

USING YOUR EMR TO IMPROVE WORKFLOW - EXPERIENCE IN A SMALL OFFICE

Anna M. Lamb DO FACOFP

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San Francisco

MY PRACTICE

When we started;

Solo practitioner

One LPN, One MA, One Receptionist

3000 Patients

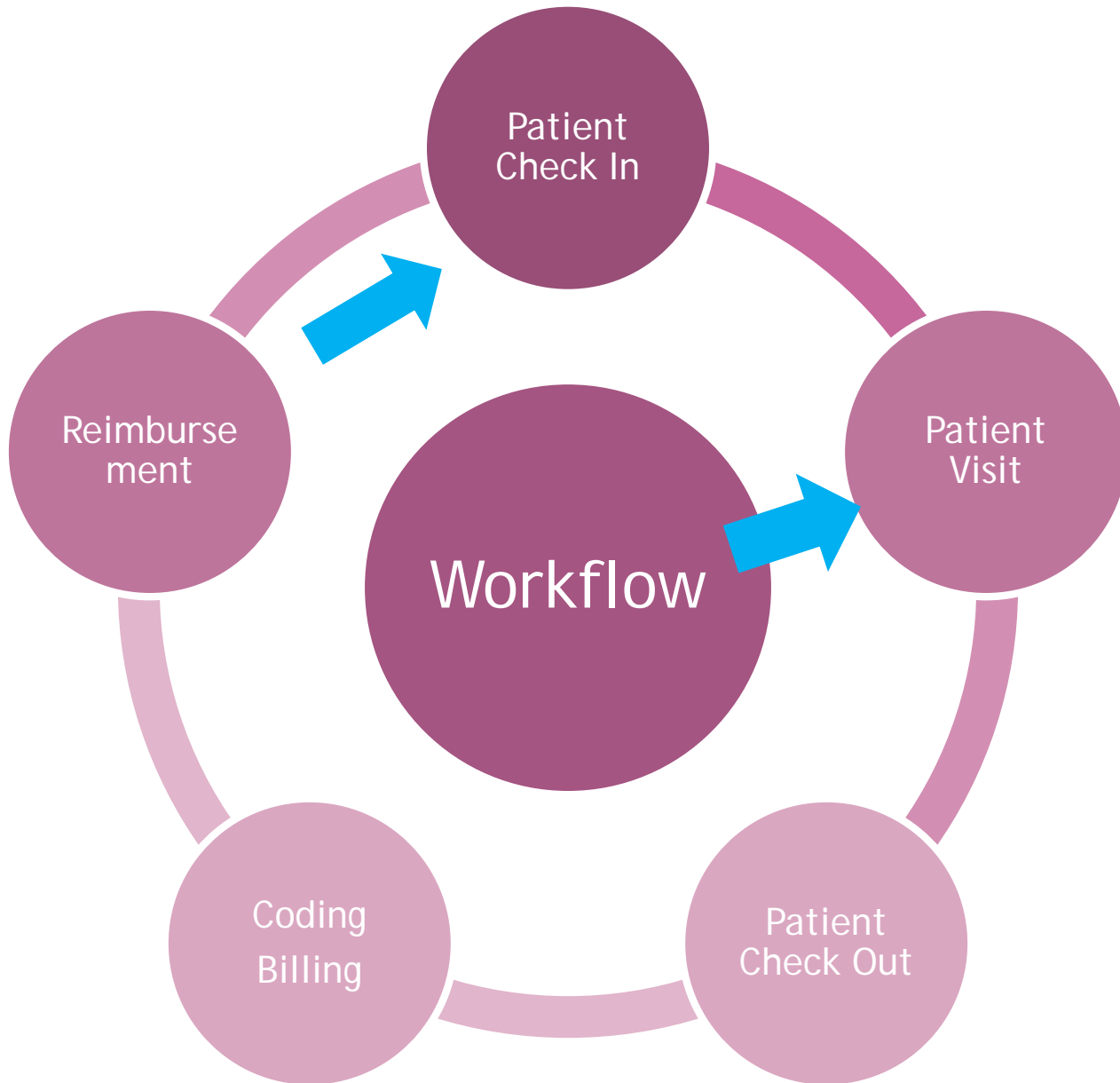
Where we are now:

One physician, one PA

One RN, One LPN, One MA, One Receptionist

5000 Patients

Working on being certified as a Medical Home



WHERE TO START?

