compromised people, that is to their patients.
The constant dilemma in the health care industry as opposed to industry in general is that of maximizing versus optimizing: clinicians must aim for the best outcome of care regardless of cost and health care managers at the “macro” level are constrained, by a limitation of resources, to aim for an optimal level of care. Thus, doctors do need Deming in their hospitals, not so much to influence their own philosophy as to influence senior management to provide them with appropriate resources to review their performance and assure health care payers and patients of the quality and the appropriateness of their practice. There is evidence available that when clinicians do review their performance and find it less than optimal they can modify their practice to achieve improved care [4].

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REFERENCES


**ISQA - Society Business**

Election of BOARD 1993-1995

According to the ISQA constitution the nominating committee suggestion for Board 1993-1995 is circulated among the members of the society prior to the election. Every Society member is free to nominate their own candidates for the Board. Such nominations must be in the hands of the Society Secretariat before April 1 1993:

ISQA  
c/o Mats Beckman  
Hematologlab Medicin Klinikken  
Karolinska Sjukhuset  
Box 60500  
10401 Stockholm

The election will then take place by mail as stipulated.

The Nominating Committee offers the following recommendations for election to the ISQA Board 1993-1995:

**President** Enrique Ruelas (Mexico), President Elect: Charles Shaw (UK), Secretary: Mats Beckman (Sweden), Treasurer: Ambrose Hearo (Canada) and as councillors three to be elected from: Hannie Giebing (The Netherlands), Franco Perraro (Italy), Judy Homa-Lowry (USA), J.M. Caldeira da Silva (Portugal), Hirobumi Kawakita (Japan).

**President** Enrique Ruelas, MD, MPA, MIISc, Mexico, is the Society President Elect. Director of Latin American Programs, Kellogg Foundation. Former Dean, National School of Public Health of Mexico; President, Mexican Hospital Association and Founding President, Mexican Association of Quality Assurance.

**President Elect** Charles Shaw, MD, BS, PhD, UK, is presently the Treasurer of the Society. Director, Clinical Audit Unit of Bristol Hospital. Member of several WHO working groups on quality assurance and the author of multiple articles and monographs on medical audit. Member of ISQA Board 1985-89; elected as Treasurer 1991.

**Secretary** Mats Beckman, MD, Sweden, is the current Secretary of the Society, Staff Radiologist at Karolinska Hospital, responsible for projects concerning radiologic epidemiology in Stockholm. Presenter at several ISQA conferences and part of the ISQA Stockholm 1990 conference organizing team.

**Treasurer** Ambrose Hearo, BComm, DHA, Canada, Executive Director, Canadian Council on Health Facilities Accreditation, the national health care administration body in Canada; formerly Deputy Minister of Health, Province of Newfoundland. Has been a participant and speaker at several ISQA conferences.

**Councillors**
- J.M. Caldeira da Silva, MD, Portugal. Director, National School of Public Health, Lisbon. Immediate past-chairman of the International Hospital Federation. A long-time participant in ISQA meetings and a leader in the development of quality assurance activities in Portugal.
- Judy Homa-Lowry, RN, USA. Director, Quality Management Services at Health Care Investment Analysts (HCIA is Ann Arbor, Michigan, a major vendor of health care quality and cost data). Formerly President of the US National Associative for Health Care Quality and current trustee of the US Health Care Quality Educational Foundation. Active ISQA member and presenter at several ISQA conferences.
- Hirobumi Kawakita, MD, MBA, Japan. President, Kawakita General Hospital and Vice Chairman, Japan Hospital Association. A founding organizer of the Japan Hospital Quality Assurance Society and a presenter at the 8th ISQA conference in Washington.
- Franco Perraro, MD, Italy. Chief of Emergency Medicine Udine General Hospital, Udine, Italy. Currently President of the Italian Society for Quality Assurance, VRQ, and Editor of the journal QA, the official journal of the Italian Society for Quality Assurance. He is also a member of the project management team and coordinator for Italy for COMAC QA project of the Commission of the European Communities. He is President of the European Association of Senior Hospital Physicians.

On behalf of the ISQA Board.

Mats Beckman  
Secretary