3-30-2016

Collective System Design: Healthcare System for Diabetics

Nadia Deiban

Indiana University - Purdue University Fort Wayne

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Collective System Design: Healthcare System for Diabetics

Nadia Deiban (MSE) & Judith Sobotie (MST)

Acknowledgments: Faculty Advisor Dr. David Cochran
Director of the Center of Excellence in Systems Engineering

1: Problem

DIABETES affects many people worldwide. Diabetes is a chronic vascular disease that deteriorates the human body. It leads to several harmful complications such as:

- Miscarriage
- Gum disease
- Kidney Failure
- Death
- Blindness
- Amputation
- Heart Disease
- Stroke

2: Current State

- There is no functional System
- Services are not efficient
- Time wasted for test results
- No easy access to information
- Cost of care is high for diabetics

3: Design Methodology

Tone is the heart of the flame model. It is the basis of everything within the system. A positive tone needs to be set in order to reinforce the success of the system.

- **Tone:** Mind-set, Positive Attitude, Perspective
- **Thinking:** System Design Decomposition
- **Physical System:** Structure and Process Flow
- **Work:** Standard Work, Processes and Procedures

4: System Boundary and Customer Needs

Defining the system boundary is the first step in the system design process.

- **Safety:** Safe Environment
- **Timeliness:** Less waiting time
- **Efficiency:** Avoid waste
- **Fairness:** Unbiased provider care
- **Effectiveness:** Avoid overuse and underuse of resources
- **Patient-Oriented Care:** Patient Satisfaction

5: System Design Decomposition and Ideal Diabetic Clinic

6: Recommendations and Conclusion

- Creating Incentive Programs for Improvement
- Employing Mid-Level Staff to Reduce Costs
- PDCA Cycle for Continuous Work Improvement

CSD resulted in a System Design with four areas: 

- **Education:** Bring disease awareness to the community and risk reduction for the disease
- **Diagnosis:** Accurately diagnose the disease
- **Treatment:** Ideal Diabetic Clinic for treatment
- **Management:** Control and manage diabetes