

Leveraging Quality and Systems Thinking: What Can We Learn? **What can the electricity industry learn from the Institute for Healthcare Improvement?**

There are many parallels between the health care and electricity industries. Both are heavily regulated and both are critical to life and safety. In addition, up until 1990 both industries settled for an average standard of care. Power outages and hospital-induced injuries and damages were considered a part of doing business.

Today, the health care industry is using quality methods, standards and competition to dramatically improve performance and the electricity sector is beginning to follow its lead. The city of Naperville, Ill., and the Illinois Institute of Technology (IIT), for example, have virtually eliminated outages by leveraging advanced quality tools and systems thinking. Similarly, some of the leading health care institutes, such as Mayo Clinic, are using these same tools to nearly eliminate hospital-acquired infections and post-ventilator pneumonia.

Change began for both industries around 1990. For the health care industry, the transformation started with a presentation by the Honorable Paul O'Neill (former U.S. Treasury Secretary and CEO of Alcoa) to a group of doctors in 1991 in which he discussed the concepts of systems thinking and the theoretical limits of performance or perfection. A systems thinking approach provides a means for gaining leverage that dramatically improves the performance of any system with minimum effort. O'Neill challenged the attending doctors to rethink all of their current assertions regarding patient care. Dr. Donald Berwick of Harvard Hospital and a few others were inspired to learn more about quality and systems thinking. This was not a difficult leap for Berwick, since Harvard Hospital was home to Dr. Peter Singe and other leaders in systems thinking.

These pioneering doctors studied quality at the Juran Institute in Connecticut. Berwick and Dr. A. Blanton Godfrey (at the time CEO of Juran Institute and now the Dean of the School of Textiles at North Carolina State University) wrote a book revealing the power of quality, "Curing Health Care." They then formed the Institute for Healthcare Improvement (www.ihl.org), which is dedicated to bringing quality methods to the health care industry. Dr. Berwick found two key leaders to help him build IHI into a world-class organization — Penny Carver and Joanne Healey.

Today, IHI collaborates with more than 100 doctors to perform research on innovative systems models and best practices. They also provide quality education to doctors across the country and convene an annual quality conference on patient safety and medical errors.

At first, the industry establishment dismissed the assertion that patient care was not sufficient. A study in 1999 conducted by The Robert Wood Johnson Foundation and influenced by Bob Galvin called “Crossing the Quality Chasm” turned the tide by revealing that the health care industry could make dramatic improvements in patient safety.

In 1999, Galvin invited doctors from across the country to a six-sigma education seminar at the Florida Motorola quality campus. The response was overwhelming, with doctors from Mayo Clinic and other leading hospitals pursuing quality as a standard practice with IHI. At the same time, O’Neill started the Pittsburg regional health care initiative to pursue perfection in health care — perfect patient safety.

By 2005, more than 6,000 health care professionals were attending the IHI annual quality conference and hospitals across the country were achieving dramatic improvements in patient safety and care. This included improving working conditions for health care employees. Systems thinking led to improvements in all aspects of hospital operations, including the bottom line: profitability.

Galvin believes that similar achievements are possible in the electricity industry. A regional blackout in 2003 left most of the Northeast blacked out for days, while massive local blackouts continue to plague the industry, causing billions in economic losses annually. In response, Galvin formed the Galvin Electricity Initiative to catalyze the transformation of the electricity sector by leveraging quality thinking and rapid prototyping.

Visit www.galvinpower.org to learn more about the Galvin Electricity Initiative.