

Performance of a Kaizen Event to Improve Patient Throughput and Satisfaction in the University Health Center Obstetrics and Gynecology Clinic

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Background

For over ten years, patient satisfaction with the care delivered at the OB/GYN clinic at the University Health Center has remained poor, resulting in patients deciding to seek care elsewhere. The patients that remain are subjected to office visits lasting upwards of 4-5 hours, and some leave on a daily basis before being seen by a provider. Many previous attempts to make improvements to the patient experience have been unsuccessful in decreasing patient throughput time or improving patient satisfaction.

Kaizen is a Japanese term meaning "improvement" (lit. "change for better"). This principle has been adopted in many industries, including healthcare. A Kaizen event specifically refers to a concentrated workshop, during which a team is assembled to evaluate and improve a process within a 3-5 day period.

Methods

Plan: Individuals representing personnel from each aspect of the patient encounter were identified and invited to participate as members of the Kaizen team. A three-week planning schedule was developed and all materials were prepared for the Kaizen event. The event itself took place February 22-26, 2016.

Do: Time studies were conducted to determine the average length of each portion of the patient encounter. The patient turnaround time (TAT) was measured from the time a patient checked in to the time the patient left the clinic. The project lead interviewed key clinic personnel to identify the actual work being performed and compared that stated work with the clinic manager's list of standard work for each position in the clinic. From these interviews, a responsibility matrix was constructed which listed all tasks performed by each personnel type and the person responsible for their completion. The Kaizen team performed a walk-through of the clinic to identify bottlenecks and non-value added steps that impeded patient flow through the clinic. Floor plans of the clinic were obtained and studied to identify points of inefficient work-flow and underutilized resources.

Study: The results of each of these steps were compiled (labeled "current state") and distributed to the Kaizen team for evaluation and identification of additional non-value added steps. Over the course of two days, a new process for the patient visit was developed, with the inefficiencies removed (labeled "future state").

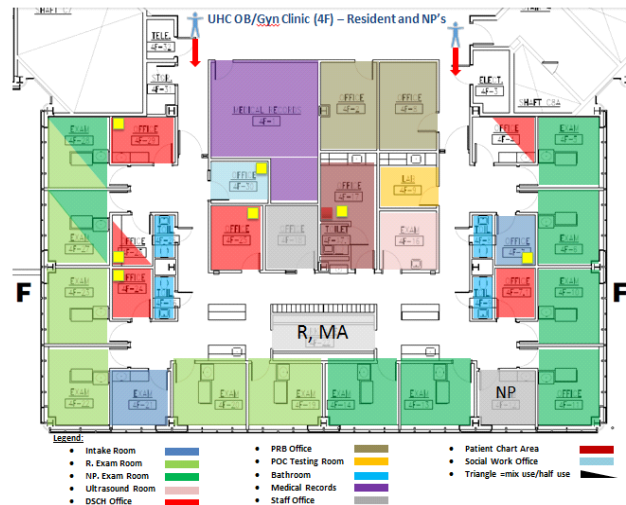
Act: All clinic personnel were educated on the new process the following day, and the new process was implemented in the clinic on March 16, 2016.

Results

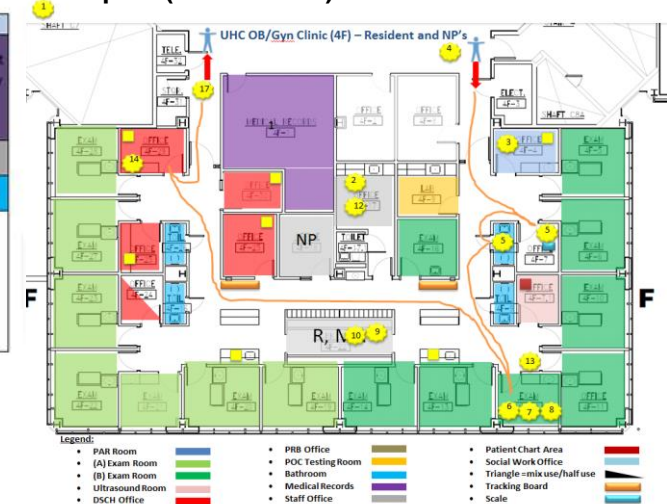
Kaizen Schedule					
Schedule	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	Introduction PPT	Current State Assessment Cont.	Future State (Process Map, Standard Work, Audit checklist)	Implement Pilot (may need to meet 1 hour before clinic opens to go over plan)	Discuss & Adjust Pilot accordingly (1 hour before clinic)
9:00 AM	Current State (Review all documents & process map)				
10:00 AM					
11:00 AM	Lunch	Lunch	Lunch	Lunch	Lunch
12:00 PM	Current State (Review all documents & process map)	Root Cause Analysis/FMEA/ Solution Analysis/Idea Prioritization	Future State Pilot Project Plan (Establish metrics to measure, may need to train staff on pilot process and standard work)	Implement Pilot Cont. (measure metrics at EOB and discuss outcomes)	Re-Cap & Close
1:00 PM					
2:00 PM					
3:00 PM	Current State Assessment				
4:00 PM					

*Schedule subject to change depending on progress

Floorplan (Current state):



Floorplan (Future state):



Major Changes:

1. RN performs patient intake
2. Ultrasound is made mobile
3. Increase clinic capacity by 25%
4. Unidirectional flow of patient through clinic
5. Decrease number of rooms a patient enters by 50%

Conclusions

A Kaizen event is a method by which an inefficient process can be quickly improved with minimal capital investment by simultaneous elimination of non-value added steps.

Turnaround Time (TAT)	Current State	Future State
Resident	151	108
Nurse Practitioner	126	65