

Ordering, Obtaining & Completing 12 Lead EKGs in the ED / FSED (Cerner Firstnet Users)

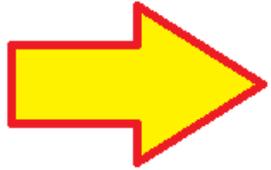
Wayne W Ruppert, CVT, CCCC, NREMT-P
Cardiovascular Coordinator
October, 2020

EVERY EKG MUST HAVE:

- **Correct Patient Information** entered into the EKG machine. (MRN number – **NOT FIN!!!**)
- **EKG must be transferred.**
- An **EKG Order** must be entered into Cerner
- The **EKG Order must be SIGNED OFF** in Cerner.

In order for the EKG to transfer into Cerner and remain a permanent part of the patient's chart ALL FOUR of the above items must be done CORRECTLY – with EVERY EKG!

CRITICAL STEPS in DOING *STAT* EKGs:



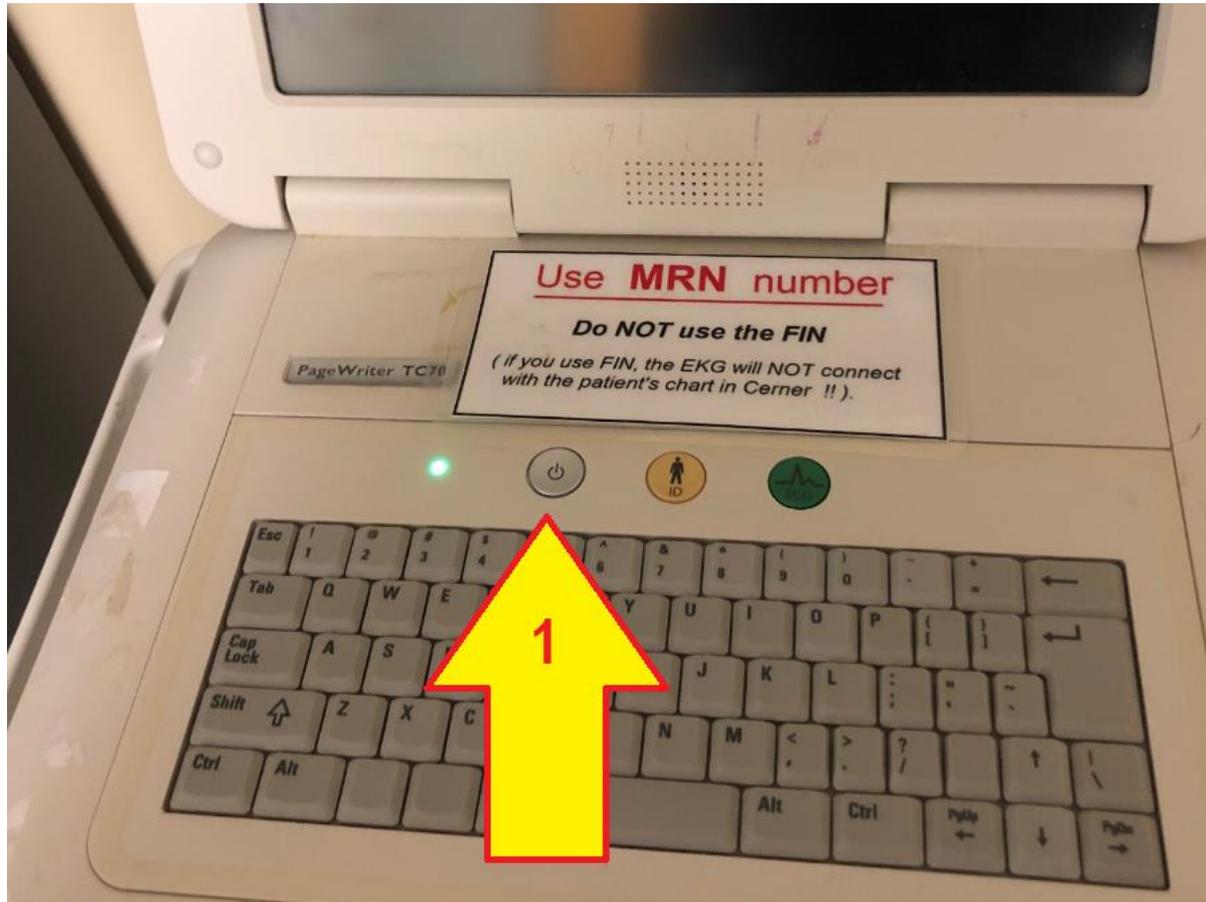
- 1. Manually enter CORRECT information into EKG machine**
- 2. Obtain EKG**
- 3. Transfer EKG**
- 4. Place EKG Order in Cerner**
- 5. Sign Off EKG Order in Cerner**

STAT EKG – Manual Entry (patient info):

- Enter Patient Data directly into the EKG machine when there is not time to enter the order into Cerner first.
- NOTE: When you do a “STAT EKG” – an ORDER MUST be placed into Cerner ASAP.

 ***FOR EVERY EKG that is obtained, there MUST be an accompanying EKG ORDER in Cerner.***

Manually Enter Patient Information:



1. Power ON the EKG machine and let it boot up. (this takes approx 30 seconds).

Manually Enter Patient Information:



- Select "ID"

Select the “New Patient” tab....

Settings

0 4:09:46 PM 12/20/2018

New Patient Worklist 4 Find Patient Edit Patient ID

Patient ID

Last Name

DOB (mm/dd/yyyy)

First Name

Gender

TECH

Patient Info Data Format Requirements:

The image shows a screenshot of a patient information form on a mobile device. The form has a header with 'Settings' and a status bar showing a heart icon, a signal strength indicator, the time '4:09:46 PM', and the date '12/20/2018'. Below the header are four buttons: 'New Patient', 'Worklist 4', 'Find Patient', and 'Edit Patient ID'. The form fields are as follows:

- Patient ID:** A text input field with the red text 'MRN #' overlaid.
- Last Name:** A text input field with the red text 'Last Name ONLY: NO abbreviations (Jr, Sr, etc) even if it's spelled that way in Cerner.' overlaid.
- DOB (mm/dd/yyyy):** Three separate text input fields for month, day, and year, with the red text 'mm', 'dd', and 'yyyy' overlaid on each respectively.
- First Name:** A text input field with the red text 'First Name ONLY: NO middle initials (even if it's spelled that way in Cerner).' overlaid.
- Gender:** A dropdown menu with the red text 'Birth Gender' overlaid.
- TECH:** A text input field with the red text 'your first initial,last name' overlaid.