- ◉ Identify Issues
- ◉ Analyze how staff is currently managing workflow
- ◉ Analyze how staff is using the EMR
- ◉ Plan an organized solution based on the above

IDENTIFY ISSUES

- ⦿ Phone messages not being handled in a timely manner
- ⦿ Patient check in was not accurate and took a long time
- ⦿ Lab and Xrays not being followed up
- ⦿ Paperwork not being completed
- ⦿ Staff Complaints - overwhelmed with work

IDENTIFY ISSUES IN OFFICE

- ◉ Staff overtime - expenses were getting out of control
- ◉ Stock problems - too much of some things too little of others
- ◉ Office was beginning to appear chaotic and disorganized (i.e. paperwork getting lost, eating at desk)

WHERE WE STARTED

- ◉ Monitored how much work our staff had.
- ◉ Monitored EMR to see when messages were completed.
- ◉ Used EMR to monitor how many outstanding Lab and Xray Orders we had
- ◉ Started having regular staff meetings and talking to our staff about Kaizen and manufacturing principles of quality and performance improvement

WHAT WE REALIZED

- ◉ Our staff was not organized
- ◉ The staff did not use the EMR to the fullest capacity
- ◉ It was a perception that they were overwhelmed with work
- ◉ If we could make them more efficient many of the complaints and issues would go away

TO START

- Convince staff that they have a product and that by following procedures they can accomplish their jobs more efficiently.
- Convince staff that accountability is not a bad thing that it will provide for a process of continuous improvement.
- Convince staff that their workload can be performed by the current number of staff persons

SOLUTIONS

- ◉ Create Procedures for Staff by the Staff
- ◉ Create Accountability for Staff Productivity
- ◉ Create a Team of workers who solve problems, become very efficient
- ◉ Teach Staff unique uses of the EMR in solving problems and doing follow up

THE PROCEDURE

- ◉ Written by staff
- ◉ Goals set by staff
- ◉ Monitoring initially by administration and then sent over to staff
- ◉ Now after 2 years we have periodic monitoring

MESSAGING

- ◉ Staff monitored how many messages per day they received. Maximum 60-65
- ◉ Initially monitoring showed that these were not answered until the afternoon
- ◉ Staff reorganized work flow to handle messages as soon as they came in
- ◉ Answer time was improved to 4 hours

TRIAGE MESSAGES PRIOR TO MONITORING

<input type="checkbox"/>	09/16/08	5:16p	Nursen	Hx	Barber Diane F	Rx	reprint
<input type="checkbox"/>	09/16/08	5:13p	Nursen	Hx	Gerould Michelle		Call
<input type="checkbox"/>	09/16/08	5:11p	Nursen	Hx	Metcalf Melissa	Call	Lab Results
<input type="checkbox"/>	09/16/08	5:11p	Nursen	Hx	Caparco Theresa		Call
<input type="checkbox"/>	09/16/08	4:21p	Nursen	Hx	Zuch Brenda L	Rx	Mammagram Order
<input type="checkbox"/>	09/16/08	4:18p	Nursen	Hx	Armas Kim F		Call
<input type="checkbox"/>	09/16/08	4:10p	Nursen	Hx	Ames Katara L	Rx	Prior Auth
<input type="checkbox"/>	09/16/08	3:47p	Nursen	Hx	Davis Gertrude A	Call	Inr
<input type="checkbox"/>	09/16/08	3:46p	Nursen	Hx	Kuchler Gary G	Call	diarrhea
<input type="checkbox"/>	09/16/08	3:30p	Nursen	Hx	Hemmer Christine		Call
<input type="checkbox"/>	09/16/08	3:28p	Nursen	Hx	Reak Viola J		Call
<input type="checkbox"/>	09/16/08	3:26p	Nursen	Hx	Harris Donna L		Call
<input type="checkbox"/>	09/16/08	3:23p	Nursen	Hx	Brown Brandie L		Call
<input type="checkbox"/>	09/16/08	3:19p	Nursen	Hx	Fagan Kimberly A		Call
<input type="checkbox"/>	09/16/08	10:15a	Nursen	Hx	Greene Joseph B	Rx	Refill
<input type="checkbox"/>	09/16/08	9:23a	Nursen	Hx	Rugh Lisa		Call

