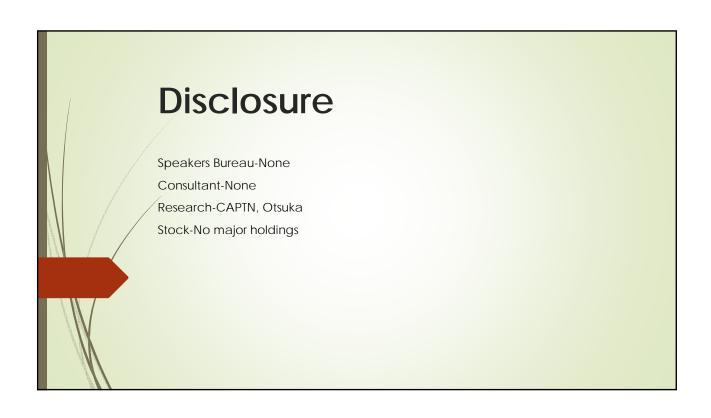
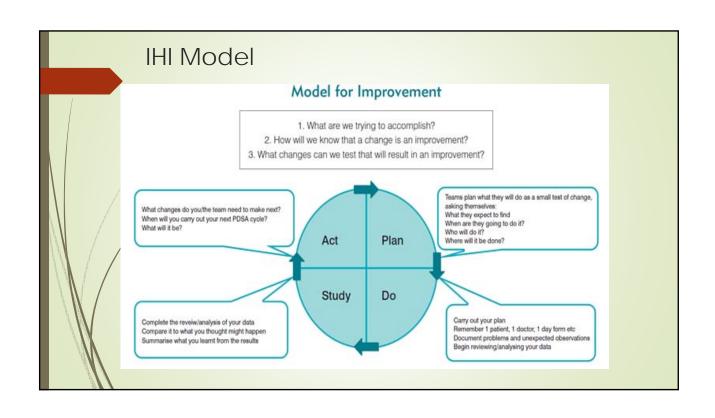


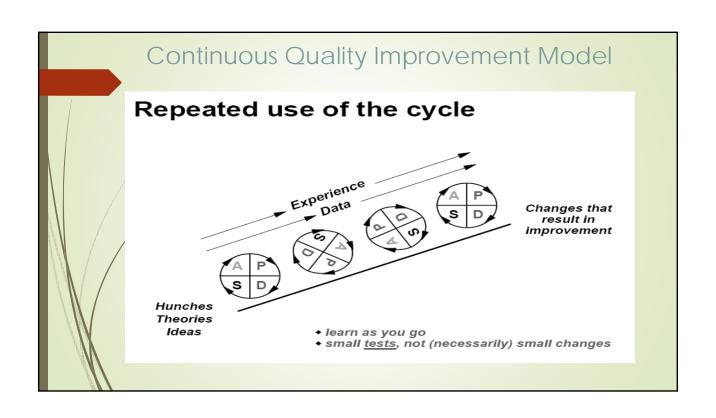
# Disclosure

- I have no relevant financial relationships with the manufacturers(s) of any commercial products(s) and/or provider of commercial services discussed in this CME activity
- I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.



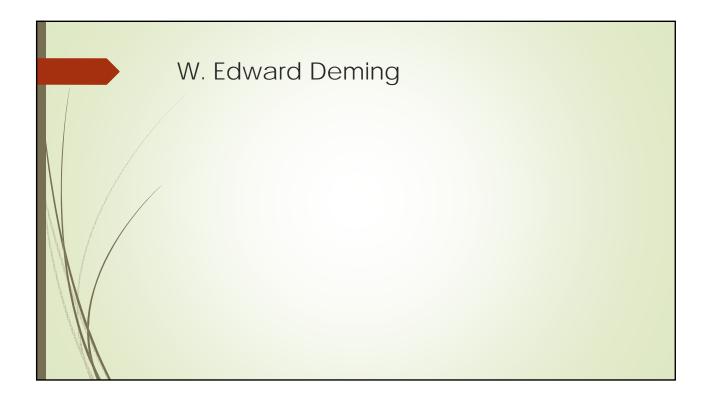






# **Standard Work**

- An agreed upon set of work procedures that establishes the best and most reliable methods and sequences for each clinical and staff member. These should translate gold standards of academic work into real work, establish workflow (decreased waste and increased efficiency) and help build a culture of continuous quality improvement
- Customization to practice specifics after we're heading in the same direction