STAT EKG – Manual Entry (patient info):

NEVER

USE

THE

FIN

NUMBER !!!!

STAT EKG – Manual Entry (patient info):

ALWAYS

USE

THE

MRN

NUMBER !!!!

The ONLY WAY

The EKG will

TRANSFER into Cerner

Is if you use

the MRN number!

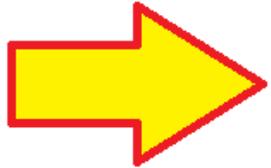
Note: if you use the FIN number, the EKG will “appear to Transfer” when you press the ‘Transfer’ button – but it WILL NOT attach to the patient’s chart in Cerner!

...and the Doctor WON’T be able to see it !!!

Also....be aware that the PAPER COPY of the EKG DOES NOT Go to the floor with the patient. The ONLY WAY for doctors outside of the ED to “see the EKG” is “via Cerner.” If the FIN number was used on the EKG the Docs won’t find it in Cerner!

CRITICAL STEPS in DOING **STAT** EKGs:

1. Manually enter **CORRECT** information into EKG machine



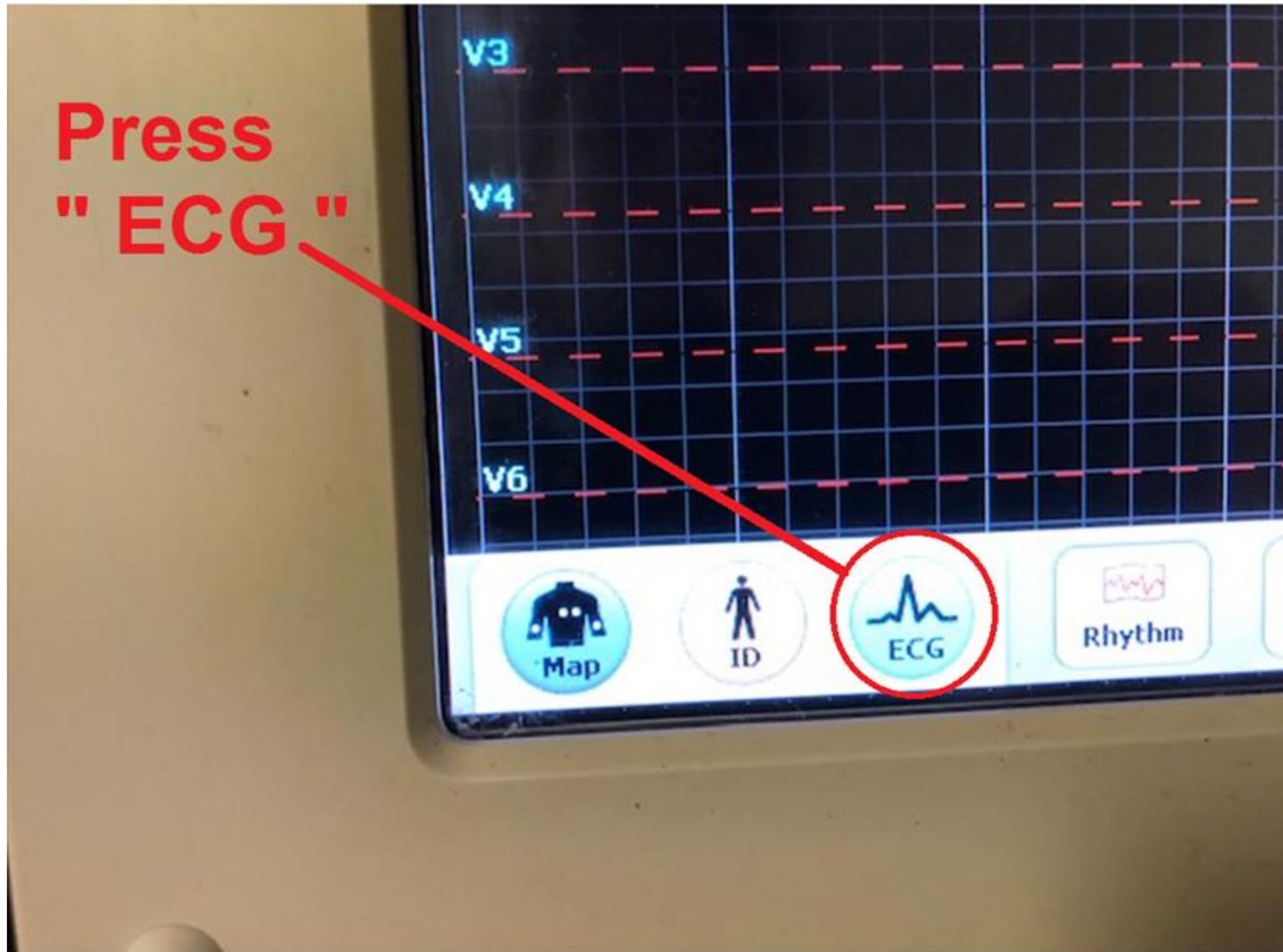
2. **Obtain EKG**

3. Transfer EKG

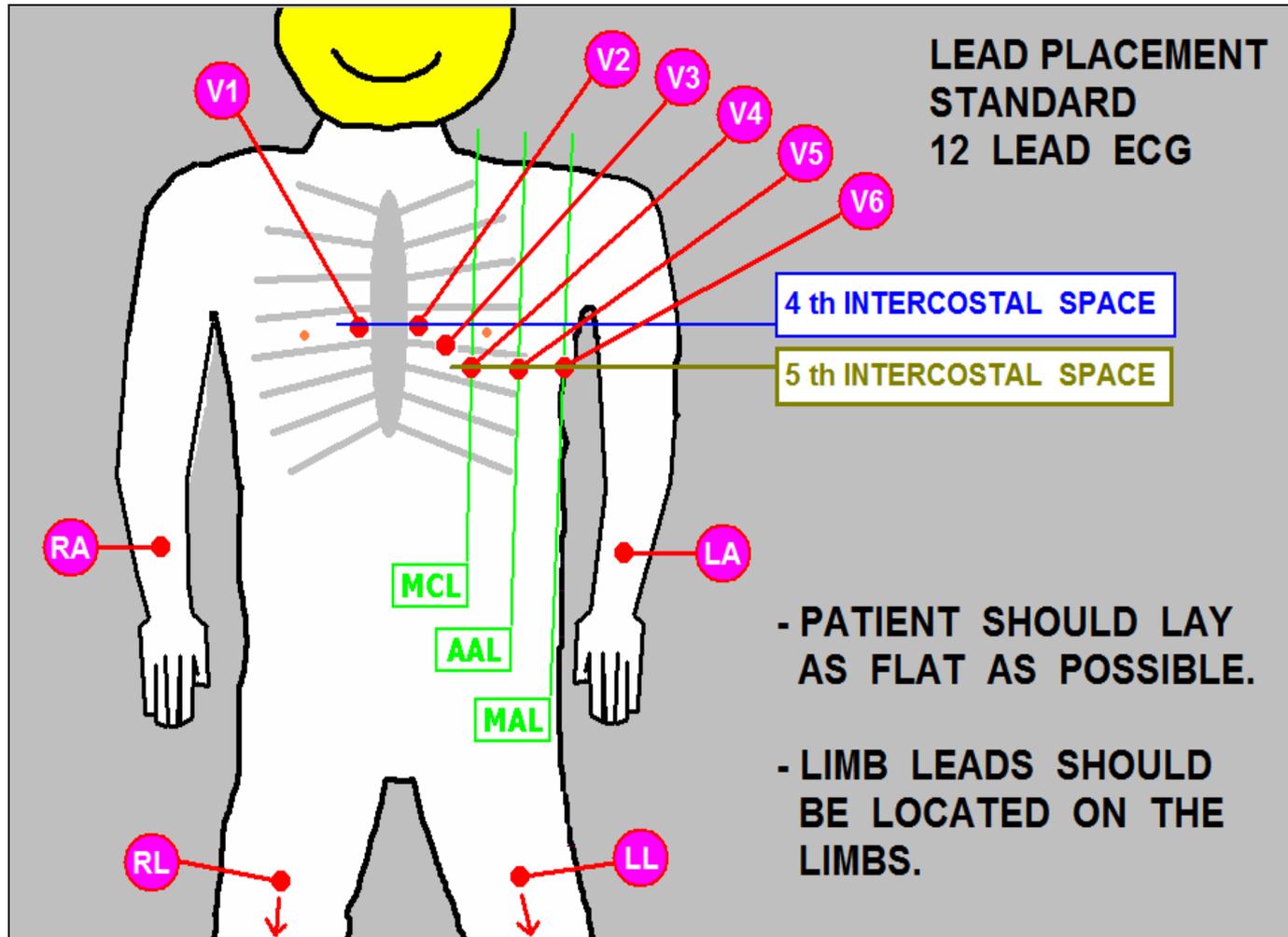
4. Place EKG Order in Cerner

5. Sign Off EKG Order in Cerner

Once Patient Info has been entered, go to "ECG" mode.....

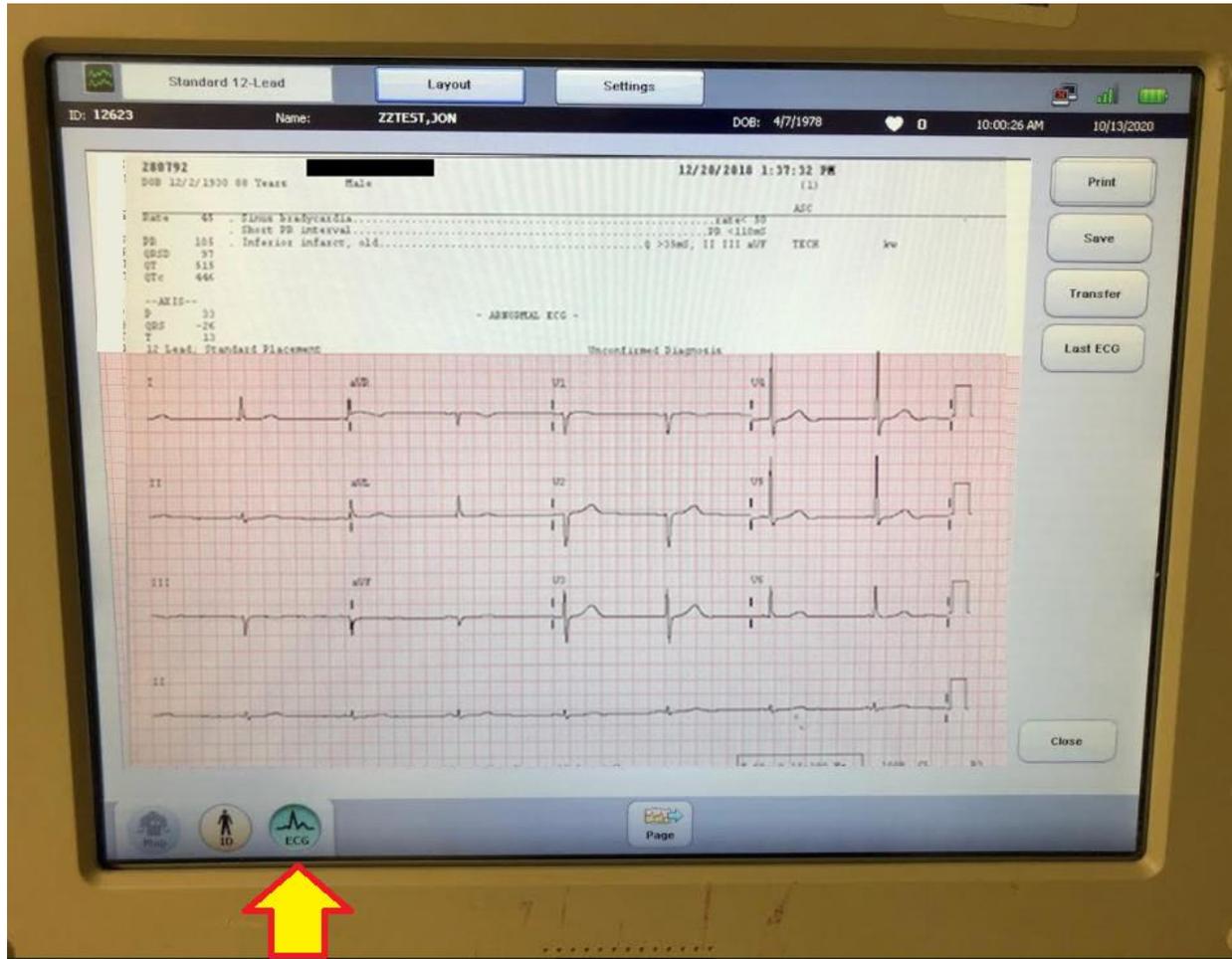


Obtaining the EKG.....