TRIAGE

<input type="checkbox"/>	07/28/10	3:25p	Nursen	Hx	Yaskulski Joni M		
<input type="checkbox"/>	07/28/10	2:32p	Nursen	Hx	Barone Marie	Call	pap results
<input type="checkbox"/>	07/28/10	2:25p	Nursen	Hx	Phillips Monica	Call	Lab Results
<input type="checkbox"/>	07/28/10	2:01p	Elaineb	Hx	Palmer Margaret		MDCLR /K+
<input type="checkbox"/>	07/28/10	2:00p	Nursen	Hx	Johns Susan	Call	UTI
<input type="checkbox"/>	07/28/10	1:45p	Nursen	Hx	Dixson Betty A	Call	Inr
<input type="checkbox"/>	07/28/10	1:42p	Elaineb	Hx	Peck Christopher		Info
<input type="checkbox"/>	07/28/10	1:37p	Nursen	Hx	Bodine Doris M	Call	Inr
<input type="checkbox"/>	07/28/10	1:17p	Nursen	Hx	Plath Nancy L	Call	Lab Results
<input type="checkbox"/>	07/28/10	12:17p	Nursen	Hx	Sherman Donald	Rx	Refill
<input type="checkbox"/>	07/28/10	10:01a	Nursen	Hx	Vega Lisa M	Call	Domestic
<input type="checkbox"/>	07/28/10	8:50a	Nursen	Hx	Maglio David		Levemir/Dentist
<input type="checkbox"/>	07/28/10	8:25a	Elaineb	Hx	Capozzolo Mario		Appt
<input type="checkbox"/>	07/28/10	8:21a	Nursen	Hx	Schwartz Nina D	Rx	Prior Auth

TRIAGE

All	Date	Time	User		Reference	Reason	Subject
<input type="checkbox"/>	08/11/10	4:24p	Elaineb	Hx	Bartz Norman		Lab Results
<input type="checkbox"/>	08/11/10	4:09p	Nursen	Hx	Mcdonald-Mrucz		US Results
<input type="checkbox"/>	08/11/10	4:09p	Elaineb	Hx	Fasano Norma C	Call	DTR Called
<input type="checkbox"/>	08/11/10	4:03p	Nursen	Hx	Sprinkle Paul W		Passed Out
<input type="checkbox"/>	08/11/10	3:40p	Nursen	Hx	Flanagan Ashley		Needs Note
<input type="checkbox"/>	08/11/10	3:03p	Elaineb	Hx	Miller Sonya A		+Preg Test
<input type="checkbox"/>	08/11/10	2:03p	Nursen	Hx	Comeau Ila E	Call	lab results
<input type="checkbox"/>	08/11/10	2:01p	Nursen	Hx	Dedman Sophie T	Call	lab results
<input type="checkbox"/>	08/11/10	12:26p	Nursen	Hx	Williams Theresa	Call	lab results
<input type="checkbox"/>	08/11/10	12:17p	Nursen	Hx	Roberts Regina J		Samples
<input type="checkbox"/>	08/11/10	12:16p	Nursen	Hx	Eighmey Catrina	Question	still sick
<input type="checkbox"/>	08/11/10	12:15p	Nursen	Hx	Roberts Darryl		Samples
<input type="checkbox"/>	08/11/10	12:01p	Elaineb	Hx	Hughes Margaret		Fyi Oxygen
<input type="checkbox"/>	08/11/10	11:33a	Nursen	Hx	Wall Maxine M		Sleep And Wellness
<input type="checkbox"/>	08/11/10	9:00a	Nursen	Hx	Tessitore Kitty	Call	inr

