



DECREASE PATIENT WAIT TIMES IN BREAST IMAGING



Breast Imaging Improvement Team Members

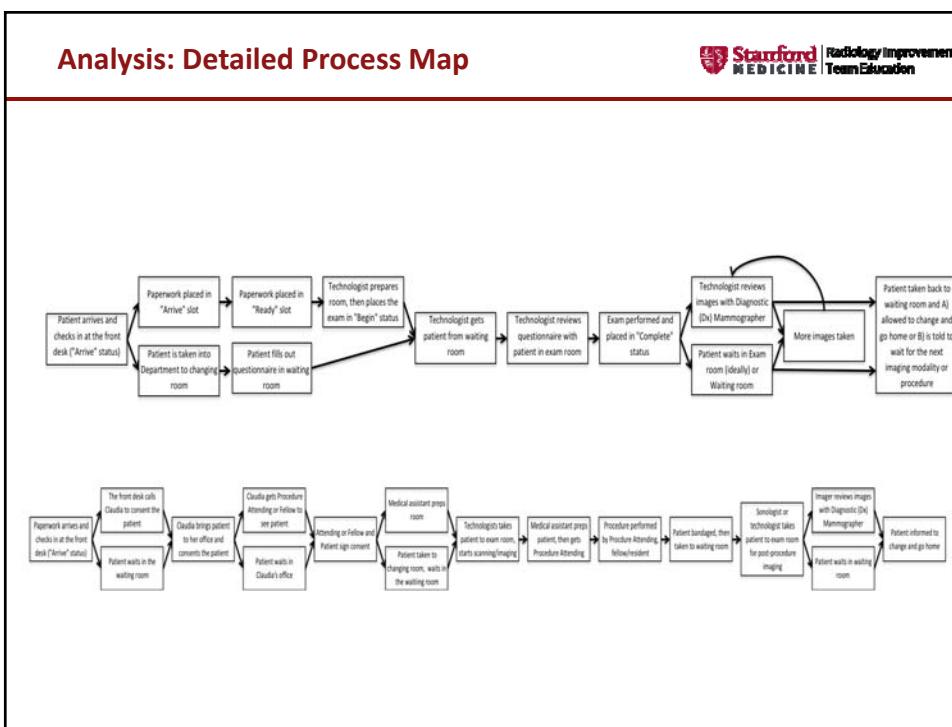
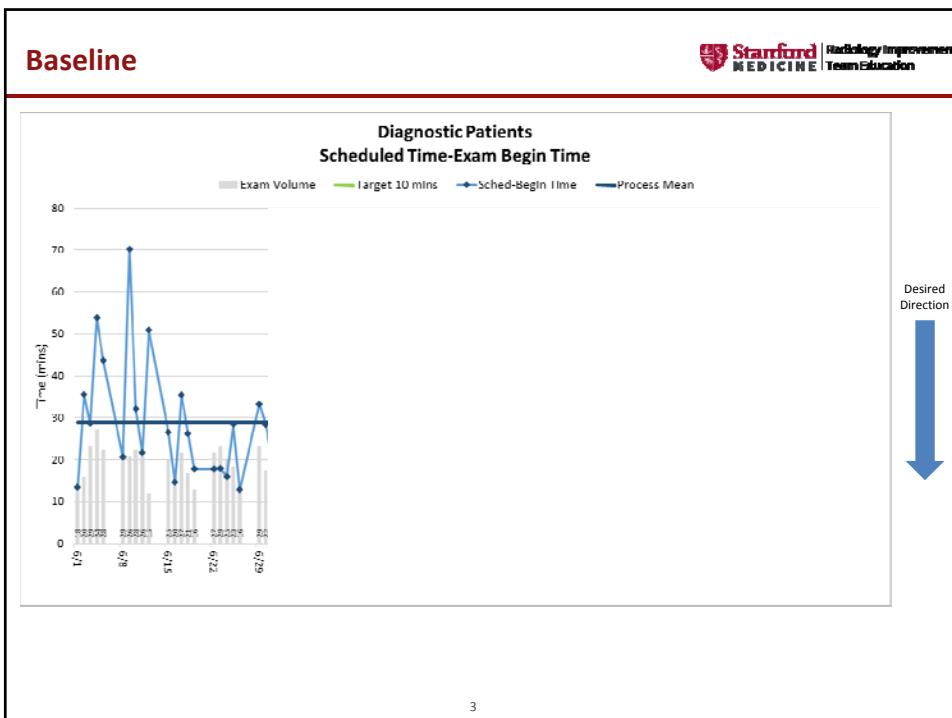
Linda Nayeli Morimoto - Radiologist
Pat Cowart - Mammography Technologist
Elizabeth Sheridan - Marketing Specialist
Myia Woods - Medical Assistant
Mary Robertson - Patient Volunteer
Jake Mickelsen - Improvement Coach