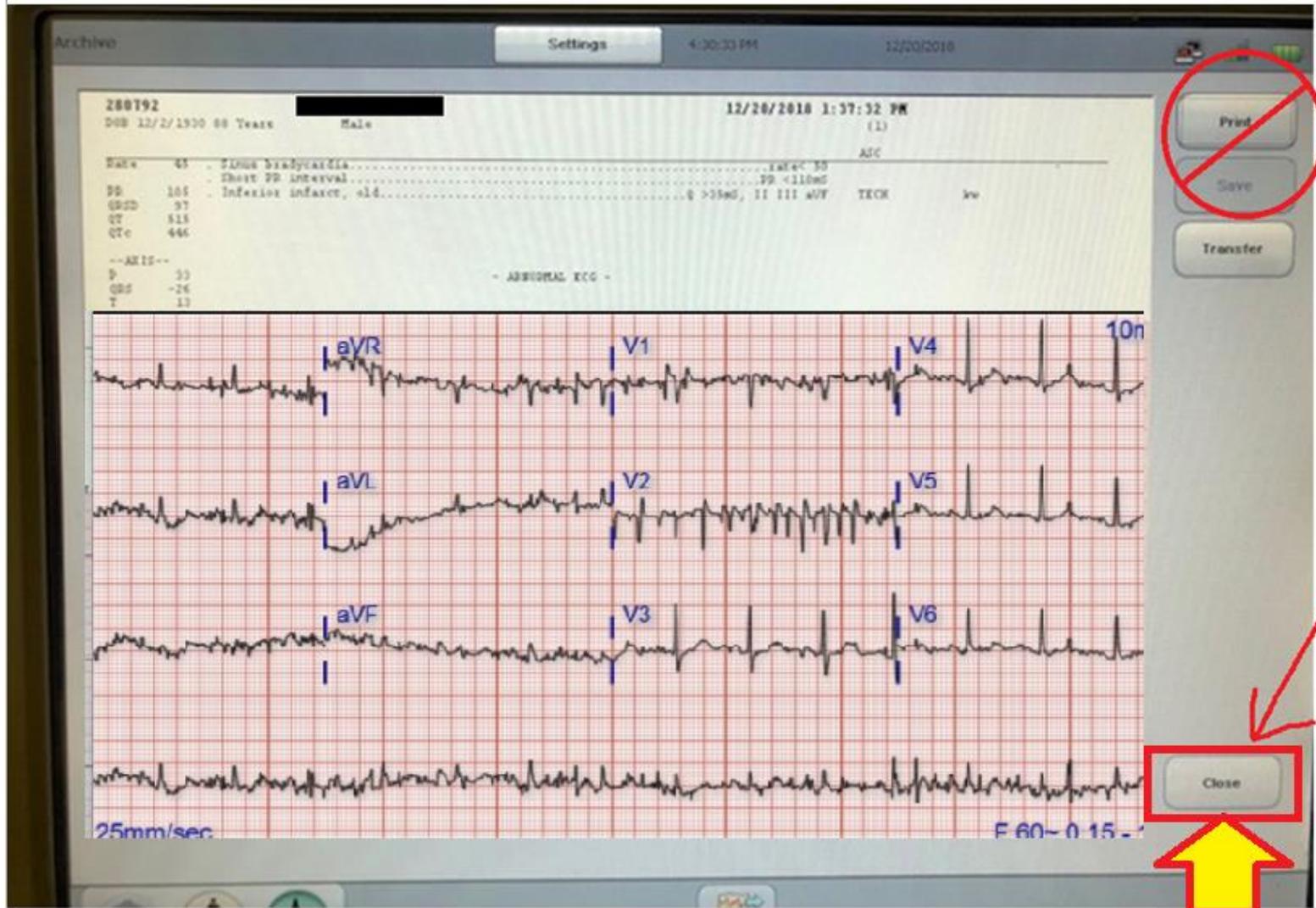
Attach wires to patient in correct positions.....

Obtaining the EKG.....



When the EKG waveform looks good, press the “EKG” button to record the EKG.

If you don't like the EKG, select **CLOSE**,
(**DO NOT** select **PRINT**, **SAVE** or **TRANSFER** !!!)



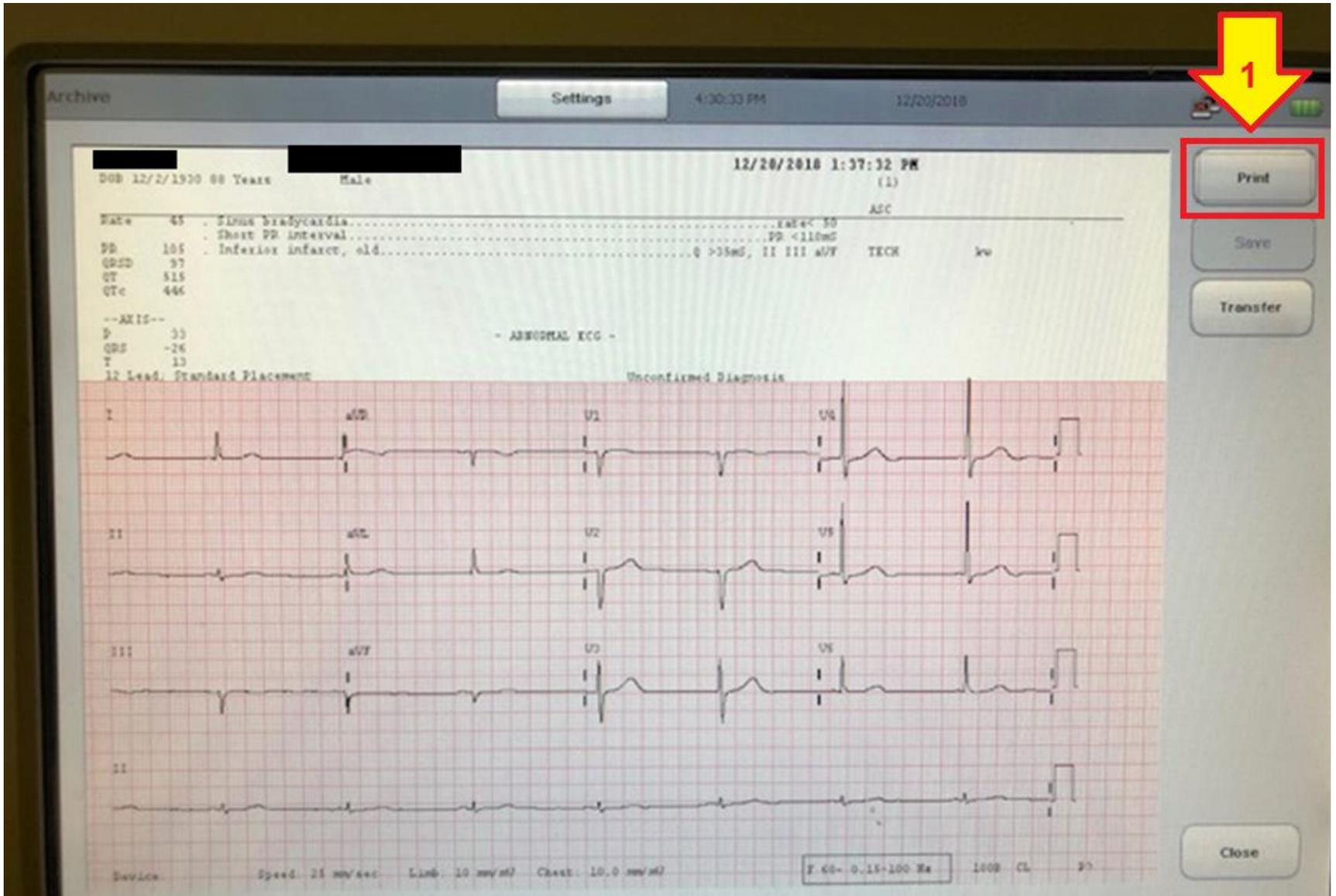
When you **"CLOSE"** the EKG, it *deletes* the bad copy.