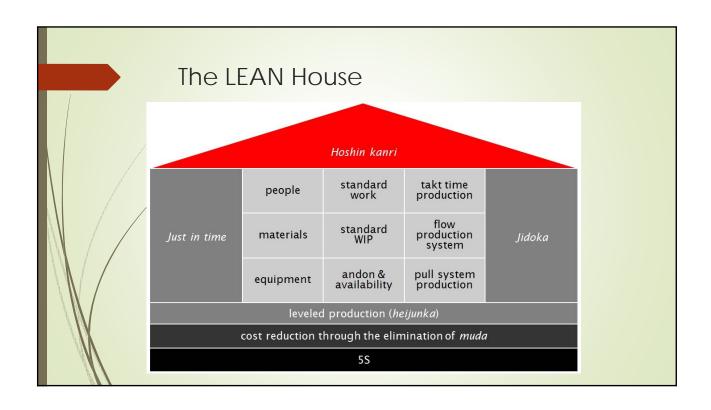


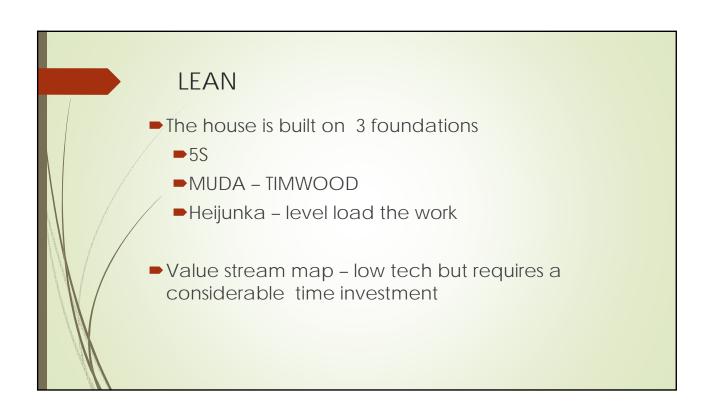
# How do we start?

- Define the Current State
  - Go to the Gemba
  - Adopt a patient perspective adding value for the "customer"
- Standard Tools for Standard Work of QI
  - **LEAN**
  - IHI 7 tools
    - ►Flow Chart need an image
    - ■Fishbone need an image
    - ■Pareto Chart image
    - ■Run Charts or SPC Charts

