Wednesday's Words of Quality- Employee Standard Work for Lean Engagement

(5S, PDCA, Standard Work, Document Management, Deviation Management, Daily Management)

We commonly entertain the following questions in Lean training that get to the heart of Dr. Deming's caution that-

#### "It is not enough to do your best; you must know what to do, and then do your best."

<u>Question from manager</u>: How do I get Lean to be more than a sporadic crisis-driven project but rather a continuous improvement initiative owned by all employees?

Question from employee: What's my role in Lean and what do you want me to do?

Lesson: To be effective, wasteful processes must be identified and repaired from the level of the work, by those who know and do the work, using data with the rules of improvement, under the guidance of a leader. Continuously. This is the 4<sup>th</sup> Rule in Use of the Toyota Production System, described by Dr. Stephen Spear in his 1999 HBR article "Decoding the DNA of the Toyota Production System". (reference #1)

From our 12 years of Lean experience, we have been able to distill our basic employee training in Lean from 8 hours to 1.5 hours. Lean training got leaner. Because this is a new and expected set of behaviors, this basic employee training is refreshed annually. The core educational modules that define required employee knowledge and engagement in the Lean continuous improvement process include:

### 5S (Sort-Set in order-Shine-Standardize-Sustain)

Lean culture requires creating a visual, organized, standardized work place that is owned by the employees. 5S is a structured approach to workplace organization that begins the process of standardization and creation of the visual work. Ironically we here at Henry Ford Hospital are the rightful heirs of 5S which originated with the 5C workplace organization of the Ford Motor Company, **C**lear-**C**onfigure-**C**lean-**C**onform-**C**ustom.

### PDCA Problem Solving (Plan-Do-Check-Act)

This is a structured approach to problem solving that requires data to define the current condition, understanding the problem more deeply at the level of root cause by involving the customer or supplier, a best guess as to the process change that would improve toward the target condition, an action plan to test the proposed intervention, and data collection to re-evaluate the condition for improvement. Repeated PDCA cycles of process change improvements are implemented until the target condition is achieved consistently.

## Standard Work

Standard Work is created by consensus of those who actually do the work and is the basis of standardization. Written and practiced standard work is continually improved based on knowledge of defective work yet received or produced in order to reduce variability and waste to achieve higher levels of quality, consistency, throughput, productivity and cost. (See reference #2, WWQ April 2017) https://www.henryford.com/-/media/files/henry-ford/hcp/pathology/words-of-quality/2017-april-wwq.pdf?la=en

#### **Document Management**

All work policies, procedures, standard work and posted job aides must be under document control with identifying implementation and expiration date and version number. Throughout the CLIA and ISO 15189 accredited laboratories of the HFHS Lab Product Line, these documents are controlled through an electronic document control system with CLIA medical director annual signoff and approval of all interim revisions. These laboratory documents are accessible via intranet within HFHS OneHenryhttps://onehenry.hfhs.org/departments/pathologyandlaboratorymedicine/Pages/Overview.aspx

### **Deviation Management**

All employees identify and document all defective work encountered to understand what to improve, document corrective actions taken, and contribute to planned process changes to eliminate the most common or severe deviations from expected work outcomes. (prepublication reference #3 available on request)

#### **Daily Management**

All employees attend Daily Management board huddles to identify, track and resolve the most critical defective work processes by contributing to root cause analysis and proposing interventions within 24 hours. (see reference #4)

The knowledge and skill sets described above define the basic **Lean Bronze Certification** for beginners in the Henry Ford Production System. Self-directed learning of these basic Lean competencies is available via Healthstream for HFHS employees.

References:

1. Spear S and Bowen KH: Decoding the DNA of the Toyota Production System. Harvard Business Review, Sept-Oct, 97-106, 1999

2. Zarbo RJ: Wednesday's Words of Quality, April 2017. Start with Standard Work for High Quality and Reliability, athttps://www.henryford.com/-/media/files/henry-ford/hcp/pathology/words-of-quality/2017-april-wwq.pdf?la=en

- 3. Zarbo RJ, Copeland JR, Varney RC: Deviation Management: Key Management Subsystem Driver of Knowledge-Based Continuous Improvement in the Henry Ford Production System. AJCP (in press)
- 4. Zarbo RJ, Varney RC, Copeland JR, et al: Daily Management System of The Henry Ford Production System: QTIPS to Focus Continuous Improvements at the Level of the Work. AJCP 144:1-15, 2015

# Henry Ford Production System Lean Training

### LEARN. DEVELOP. ESTABLISH. TRANSFORM. MASTER.

#### Lean Bronze Certification for Lean Beginners

Available to all employees through Healthstream, self-directed learning

Lean Silver Certificationfor Lean Establishers (14 hrs. CME)April 27-28, 2017September 21-22, 2017

Lean Gold Certification for Lean Cultural Transformers (7 hrs. CME) November 7, 2017