Helping Deaconess-Glover Hospital Recover

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Background of Carter

- Patient
  - Second cervical vertebra broken patient
- Practitioner
  - 20-year vascular surgeon
  - Surgical practice manager in WA
  - Understood TPS approaches

TPS

- Reduce Variability
  - Everyone checks for defects (short feedback loops)
  - Not afraid to “stop the line”
- Understanding the “current condition”

Background of DGH

- 41-bed community hospital
- $2.7M lost in the previous 12 months
- Part of CareGroup
  - 1,500-bed system
  - Nearly $100M lost in the same period
- Pilot of Deming-inspired quality improvement

DGH and Carter

- Dalton, Bonefant, and Carter
  - Want to test TPS in the medical realm
- DGH
  - Need to improve process control to save cost
  - Need a champion, an expert

Carter's study

- Found a model line
  - Gastrointestinal unit
  - South two medical/Surgical inpatient care unit
  - The pharmacy
- Understood the "current condition"
  - Material and information flows: Day shift
  - Medication administration: Evening and Nights
  - Observing the work of a nurse
- Discovered areas for TPS-style improvement

Problems Identified (Rule #1)

- The following were not highly specified:
  - How nurses should be assigned to patients
  - How nurses should exchange patient information
  - How nurses should record patient information
  - How medications should be staged
  - How changes made in the patient's chart should be notified
  - How additional medication deliveries should be made
- Verbal communications of information were heavily used in the medication administration process

Problems Identified (Rule #2)

- Every customer-supplier connection must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses
  - **Doctor-nurse communications were not direct**
  - **Between half and two-thirds of a nurse's time was spent not doing the value-adding nursing work**
  - Nurses occasionally did work they were not responsible for
  - Doctors communicated prescription information to nurses differently
  - Time needed from the prescription of a medication to its administration was not specified
  - Pharmacy learned about the needs of patients in different ways
  - Doctors could prescribe medications that were not available in-house

Problems Identified (Rule #3)

The pathway for every product and service must be simple and direct.

- Several possible ways existed in delivering medications from the pharmacy to South Two
- The number of distinct pathways over which prescription requests and medications traveled was large
- The connections among patients, doctors and nurses were quite complicated

Problems Identified (Rule #4)

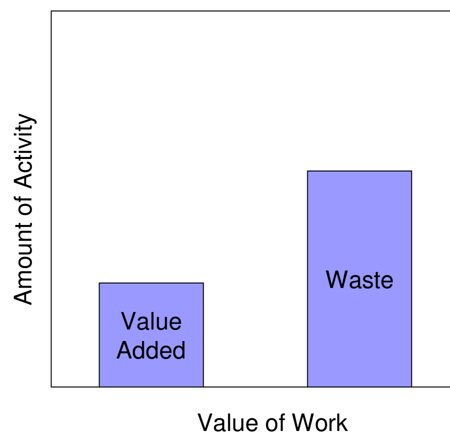
- Improvement activities had not been carried out as a bona fide experiment with an explicit, clearly articulated, verifiable hypothesis to test against
- People were expected to learn strictly from personal experiences

Overarching Goals

- Reduce Costs
  - Salaries and Supplies
- Increase Efficiency
  - Manage Time
  - Decrease Waste

Time Management

- Direct communication
- All-inclusive chart
- Volunteer delivery
- Med administration



Waste Reduction

- Daily arrangement of medication
  - Nurse rotation
  - Decrease Errors
  - Reorganization of pharmacy
    - alphabetize
    - tool-box method

Expected Response from Dalton and Bonefant

- Agreed with Carter's assessment of how the critical patient-care process actually occurred
  - Personal stake in the profit percentages
  - Labor cost-savings of 33 to 67% are significant
  - Should agree
- Everyone needs to be on board
  - "Current Condition"
  - Process improvement performed under scientific method and aTPS-familiar instructor
  - The trend may even extend to all CareGroup hospitals