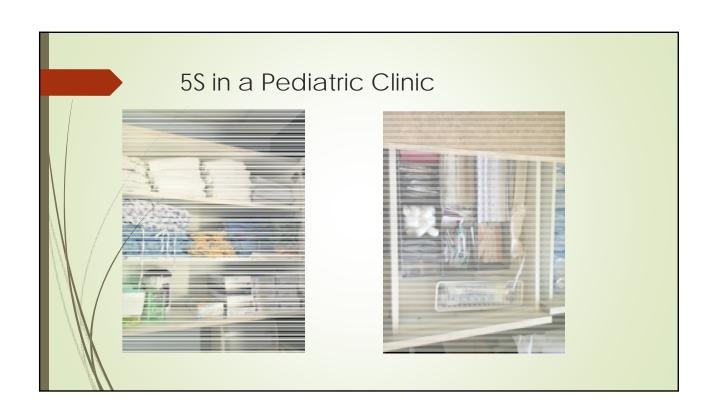
# What We've Done at KUMC

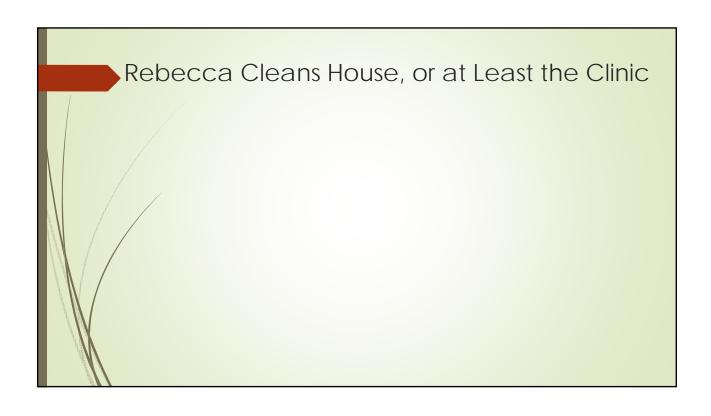
- LEAN
  - Virginia Mason story
  - Toyota system of management
- Quality Academy
  - Built on Intermountain Quality Program
    - ■Brent James
  - About 170 people so far through it
  - Establish a common culture with a common language
  - So far one outside group













# 8 Wastes in Healthcare (TIM P WOOD)

#### TRANSPORTING

Moving patients, specimens, equipment or supplies on wheels

#### **NVENTORY**

Stock of medical or operational supplies, patients in beds, specimens waiting for analysis

#### MOTION

People reaching, bending, searching for supplies, patients, other staff

#### PEOPLE POTENTIAL

Unused or untapped potential of our staff

#### WAITING

Patients in a waiting room; waiting for lab results

#### **OVERPROCESSING**

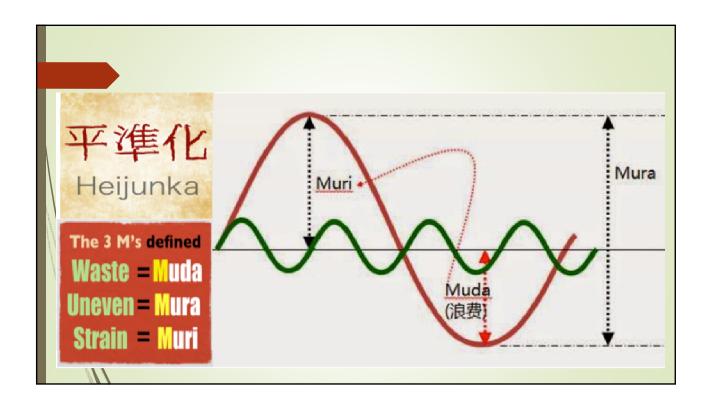
Asking patients for their information more than once; ordering more labs than neede