Target State: SMART Goal

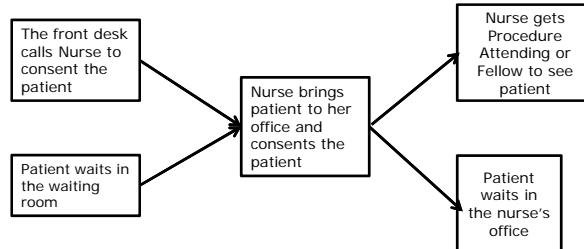


Our target was to decrease the average wait time for breast imaging patients from 29 minutes to 10 minutes by October 9, 2015.



Process Analysis: Multiple Consent Steps Identified

 Stanford MEDICINE | Radiology Improvement Team Education



1. Nurse Consents
2. Attending/Fellow Consents (Giving same information as the nurse)
3. Technologist explains procedure (Some of the same information as Nurse and Attending/Fellow)
4. Medical Assistant repeats the post procedure instruction.(Same information as Nurse, Attending/Fellow and Technologist)

5

Cause and Effect Analysis

 Stanford MEDICINE | Radiology Improvement Team Education



6

Interventions

Shorten consent times for procedures

Old workflow

1. Patient checks in at front desk
2. Paperwork is generated
3. Front desk calls mammography nurse to consent patient
4. Mammography nurse brings patient to her office to consent the patient. Explains the procedure and post care
5. Attending or Fellow and patient sign consent. Explains the procedure and post care
6. Medical assistant preps room
7. Patient is changed
8. Technologist takes patient to exam room, explains procedure, starts imaging
9. Medical assistant explains procedure, preps the patient, then gets attending
10. Attending does timeout and answers more questions from patient
11. Procedure performed by procedure attending/fellow
12. Patient bandaged by MA and explained post care
13. Technologist takes patient for post procedure imaging
14. Images checked
15. Patient informed to change and can go home

New workflow

1. Patient checks in at front desk
2. Paperwork is generated
3. Front desk calls mammography nurse to consent patient
4. Mammography nurse brings patient to the VIP room to consent the patient. Explains the procedure.
5. Attending or Fellow and patient sign consent. Asks if the patient has additional questions.
6. Medical assistant preps room
7. Patient is changed and brought to the exam room
8. Attending does timeout.
9. Procedure performed by procedure attending/fellow
10. Patient bandaged by MA and explained post care
11. Technologist takes patient for post procedure imaging
12. Images checked
13. Patient informed to change and can go home

Interventions

Shorten consent times for procedures

Structure and protocol for same day add on exams

Interventions

Shorten consent times for procedures

Structure and protocol for same day add on exams

Improve communication to patients and staff about wait times

BREAST IMAGING CENTER

Approximate Wait-Time for Appointments:

5 minutes

From Scheduled Appointment Time

9

Interventions

Shorten consent times for procedures

Structure and protocol for same day add on exams

Improve communication to patients and staff about wait times

Improve pre-exam process for diagnostic mammogram and ultrasound

Lead Tech is protocoling diagnostic schedule **the evening before**.
Protocoling includes: correct exam ordered, correct number of views, patient history.

Indications	
BI-RADS 0 IV asym/ distortion on CC	BI-RADS 0 IV asym/ distortion on MLO
BI-RADS 0 V mass/ asym/ distortion	BI-RADS 0 calc
BI-RADS 2/IV mass/ asym/ distortion	BI-RADS 0 calc
CT finding	Focal breast sign or symptom 30y or younger
Focal breast sign or symptom 45y or older	More patient
MRI finding, no lesion in the last 6 months	MRI finding, with lesion in the last 6 months
New cancer, treatment planning	Post benign US biopsy 40y or older
Post benign stereo biopsy	Post benign US biopsy 30y or younger
Post Lymphomyeloma surveillance >1yr	Post neoadjuvant, pre op planning
Preobscranner	Second opinion