MESSAGING CURRENTLY

- ◉ All messages answered daily either by phone or letter
- ◉ All messages answered within 4 hours
- ◉ Handled by one nurse
- ◉ Monitoring occurs periodically and shows that this continues to be true

PROCEDURE TO USE EMR SCREENS EFFICIENTLY

Name	ANNA	LAMB		Age	42 yrs	DOB	10/03/1967
Addr	9281 Ellinwood Rd			Sex	F	Race	
Addr2				ActI	6	Onset Date	00/00/0000
City	CORFU	S NY Z	14036	D/B		Account Date	11/18/04
Ph #	(585)-599-4680	W		Hold	N N	Chart#	
Fax		Cell		FChg	N	SS #	058543289
Diag				Dunn	Y 0	Dr #	1 Lamb, Anna M., D.
Phmy	3320037	Rite Aid Pharmacy				Loc#	1 Main Office
Memo1		Memo2				RD#	
Email						PCP#	
							N

03/24/2008

Insurance Plans:



Patient Portal

PATIENT CHECK IN PROCEDURE

- ◉ Greet Patient
- ◉ Check patient “Arrived” in Chart central
- ◉ Verify Demographics
 - Verify Name with Middle initial
 - Verify Addresses Primary and Secondary
 - Verify Phone Numbers
 - Verify Pharmacy
- ◉ Verify Insurance
 - Review Cards
 - Scan any new cards
 - Verify Eligibility on line if a new patient or an established patient not seen in last 3 months
- ◉ Collect Appropriate Copayment
- ◉ Issue Receipt
- ◉ Apply Payment to Superbill
- ◉ Update Insurance Information on Demographic Screen
- ◉ Check patient to “Nurse” in Chart Central

LAB PROCEDURE

- ◉ Lab Results are followed up on a weekly basis
- ◉ Use the EMR to access “Acquired, Reviewed Partial, Sent and Ordered” statuses
- ◉ Test results that have not been received in over a week are tracked down and placed in the chart and the provider is notified
- ◉ Each week the number of lab tests over a week old will be monitored

LAB REPORT FOLLOW UP

<input type="checkbox"/>	<input type="checkbox"/>	RvwdPart	08/04/10	1 Anna M. Lamb, D	United Memorial Me	13556	Hx	Norton, Elizabeth
<input type="checkbox"/>	<input type="checkbox"/>	Acquired	08/03/10	1 Anna M. Lamb, D	United Memorial Me	13616	Hx	Messina, John
<input type="checkbox"/>	<input type="checkbox"/>	Sent	07/30/10	1 Anna M. Lamb, D	Acm	13574	Hx	Cooper, Amy
<input type="checkbox"/>	<input type="checkbox"/>	Acquired	07/30/10	1 Anna M. Lamb, D	United Memorial Me	13572	Hx	Cox, Diane
<input type="checkbox"/>	<input type="checkbox"/>	Ordered	07/23/10	201 Miner, Laura	Acm	13519	Hx	Dalba, Joan
<input type="checkbox"/>	<input type="checkbox"/>	Scheduled	07/14/10	1 Anna M. Lamb, D	United Memorial Me	13434	Hx	Tuohey, Charles
<input type="checkbox"/>	<input type="checkbox"/>	Ordered	07/13/10	201 Miner, Laura	Acm	13418	Hx	Cuthbertson, Amanda
<input type="checkbox"/>	<input type="checkbox"/>	Scheduled	06/30/10	1 Anna M. Lamb, D	Acm	13319	Hx	Gould, Ingrid

EXAMPLES OF PROCEDURES


- ◉ Sorting Mail
- ◉ Rooming Patients
- ◉ Stock Rotation
- ◉ Managing controlled prescriptions


PROCEDURES WORK WITH EMR




CC: Patient presents for. (Complaint) 


HPI: 


ROS:


Const: Denies constitutional symptoms. 


Eyes: Denies eye symptoms. 


ENMT: Denies ear symptoms.  Denies nasal symptoms.  Denies mouth or throat symptoms. 