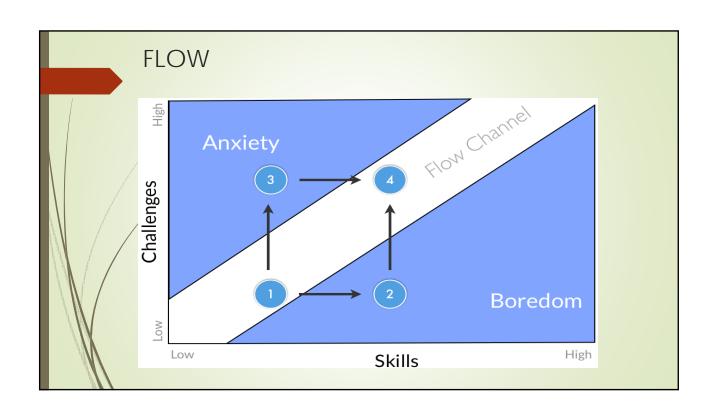
#### **OVERPRODUCING**

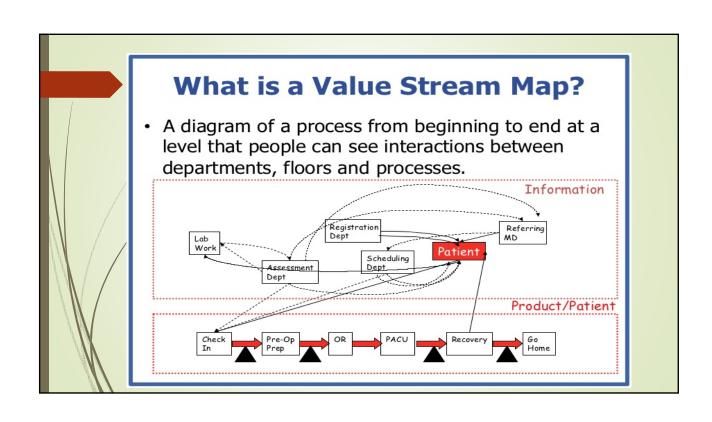
Creating forms "in case" you need them; producing more labs than needed

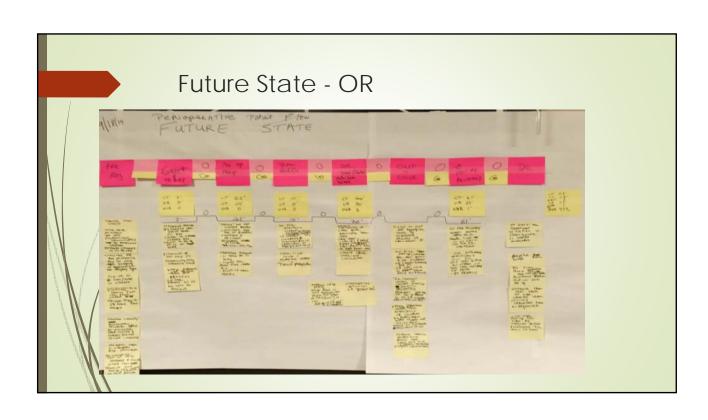
#### DEFECTS

Wrong patient, wrong procedure, redraws









# Value Stream Mapping

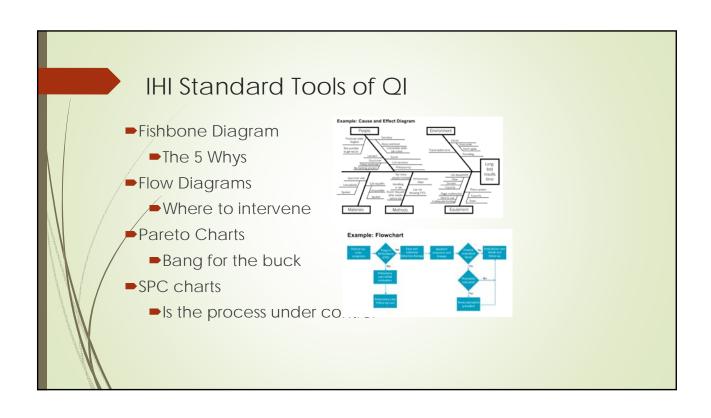
- Cycle time = CT
  - The time it actually takes to complete one step in the process.
- Lead time = LT
  - The total time from the beginning to the end of a process, including all cycle times and wait times.
- Value added ratio = (sum of cycle times)/ LT
  - The value added time in the process (from the patient's perspective) divided by the total lead time.