ALWAYS IMMEDIATELY DELETE a poor quality EKG!!!! (Don't SAVE or PRINT !)

If you select “PRINT” with the BAD QUALITY EKG, the machine may “SAVE” it – that means the *bad quality* EKG will be what ATTACHES TO THE EKG ORDER in Cerner. That means when you obtain a GOOD quality EKG, it will NOT transfer to Cerner – because the “BAD EKG” already took it’s spot.

If you like the ECG . . .

PRINT IT



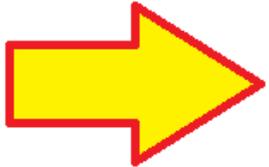
. . . .and then . . .

*After the EKG has been
OBTAINED (and PRINTED)*

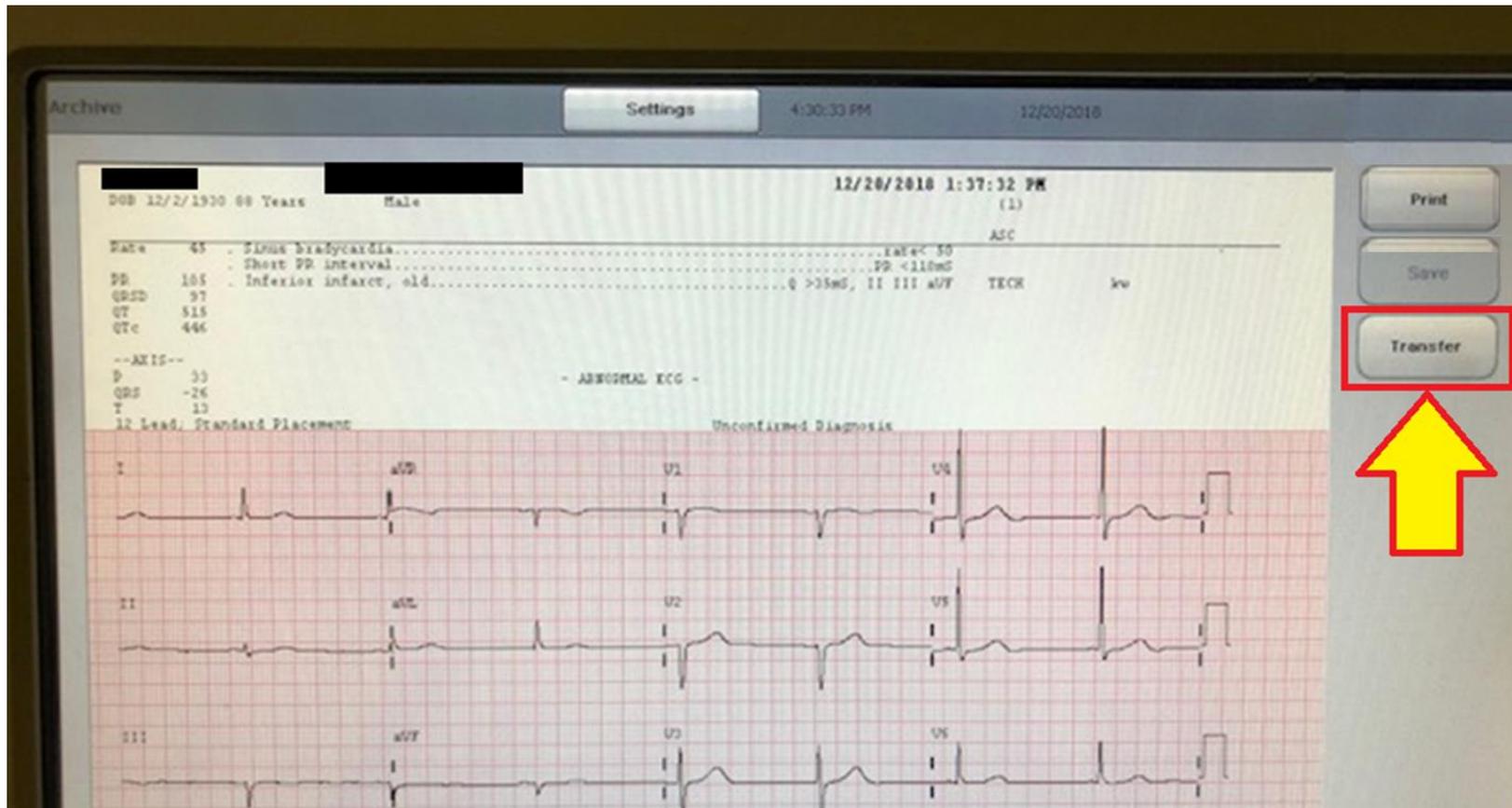
you must TRANSFER it

CRITICAL STEPS in DOING **STAT** EKGs:

1. Manually enter **CORRECT** information into EKG machine
2. Obtain EKG
- 3. Transfer EKG**
4. Place EKG Order in Cerner
5. Sign Off EKG Order in Cerner



TRANSFER THE EKG !!!



(this step is necessary to get the EKG into Cerner so doctors outside of the ED can see it)....

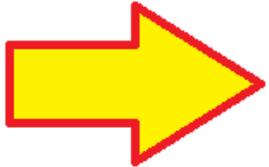
“TRANSFERRING” the EKG

Once the EKG is *transferred*, it waits in the que until a **Matching EKG Order** is placed in Cerner. Once the **EKG ORDER** is in Cerner, the EKG “attaches” to the Order and only then is the EKG is visible to Doctors in Cerner.

