



Mini Review – Education

# The History of Quality: From an Eye for an Eye, Through Love, and Towards a Multidimensional Concept for Patients, Kin, and Professionals

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## Abstract

In ancient civilizations, poor quality was dealt with according to the principle of “an eye for an eye.” In the modern era we have learned from industry what quality really is. Quality includes standards, protocols, system thinking, and an understanding of variation to ensure good outcomes. In the post-COVID era, quality is not all about predefined specifications but rather about relationships and even love. Quality can now be defined as multidimensional, including person-centered care for patients, kin, and providers. Care should be safe, efficient, effective, timely, equitable, and eco-friendly. High quality is only possible if we include core values of dignity and respect, holistic care, partnership, and kindness with compassion in our daily practice for every stakeholder at every managerial and policy level.

**Patient summary:** Quality of care is a multidimensional concept in which person-centered care is central. The care a patient receives should be safe, efficient, effective, timely, equitable, and eco-friendly. Attention should be given to dignity, respect, kindness, and compassion. There should be a holistic approach that includes partnership with all stakeholders. The only acceptable level of quality a professional should provide is the level they would accept if their loved one were to be the next patient.

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In ancient Babylonia, the Code of Hammurabi was issued circa 1755–1750 BCE. This legal text called for “an eye for an eye”, whereby the person causing an injury should receive a punishment equivalent to the injury inflicted. The Romans followed suit with the *lex talionis* principle, which was a law

of retaliation whereby a person who injured another was penalized to a similar degree. Hence, the victim received the value of the injury in compensation. The loss of quality was compensated negatively.

Over the centuries, quality became an increasingly important paradigm that was initially mainly used in

manufacturing. During the Middle Ages, guilds oversaw and formalized the practice of their crafts. They disciplined members who were found guilty of cheating regarding hours of trading, pricing, and failing to maintain good quality. Those found in breach of agreed standards were banned from the guild [1]. Today in medicine, training of clinicians and medical practice still retain some of the characteristics of the ancient guilds. However, quality management is no longer a negative compensation mechanism, but rather a challenge and an opportunity to move towards excellence.

The development of quality in health care has involved several steps. In the early 20th century, Codman [2] introduced the concept of standards in health care, although implementation of improvements was not connected. In the second half of the 20th century, health care learned about quality improvement from the manufacturing industry. In the 1950s, Edwards W. Deming and Joseph Juran developed theories on improving quality via quality standards, specifications, sampling inspection, continuous improvement, and statistical process control. They understood that to achieve a high-quality final product, studying the processes that lead to the outcome is important. Deming [3] proposed that understanding the system that produces the work, measuring the variation in the system, understanding the psychology, and having theories of knowledge or learning are key to success. In the 1980s, Crosby [4] stated that “Quality is not only right it is free, and it is not only free it is the most profitable product line we have”. In industry it became clear that the higher the quality, which means conformance to predefined specifications, the lower the total cost. Quality was still highly linked to efficiency and profit.

In health care, the outcome is not only efficiency and cost but also something more complex: life-years, quality of life, and clinical outcomes at an individual patient level. Therefore, one does not only need lean or efficient processes. Donabedian [5] stated that while understanding systems and processes leads to good outcomes, they are not enough and are only enabling mechanisms. Rather, it is the ethical dimension of individuals that is essential to a system's success. Doctors and nurses are stewards of something precious. He stated that “ultimately, the secret of quality is love. You have to love your patient and you have to love your profession. If you have love, you can then work backward to monitor and improve the system” [5]. The type of love Donabedian refers to is not the love you have for your partner or child; instead, it is positive resonance, as defined by Fredrickson [6]. Positive resonance is a daily nutrient, like food and oxygen. It is about creating happiness and health in moments of connection. That connection is needed between caregivers and patients to be able to go the extra mile and strive for excellence.

The World Health Organization has defined quality as the “degree to which health services for individuals and populations increased the likelihood of desired health outcomes” [7]. This vague definition does not define what quality

means in daily practice. In their 2001 landmark report *Crossing the Quality Chasm*, the Institute of Medicine (IOM) defined the six dimensions of quality as being safe, effective, efficient, timely, equitable, and patient-centered [8]. The report enabled policy makers, managers, clinicians, and patient representatives to discuss quality in a pragmatic and operational way. The six dimensions made quality actionable and opened discussions on priority-setting and on the roles of all stakeholders.

The triple aim (better care, improved health, and lower costs) was introduced in 2008 and expanded in 2015 to the quadruple aim. Care for the care provider became an additional goal for high-performing systems [9]. Therefore, quality over the past decades has undergone an important evolution not only in a theoretical but also in operational way via the introduction of standards, indicators, public reporting, pay for performance, and accreditation to a person-focused approach with patient-reported outcomes, experience measures for patients and the workforce, and co-production of care.

This is why quality is now defined as a multidimensional concept. As reported by Lachman et al [10], quality should be a combination of technical dimensions and core values for care that are based on the actual vision and challenges of our society. The original IOM dimension of patient-centered care is now defined as the overall umbrella dimension “person- and kin-centered care” calling for attention to patients, their kin, and health care providers and professionals in everything we do. Six more technical dimensions remain in the multidimensional model: safe, effective, efficient, timely, equitable, and eco-friendly. The last dimension is new, as sustainable health care because of climate change is now a challenge at individual, organizational, and global levels.

To achieve the goal of person-centered care combined with optimal scores for the six technical dimensions, we need to understand the core values for care. In the multidimensional model, four are defined: dignity and respect; holistic care; partnership; and kindness with compassion. Real clinical leadership is required to link these core values to the technical and umbrella dimensions. This will require continuous acknowledgment of the resilience of our patients and workforce, as has been evidenced in the COVID-19 pandemic. Our ongoing search for excellence for all dimensions of the Lachman model will require transparency at every managerial and policy level [10]. In addition, remember that the only acceptable level of quality is the level you would accept if your loved one were to be the next patient.

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## References

- [1] American Society for Quality. The history of quality. <https://asq.org/quality-resources/history-of-quality>.

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- [2] Neuhauser D. Ernest Amory Codman MD. *Qual Saf Health Care* 2002;11:104–5.
- [3] Deming WE. *Out of the crisis*. Cambridge, MA: MIT Press; 1982.
- [4] Crosby PB. *Quality is free*. New York, NY: McGraw-Hill; 1980.
- [5] Best M, Neuhauser D. Avedis Donabedian: father of quality assurance and poet. *Qual Saf Health Care* 2004;13:472–3.
- [6] Fredrickson BL. *Love 2.0: finding happiness and health in moments of connection*. New York, NY: Hudson Street Press; 2013.
- [7] World Health Organization. Quality of care. [www.who.int/health-topics/quality-of-care#tab=tab\\_1](http://www.who.int/health-topics/quality-of-care#tab=tab_1).
- [8] Institute of Medicine Committee on Quality of Health Care in America. *Crossing the quality chasm: a new health system for the 21st century*. Washington, DC: The National Academies Press; 2001.
- [9] Sikka R, Morath JM, Leape L. The quadruple aim: care, health, cost and meaning in work. *BMJ Qual Saf* 2015;24:608–10.
- [10] Lachman P, Batalden P, Vanhaecht K. A multidimensional quality model: an opportunity for patients, their kin, healthcare providers and professionals to coproduce health. *F1000Research* 2021;9:1140.