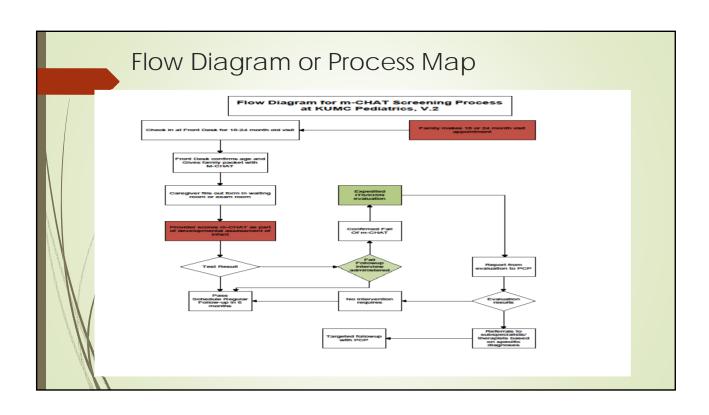
## KaiZen workshop

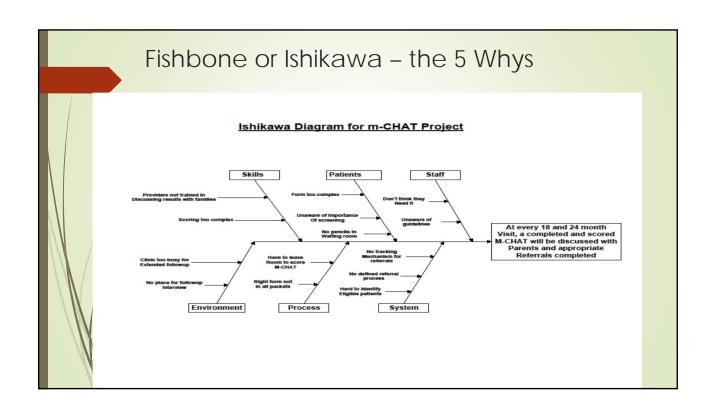
- Assemble the right team and a whole lot of sticky notes
- Team goes to the gemba and observes a workflow
- Team reassembles and builds the value stream map of current state
- Determine the value-added time in the process
- Identify the value-less time in the process
- → Build your ideal future state, minimalizing the value-less time
  - Gap analysis between current and future state
  - Start the PDSA process

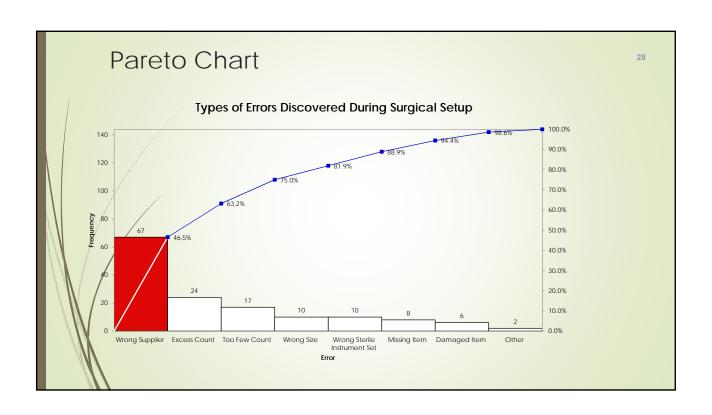
### Lean summary

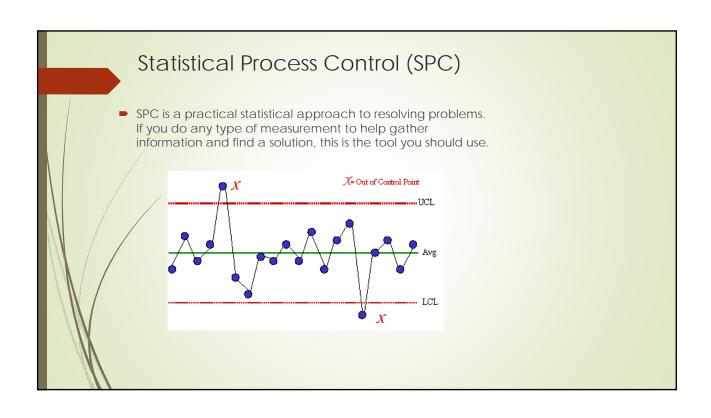
- Base is most important
- Much of the columns and rooms are related to system interactions that may not be much of a concern in contained practice
- Goal increase value
- Tools are simple, the cost is time
- Lean is really a cultural change and thus requires commitment from all