- All EKGs obtained in the ED (paper copies) DO NOT go with the patient when the patient gets admitted. The ONLY way Doctors outside the ED can see EKGs is IN CERNER.

CRITICAL STEPS in DOING **STAT** EKGs:

1. Manually enter **CORRECT** information into EKG machine
2. Obtain EKG
3. Transfer EKG
4. **Place EKG Order in Cerner**
5. Sign Off EKG Order in Cerner



Place EKG Order in Cerner – ED Patients

ZZTEST, KRISTENA - Add Order

ZZTEST, KRISTENA DOB: 12/10/19... Age: 39 years Patient Wt: Sex: Female MRN: 12855 Attending: CERNER, CERNER Cerner Service Acc...
Allergies: Apple Juice Code Status: Isolation: Outpatient FIN: FLSR1000082880 [Visit Dt: 10/13/2020 10:24:40 E... Loc:FLSR ED; DSTR; A
Opted in the Directory: Not Asked COVID-19 Status: Not Tested / Unsure

Diagnoses & Problems

Search: ekg

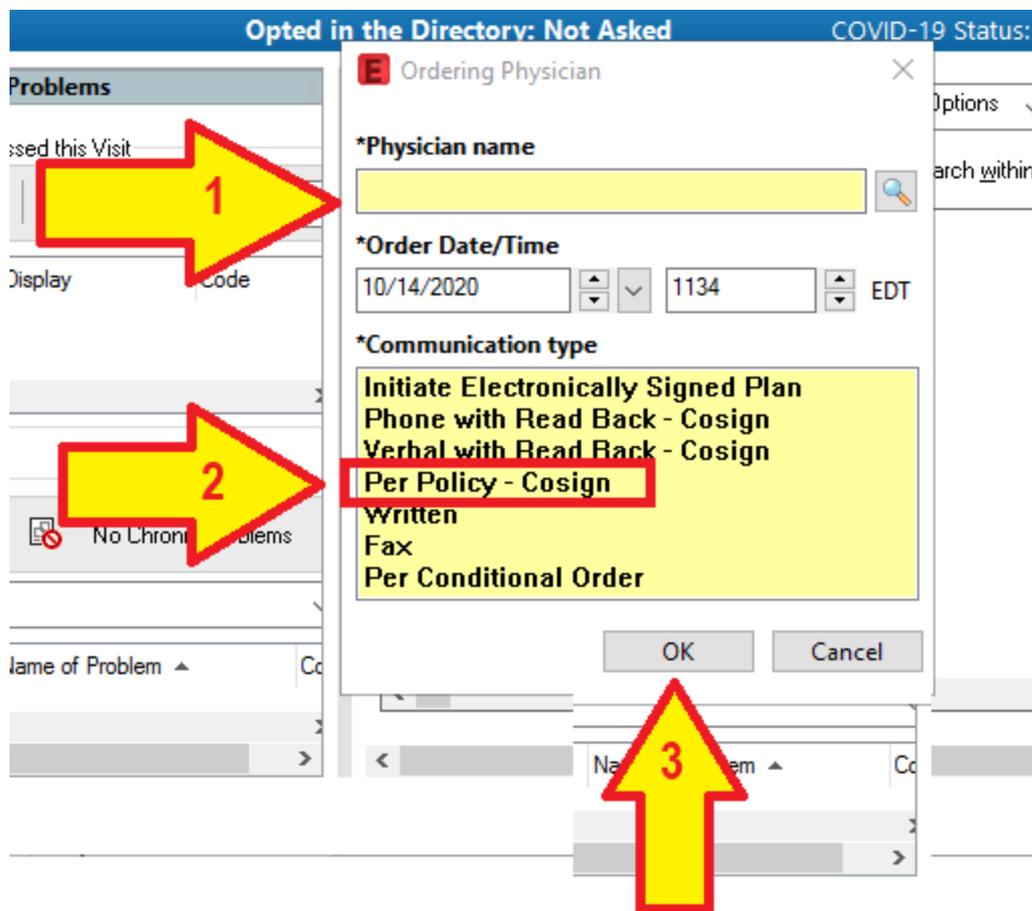
Advanced Options Type: Inpatient

EKG 12 Lead
EKG 12 Lead (T;N, STAT, Chest Pain)
EKG 12 Lead (T;N, STAT, Chest Pain)
EKG 12 Lead (T;N, Routine, Abnormal Heart Sounds)
EKG 12 Lead (T;N, STAT, Abnormal Heart Sounds)
EKG 12 Lead (T;N, Routine, Dizziness, Giddiness and Syncope)
EKG 12 Lead (T;N, STAT, Dizziness, Giddiness and Syncope)
EKG 12 Lead (T;N, Routine, Thyroid Disease)
EKG 12 Lead (T;N, STAT, Thyroid Disease)
EKG 12 Lead (T;N, Routine, Atrial Fibrillation)
EKG 12 Lead PRN
EKG BCE
EKG ED
EKG ED (T;N, STAT, Chest Pain)
EKG PRN

MRI Brain WWO
US Abdomen Complete
US Pelvis Non OB Complete
US Pregnancy Limited
Saline Lock Insert
Orthostatic Vital Signs
Dextrose 5% with 0.9% NaCl
NS
Hospital Placement Decision
Place in Observa
Transfer to Hosp
Discharge Patien
Admit to Inpatient