CV: Denies cardiovascular symptoms. 


Resp: Denies respiratory symptoms. 


GI: Denies gastrointestinal symptoms. 



Musculo: Denies musculoskeletal symptoms. 

Skin: Denies skin, hair and nail symptoms. 

Neuro: Denies neurologic symptoms. 

Psych: Denies psychiatric symptoms. 

Endocrine: Denies endocrine symptoms. 

Hema/Lymph: Denies lymphatic symptoms.  

Current Meds: Bisoprolol-Hydrochlorothiazide 2.5-6.25 mg, lopidine 0.5 %

Allergies:

Past Medical History

Family History

Social History

PROCEDURE FOR ROOMING PATIENTS

- ◉ **Preparing to Room a Patient**
- ◉ Identify patient ready for rooming by checking Chart Central
 - Identify patient type
 - New
 - Established
 - Physical
 - Medical Clearance
- ◉ Assign Room. Note in Chart Central
- ◉ Bring Patient in from Waiting Room
- ◉ Check Height and Weight
 - A Height should be checked on all new patients, all children at each visit until age 18 and all adults once yearly at a routine visit
 - For measurements patient should face front
 - For height patient's shoes should be off
 - For weight patient's shoes may be on or off
- ◉ Take patient to assigned room

PROCEDURE FOR ROOMING A PATIENT #2

- ◉ **Rooming Patient**
- ◉ Patient should be seated on table with feet flat on the floor
- ◉ Open progress Note and record reason for visit
- ◉ Review Medications
 - Discontinue short term medications
 - Add new medications
- ◉ Review Allergies and mark reviewed in chart
- ◉ Update PFSH
- ◉ Check Blood Pressure for all patients > 5 years of age
 - Apply cuff to arm
 - Line up arrow with artery
 - Apply stethoscope to artery
 - Inflate to 220 mmHg on patients over 150 pounds
 - Confirm absence of pulse
 - Deflate cuff in increments of 2 mmHg
 - Record systolic on first heartbeat heard
 - Record diastolic on last heart sound heard
- ◉ Record Temperature

ROOMING A PATIENT #3

- Record Pulse for the following complaints:
 - Chest discomfort
 - Palpitations
 - Respiratory Distress
 - Dizziness
 - Fatigue
 - Loss of Consciousness
 - Use pulse oximetry instrument or count radial pulse for 15 seconds and multiply by 4
- Record Pulse Oximetry if Needed.
- Record Respirations
 - Count respirations for 1 minute
- **Prepare Patient for Exam**
- Instruct patient to remove shoes for diabetic foot exam
- Make sure area of evaluation is easily accessible
- Obtain surgical consent if needed

-

ROOMING A PATIENT #4

○ Physicals

- Eye exam
- Urinalysis if required
- Complete documentation/Health Appraisal Form
- Notify Triage Nurse of Vaccines when Necessary

○ Medical Clearance

- Draw Labs
- Complete EKG and obtain ABN if needed.

○ Exiting Patient

- Give samples
- Give prescriptions and orders
- Answer any questions
- Give copy of Visit

USING THE EMR EFFICIENTLY

- ◉ Multiple sessions can be accessed
- ◉ Opening a progress note and putting all information in through that field instead of moving in and out
- ◉ How to use document codes and the importance of needing them to search the chart
- ◉ Develop habit of looking at patient flow through Chart Central

