



## The History of Continuous Quality Improvement (CQI)

Dr. W. Edwards Deming felt that creating better goods and services while learning to take joy in work was possible.

The Japanese captured the world auto and electronics markets by following Deming's advice to practice continual improvement by thinking of manufacturing as a system.

His encouraged cooperation, continual improvement, decision-making based on fact, and how to view organizations as a "system". These theories laid the groundwork of modern CQI.

### Why use CQI?

Although the roots of CQI (or total quality management) were born in the field of manufacturing back in the World War II era, the tools of CQI can be used quite effectively in healthcare today.

You might be surprised how often you instinctively use statistical thinking and CQI while caring for end stage renal disease patients.

Q: What can CQI do for the average dialysis & transplant facility?

A: (These are only a few possible answers.)

- It provides the care team with data that can be used to improve patient quality outcomes!
- It can be used to satisfy governing entity requirements
- Data has strong persuasive powers
- It involves the healthcare team in problem solving
- The data showing improvement can be very encouraging and promotes the desired behavior

### Plan, Do, Check, Act

The Plan, Do, Check, Act cycle or "Deming Cycle" as it is often called, is the tool of continuous quality improvement that is probably the most familiar to dialysis staff members. It is much like the Nursing Process (assessment, nursing diagnosis, planning, implementation, and evaluation) that is taught in nursing schools. As the diagram above illustrates, it is a cycle that is continually evolving and changing as a process is reviewed and reevaluated to determine the effectiveness of the interventions. It is an on-going, dynamic tool. In essence: the patient care team evaluates the process, keeps what is working, discards what does not work, and tries something else. Like Grandma used to say - "You just eat the chicken and throw away the bones."

**Plan:** Determine the root cause of the problem and then plan a change or a test aimed at improvement. Keep asking the question "why" to get to the root of the problem. (This process is called performing a "*Root Cause Analysis*")

**Do:** Be brave. Try out the plan on a small scale first. (Called *Pilot testing*.)

**Check:** Was the desired result obtained? Did you learn any lessons?

**Act:** At this point, the lessons learned from the Check phase are used to adjust the plan. If the results were good from the pilot test, adopt the change on a grander scale. If the results were not as desired, adjust the plan. Try again, and keep trying. Remember, it is a dynamic, on-going process!