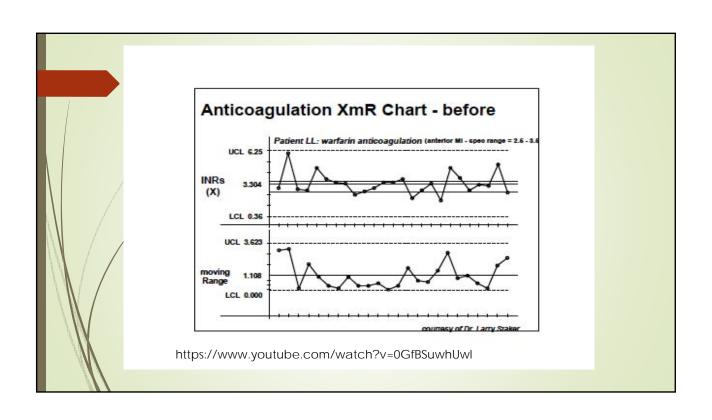


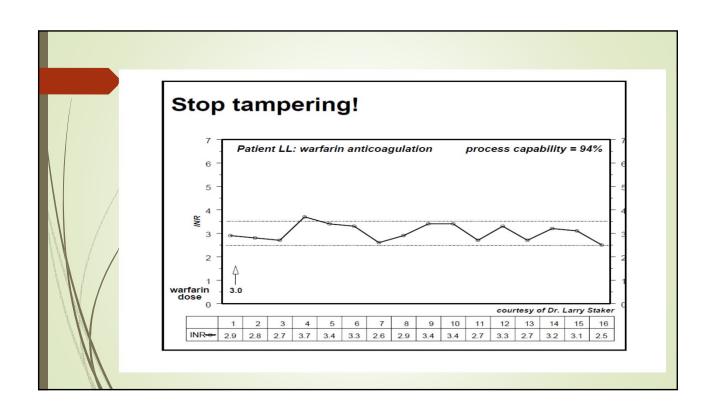


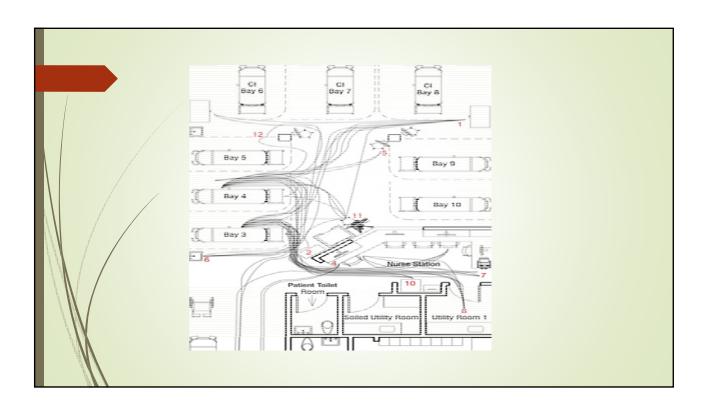


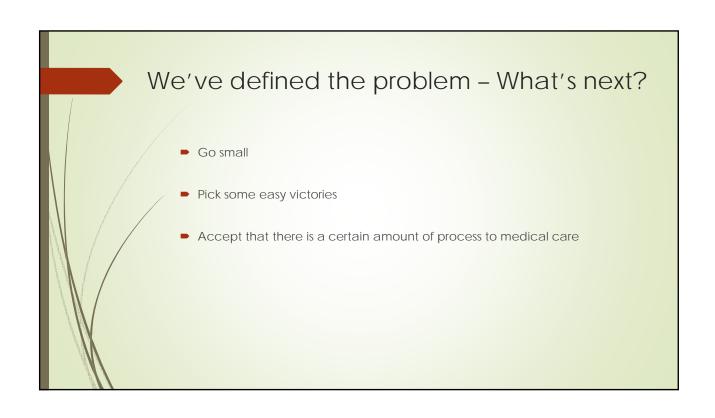


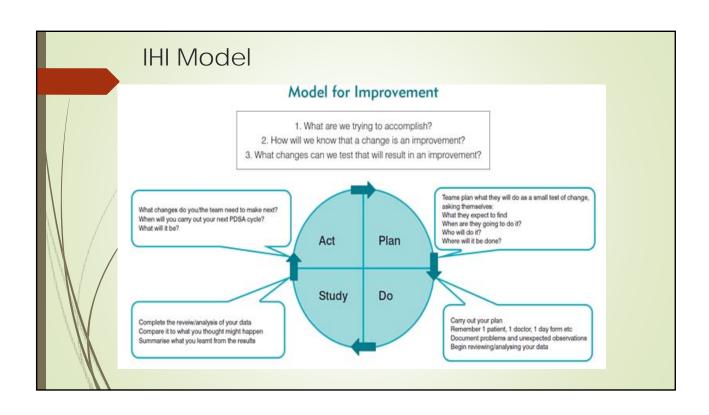


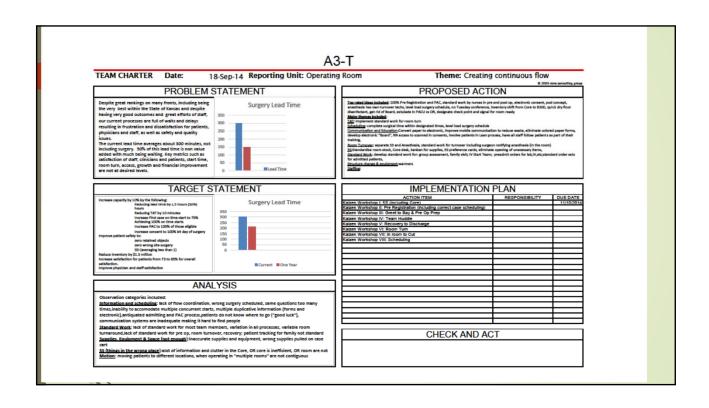


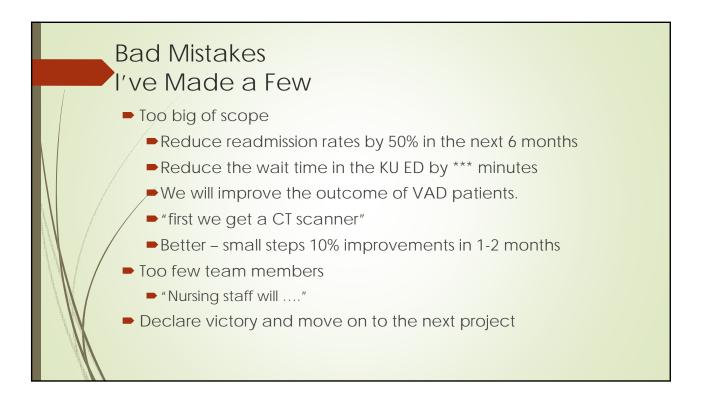


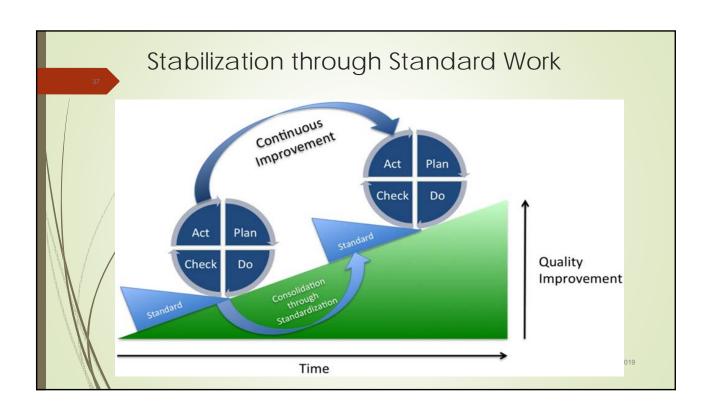


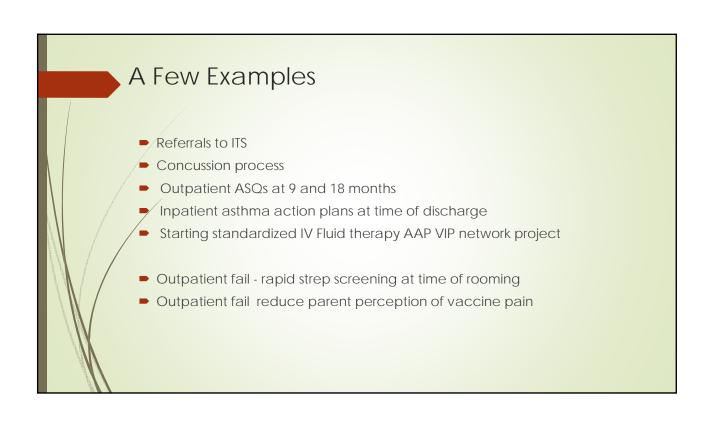