Specifications	
See report	Start with US, MG if needed
US only	US, old films must be available for reading
2D CC, MLO	2D CC/MLO/Mag CC + LM
2D LM mag Cr + LM (hold for 1 min in LAT mag view)	2D + 3D CC/MLO
2D + 3D CC/MLO/M	2D + 3D CC/MLO/Mag CC + LM
2D + 3D LM spot tomos in CC as reported	2D + 3D LM spot tomos in CC/MLO
2D + 10 LM spot tomos in LMO as reported	
US Breast Bilateral	US Breast Right
US Axilla Right	US Axilla Left
MG Diagnostic Left	MG Diagnostic Right

Comments

10

Interventions

Shorten consent times for procedures

Structure and protocol for same day add on exams

Improve communication to patients and staff about wait times

Improve pre-exam process for diagnostic mammogram and ultrasound

Improve the accuracy of scheduling the correct exam

Breast Imaging Diagnostic

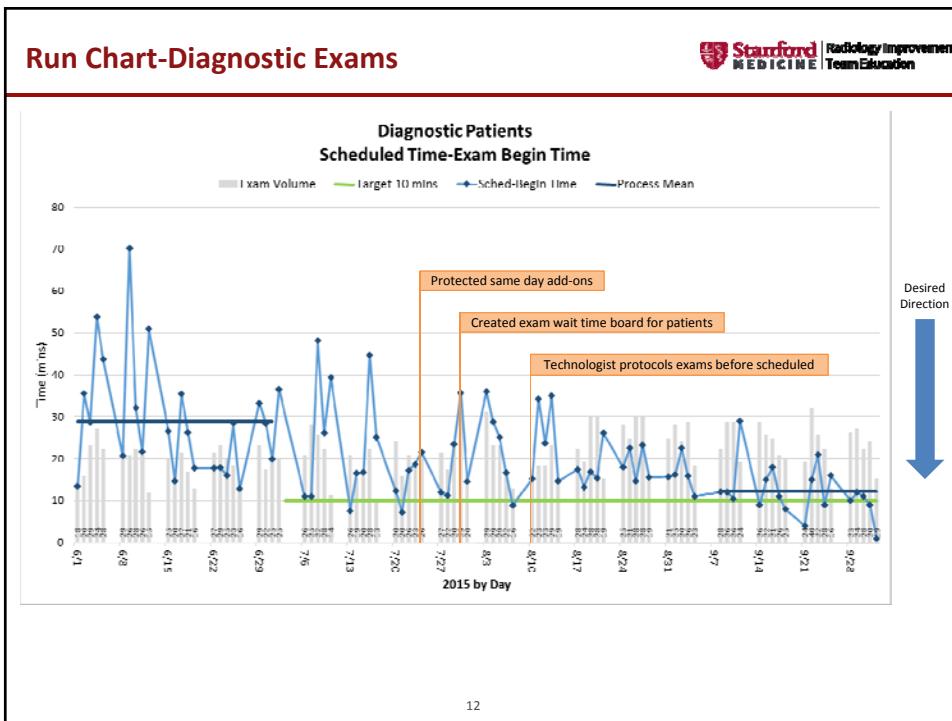
Indications	
BI-RADS 0-1/V asymm/distortion on CC	BI-RADS 0-1/V asymm/distortion on MLO
BI-RADS 2/V mass asymm/distortion	BI-RADS 2 calc
BI-RADS 3/V mass asymm/distortion	BI-RADS 3 calc
CT finding	Focal breast sign or symptom 35y or younger
Focal breast sign or symptom 40y or older	Male patient
MRI finding, no tumor in the last 6 months	MRI finding, with tumor in the last 6 months
New cancer, treatment planning	Post benign US biopsy 40y or older
Post benign stereot biopsy	Post benign US biopsy 35y or younger
Post Lymphomy surveillance >3yrs	Post neoadjuvant, pre op planning
Pseudoscreener	Second opinion
See report	Start with US, MG if needed
US only	US, old films must be available for reading
2D CC, MLO	2D CC/MLO/Mag CC + LM
2D LM mag CC + LM (hold for 1 min in LAT mag view)	2D + 3D CC/MLO
2D + 3D CC/MLO/MLM	2D + 3D CC/MLO/Mag CC + LM
2D + 3D LM spot tomo in CC as reported	2D + 3D LM spot tomo in CC/MLO
2D + 3D LM spot tomo in LMO as reported	
US Breast Bilateral	US Breast Right
US Axilla Right	US Axilla Left
MG Diagnostic Bilateral	MG Diagnostic Right
MG Diagnostic Left	