ZZTEST, KRISTENA - 12855 Done

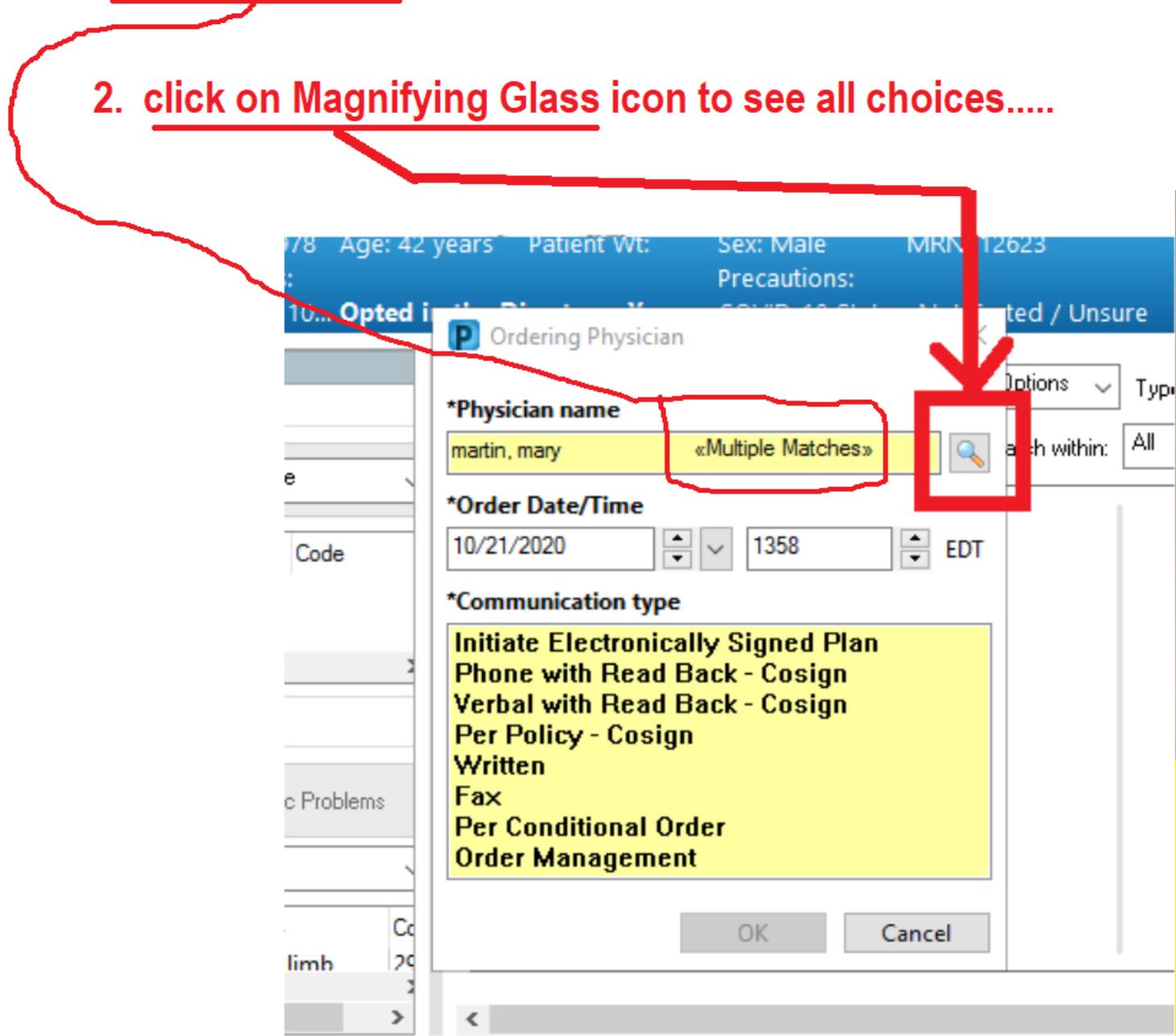
1. Type “ekg” in search box
2. Select “EKG ED (T;N, STAT, Chest Pain)”
3. Select “Done”



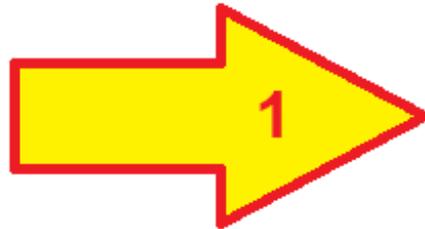
- Type in Dr.'s name (last name, first name)
- Select "Per Policy – Cosign"
- Select "OK"

1. If you see "Multiple Matches" in Physician Name Box, you must

2. click on Magnifying Glass icon to see all choices.....



1. Highlight the correct provider



Preview

Clear

Username:

Limit by group

Limit by organization

Limit by position

Limit by relationship

No data filtering

Filtered: Bayfront Health Seven Rivers

No data filtering

No data filtering

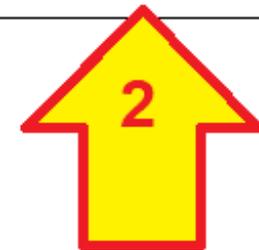
View physicians only

Name	Positions	Organizations	Services	Aliases
Martin, Mary S Md	ED Physician	Bayfront Health S...		FLSR_ORG_DO...
MARTIN, MARY...	Physician - View ...	Bayfront Health S...		FLSR_ORG_DO...

< >

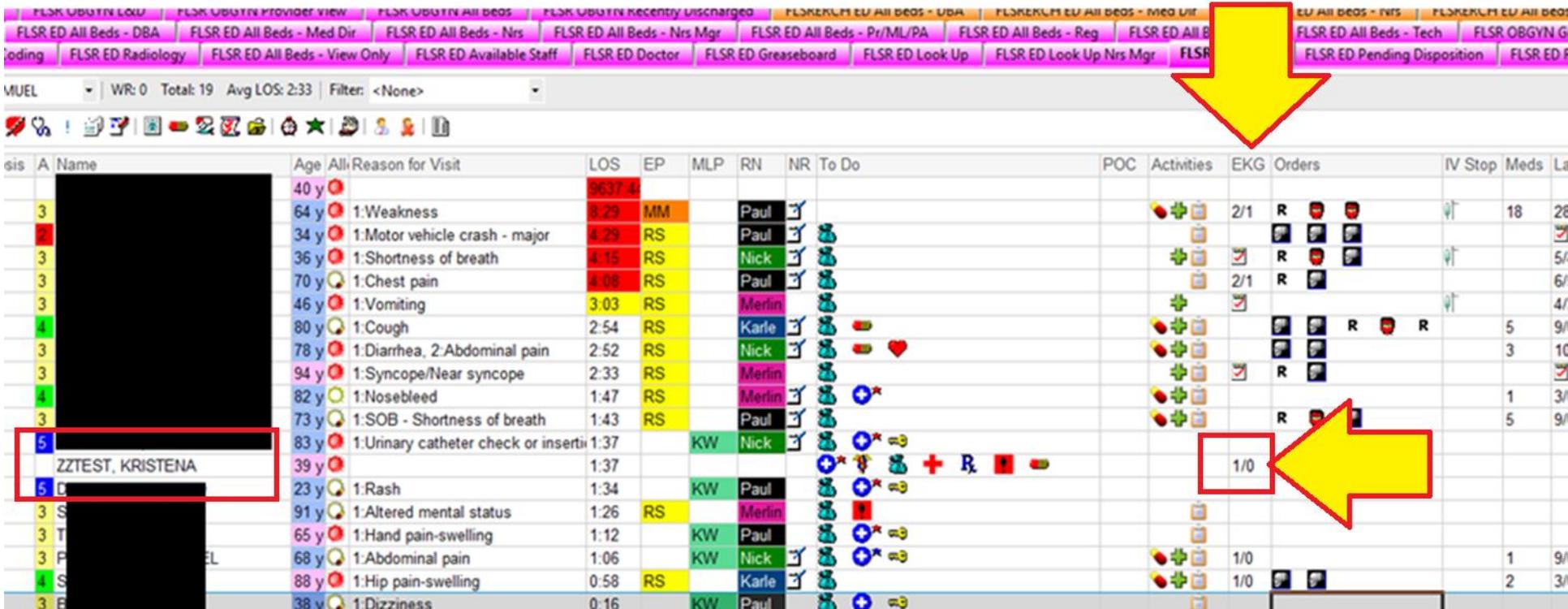
OK Cancel

2. Select "OK"



Now the order is in Cerner

On the “ED Greaseboard” you’ll see the **EKG order** shows up for your patient in the “EKG” column. Since there is 1 EKG currently ordered it shows up as “1/0.”