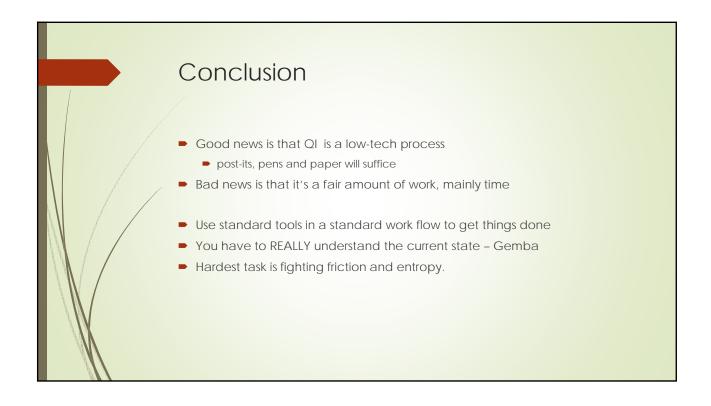


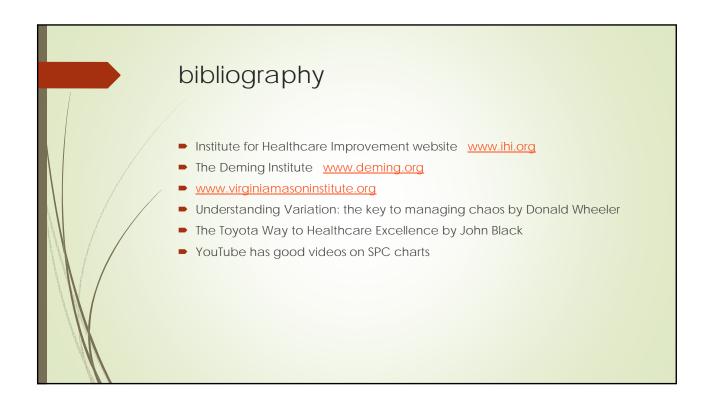






# Summary Lean and IHI/CQI are two approaches to QI work Lean is a more industry-based feel CQI may be a bit more academic Which one works best for you depends on your situation Common Points You have to understand the system you are working in You have to have the right team Go small Law of unintended consequence Your biggest enemy is entropy







# FOCUS-PDSA

- \* Focus Find an opportunity to improve
- \* Organize a team
- \* Clarify understanding of process needing improvement
- ★ Understand variation, root causes, and barriers

Plan

Study

- \* <u>Select</u> an opportunity and strategy
- \* Plan intervention
- \* Do intervention
- \* Study the results
- \* Act to hold the gains or continue to improve on