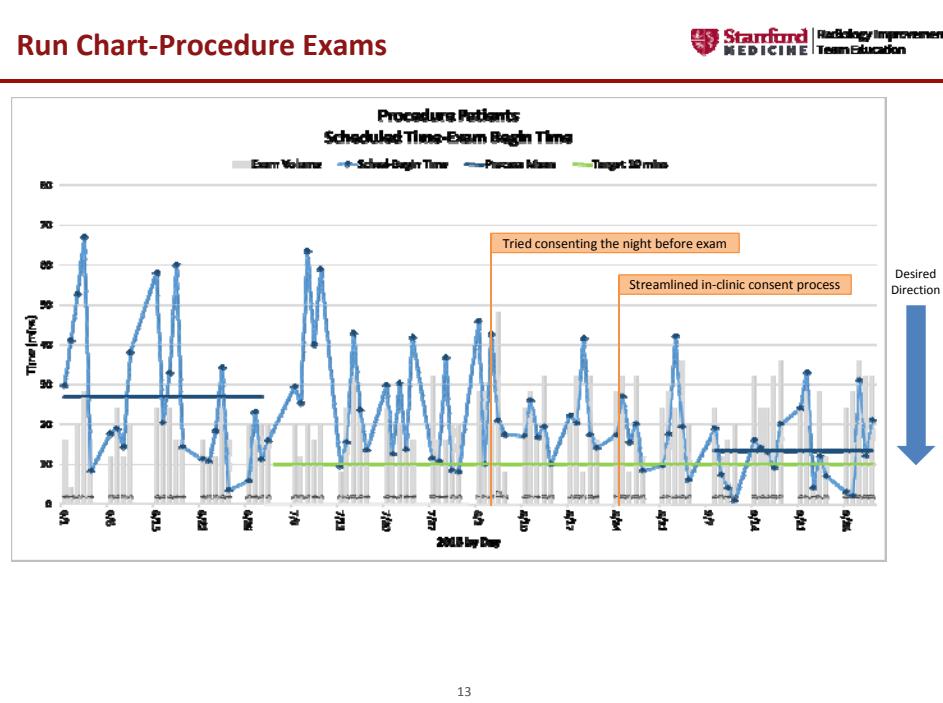
Comments

Mammography coordinator and Lead Tech protocol diagnostic exams prior to scheduling.

The designated breast imaging schedulers are then scheduling appropriate exams.

11





Sustain Plan

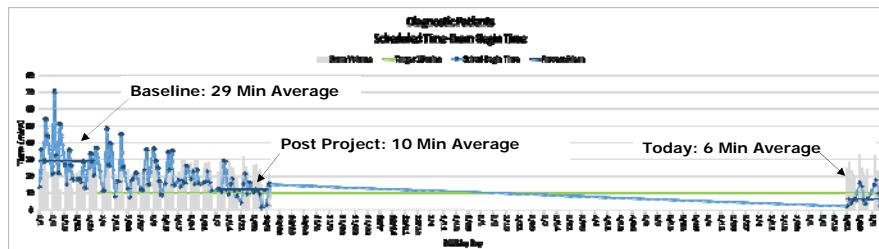
Intervention **Sustain Method**

Structured procedure consenting process	Watch the daily run chart. If consent time is out of limits, the reason will be looked into and addressed.
Protocol exams before they are scheduled.	The assigned techs will be checking the order que daily, to protocol exams in que.
Same day add on slots	Daily schedule checks to make sure the add on slots are not being overridden on the schedule.

Sustainment



As shown in the following chart, our process mean (dark blue line) **went from 29 minutes to 10 minutes within the 5 month time frame** with much less variation. A year later, our current average is 6 minutes.



15

Key Learning Points



1. Small changes with everyone on board = Large impact on processes
2. It takes a village to move mountains
3. Don't be afraid to ask the customer what they want
4. Time can't be given back
5. Calmer and relaxed staff due to patients being more relaxed
6. The power of patient involvement in problem solving



We invited a patient to assist the group with input on how to help alleviate long patient wait times. Having Mary on our team brought patient perspective to light. Her insight was instrumental in achieving our goal.

16

Go Team!

 Stanford MEDICINE Radiology Improvement Team Education



17