

December 7, 2011

Wednesday's Words of Quality

The White Board in Identifying Opportunities for Change

"Even a mistake may turn out to be the one thing necessary to a worthwhile achievement."

-Henry Ford

The primary role of team members working in a culture of continuous improvement is to actually see their system of work for what it is and what it could be. Employee engagement in a Lean culture expects workers to reveal in real-time, to each other, and to their managers what is not working as expected, that is, to identify in-process defects and waste.

To this end, we place white boards in the workplace at each laboratory workstation so that defects can be made visible, blamelessly, by the workers themselves. For those of you in patient care areas, consider placing your white boards in break rooms, secretarial areas or manager offices away from patient scrutiny.

A white board is a work communication tool for the team members and managers to proactively address issues so that **"no problem"** doesn't become a **"problem."**

Why write it down publicly? Simply, to collect factual information about less than optimal work and because lack of effective communication begets poor quality.

Should you walk into a workplace and see white boards describing defects encountered, you will understand this tool to be a visual reminder that in a true Lean culture employees are empowered to work differently, invested in and accountable for the quality of the work they receive or produce.

White boards are a simple tool to help the individual worker and the team communicate within and between work stations, connect work stations horizontally across the path of work flow (or value stream) and make the workplace visual for both those doing the work and those managing the reliability, consistency and stability of the work.

White boards are only fully functional as visual workplace tools when leaders have created the enlightened culture that encourages blameless identification of mistakes and provide an organizational structure and reporting relationships that incentivize empowered workers to contribute to daily defect resolution. This is the essence of Lean- a continual improvement loop with a 'shop floor' focus by employees who know the nature of their work best.

Important information elements are captured on white boards to clarify the defects that arise in the workstation and facilitate the team's subsequent resolution. The following structured list of data elements were observed on a white board to capture issues in a manufacturing plant but are just as pertinent to our work in healthcare.

- Date
- Problem
- Who identified
- Action- short term (our rapid fixes)
- Action- long term (our data driven A3 based PDCA improvements)
- Responder/Comments
- Estimate % complete (visual using a circle with quadrants filled in)

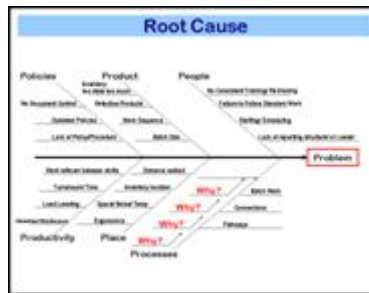
Standardized White Board

Although we have been using white boards for some years now, we have only recently standardized our own approach in the laboratories. Below is our current iteration of a white board. The header is a ready reference meant to inform and educate the workforce. Our header contains regularly used references to the defect resolution process of the Henry Ford Production System:

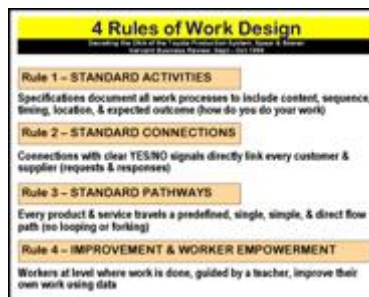
1. The 7 Types of Waste



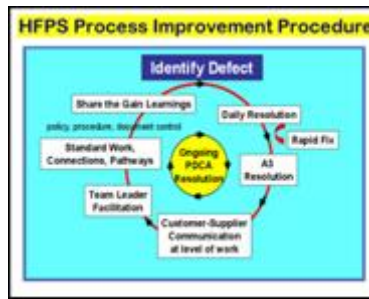
2. The 5 Why's of Root Cause Analysis using an Ishikawa Fishbone diagram of common causes



3. The 4 Rules of Work from the Toyota Production System that are often in violation when a defect is encountered



4. The process improvement procedure methodology of the Henry Ford Production System



5. The leader's quality messages, here, the Wednesday's Words of Quality

The white board shown below is segmented to capture detail about:

- Daily defects encountered
- The defects immediately resolved on the spot or those queued for further development as an A3 based process improvement that often requires a 'Go and See' or a customer-supplier meeting
- Communications for and between shifts and ongoing quality education topics and learnings

Visual Workplace “No Problem is a Problem”

7 Wastes	5 Why's	4 Rules of Work Design	Process	Leader
<p>7 Types of Waste</p> <p>Waiting – wasted time between steps Defects – process & production failures Transportation – unnecessary movement of material & products Overproduction – more than needed Over processing – redundant steps, rework Motion – unnecessary movement of people Inventory – over or under stock</p>	<p>5 Whys</p> <p>Problem Cause</p> <p>Why 1: ... Why 2: ... Why 3: ... Why 4: ... Why 5: ...</p>	<p>4 Rules of Work Design</p> <p>Rule 1: Standard activities Standardize the work that is done every day, every shift, every week, every month.</p> <p>Rule 2: Standardized connections Standardize the way that things are connected.</p> <p>Rule 3: Standardized pathways Standardize the way that people move through the work area.</p> <p>Rule 4: Standardized information Standardize the way that information is communicated.</p>	<p>HFPS Process Improvement Procedure</p>	<p>Wednesday's Words of Quality</p>
<p>Capture Daily Defects</p> <ol style="list-style-type: none"> Wrong patient identification Ran out of gloves - size medium Not enough specimens collected for lab test 				
<p>Daily Resolution of Defects</p> <p>Rapid (Defects corrected on the spot) A3 (PDCA analysis and customer-supplier involvement)</p>				
<p>Communication & Education</p> <p>All shifts (New policy, standard work, hours, competency, quality tool)</p>				

Henry Ford Production System

So, should you as the manager on a "gemba walk" through the workplace see a blank white board, you now have a visual message that you have either encountered a perfect workday (doubtful) or you have a workforce disengaged from their responsibility of contributing to continuous improvement. As a manager, you now have work to do in re-engaging the team.

Conclusion:

The simple white board functions for all levels of work engagement and fosters visual management.

References:

- Ford H. Today and Tomorrow. New York, NY: Doubleday; 1926
- Ohno T. Toyota Production System: Beyond Large-Scale Production. Portland, OR: Productivity Press; 1988 Rother M. Toyota Kata. Managing People for Improvement, Adaptiveness and Superior Results. New York: McGraw-Hill, 2010.
- Spear SJ, Bowen HK. Decoding the DNA of the Toyota Production System. Harvard Bus Rev. September 1, 1999:96-106.