CHART CENTRAL

NEW	Linda Augello	Closed	4:09 pm	eBill	Rash,Blood Pressure
SICK	Randy Bigelow	Closed	1:26 pm	eBill	Ankle Injury
RTN	Veronica Smith	Closed	1:27 pm	eBill	Recall Letter
SICK	Stephanie Pastore	Closed	1:28 pm	eBill	uti
WALK	Kim Mcmanus	PatSeen	9:58 am	eBill	Foot
SICK	Kathryn Olson	Closed	1:28 pm	eBill	Throat
NEW	Jilleen Tundo	Closed	1:30 pm	eBill	BC/BS Establish
NV	Kitty Tessitore	Closed	1:31 pm	eBill	Blood Work
WALK	Kenneth Kral	PatSeen	10:47 am	eBill	Cold
NFWC	Megan Musilli	Closed	1:41 pm	eBill	MVA, Aware Of 45.00
WCC	Garrett Schmidt	Closed	1:33 pm	eBill	Kindergarten Physical
WALK	Lois Grimes	PatSeen	11:49 am	eBill	Back
RTN	Shannon Schmidt	Closed	1:35 pm	eBill	Blood Work
NV	Patricia Sauer	Closed	1:35 pm	eBill	Blood Work
WALK	David Bielec	PatSeen	12:40 pm	eBill	Cortisone Shot
WALK	Melissa Ruble	PatSeen	12:40 pm	eBill	Ear Pain

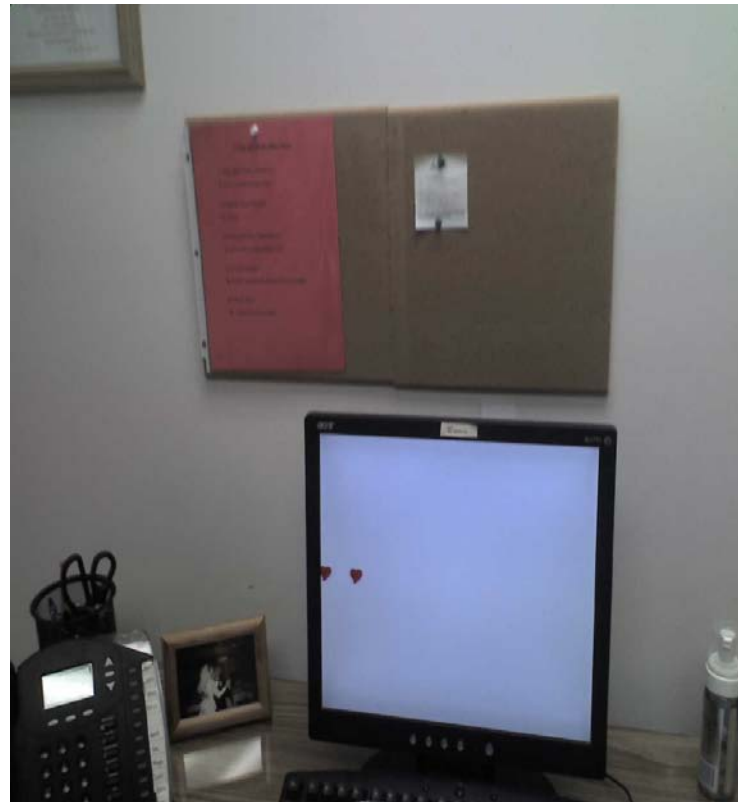
REORGANIZED OFFICE

- ◉ Added wall files so paperwork would not get lost
- ◉ A place for everything and everything in its place
- ◉ We performed Kaizen on key areas of the office
- ◉ We organized stock and an ordering procedure

5S

- ◉ Sort - All unneeded items are removed from area
- ◉ Set in Order - A place for everything and everything in its place
- ◉ Shine - The area is cleaned as the work is performed
- ◉ Standardize - Methods are continually applied
- ◉ Sustain - 5S is a habit and is continually improved

A PAPERLESS OFFICE



A SMALL OFFICE LAB



WHAT ABOUT THE STAFF?

- ◉ Initially had difficulty convincing staff that this would make their day easier
- ◉ Reluctant participation
- ◉ During the writing of procedures, a number of personality traits were revealed
- ◉ Ultimately went through an entire staff turnover

HOW THE OFFICE HAS BENEFITTED

- ◉ Staff overtime has decreased
- ◉ Reorganizing stock has reduced stock costs and has made it easier to store
- ◉ As practice has grown the staff has been able to handle heavier workload without increasing overtime

WHERE ARE WE GOING?

- ◉ Continuing to improve procedures and efficiency
- ◉ The practice continues to grow
- ◉ Working towards a Medical Home designation
- ◉ The EMR continues to have updates which decrease clicks and improve efficiency.
- ◉ Now have a working team