sis	A	Name	Age	All Reason for Visit	LOS	EP	MLP	RN	NR	To Do	POC	Activities	EKG	Orders	IV Stop	Meds	La
			40 y		9637.4												
3			64 y	1:Weakness	8.29	MM		Paul					2/1	R		18	28
2			34 y	1:Motor vehicle crash - major	4.29	RS		Paul						R			
3			36 y	1:Shortness of breath	4.15	RS		Nick						R			5/
3			70 y	1:Chest pain	4.08	RS		Paul					2/1	R			6/
3			46 y	1:Vomiting	3.03	RS		Merlin									4/
4			80 y	1:Cough	2.54	RS		Karfe							R		5
3			78 y	1:Diarrhea, 2:Abdominal pain	2.52	RS		Nick									3
3			94 y	1:Syncope/Near syncope	2.33	RS		Merlin						R			10
4			82 y	1:Nosebleed	1.47	RS		Merlin									1
3			73 y	1:SOB - Shortness of breath	1.43	RS		Paul						R			5
5		ZZTEST, KRISTENA	83 y	1:Urinary catheter check or inserti	1:37		KW	Nick									
3			39 y		1:37								1/0				
3			23 y	1:Rash	1:34		KW	Paul									
3			91 y	1:Altered mental status	1:26	RS		Merlin									
3			65 y	1:Hand pain-swelling	1:12		KW	Paul									
3			68 y	1:Abdominal pain	1:06		KW	Nick									
4			88 y	1:Hip pain-swelling	0:58	RS		Karfe					1/0				1
3			38 y	1:Dizziness	0:16		KW	Paul					1/0				2

Magnified view of EKG Order

A	Name	Age	All	Reason for Visit	POC	Activities	EKG	Orders
2	[REDACTED]	34 y	🚫	1:Motor vehicle c		📄		📄 📄 📄
3	[REDACTED]	36 y	🚫	1:Shortness of b		➕ 📄	☑️	R 📄 📄
3	[REDACTED]	70 y	🚫	1:Chest pain		📄	2/1	R 📄
3	[REDACTED] L R	46 y	🚫	1:Vomiting		➕ 📄	☑️	
4	[REDACTED]	80 y	🚫	1:Cough		📄 ➕ 📄		📄 📄 R 📄
3	[REDACTED] TH L	78 y	🚫	1:Diarrhea, 2:A		📄 ➕ 📄		📄 📄
3	[REDACTED]	94 y	🚫	1:Syncope/Ne		📄 ➕ 📄	☑️	R 📄
4	[REDACTED] S M	82 y	🚫	1:Nosebleed		📄 ➕ 📄		
3	[REDACTED] S J	73 y	🚫	1:SOB - Sho		📄 ➕ 📄		R 📄 📄
5	[REDACTED]	83 y	🚫	1:Urinary ca				
	ZZTEST, KRISTENA	39 y	🚫				1/0	
5	[REDACTED]	23 y	🚫	1:Rash				
3	[REDACTED]	91 y	🚫	1:Altered me		📄		
3	[REDACTED]	65 y	🚫	1:Hand pain		📄		
	[REDACTED]	68 y	🚫			📄		
4	[REDACTED]	88 y	🚫	1:Hip pain				

"1/0" EKG(s) ordered

Our patient

NOTE:

- **For EVERY EKG that is obtained, *there must be a matching order for that EKG in Cerner.***



For example, if six EKGs are obtained on the patient, and you want all six to be visible to doctors in Cerner, there must be SIX SEPARATE EKG ORDERS entered into Cerner. (Only ONE EKG attaches to ONE ORDER).

CRITICAL STEPS in DOING EKGs:

1. Place EKG Order in Cerner:

- ED Patients. (ED & FSED)
- Non-ED Patients (Inpatients, pre-op, ED hold, etc).

2. Assure **CORRECT** information entered into EKG machine (follow one of the two items listed below):

- EKG Order is placed in Cerner BEFORE EKG obtained.
- STAT EKG with Manual Information Entry.

3. Obtain EKG.

4. TRANSFER EKG.

5. Sign Off EKG Order in Cerner.



Signing Off EKG Orders – Emergency Department & FSED:

Our Patient

A	Name	Age	All	Reason for Visit	LOS	EP	MLP	RN	NR	To Do	POC	Activities	EKG	Orders
2	[REDACTED]	34 y	🔴	1:Motor vehicle crash - major	4:07	RS		Paul	📄	📄				
3	A	36 y	🔴	1:Shortness of breath	3:53	RS		Nick	📄	📄		+	☑	R
3	F	70 y	🟡	1:Chest pain	3:46	RS		Paul	📄	📄			2/1	R
3	A	46 y	🔴	1:Vomiting	2:41	RS		Merlin	📄	📄		+	☑	
4	L	80 y	🟡	1:Cough	2:32	RS		Karle	📄	📄		+		
3	E	78 y	🔴	1:Diarrhea, 2:Abdominal pain	2:30	RS		Nick	📄	📄		+		
3	L	94 y	🔴	1:Syncope/Near syncope	2:11	RS		Merlin	📄	📄			☑	R
4	K	82 y	🟡	1:Nosebleed	1:25	RS		Merlin	📄	📄		+		
3	F	73 y	🟡	1:SOB - Shortness of breath	1:21	RS		Paul	📄	📄				R
5	D	83 y	🔴	1:Urinary catheter check or inserti	1:16					📄		+		
	ZZTEST, KRISTENA	39 y	🔴		1:15					📄		+		1/0
5	L	23 y	🟡	1:Rash	1:12					📄		+		
3	S	91 y	🟡	1:Altered mental status	1:04	RS		Merlin	📄	📄				
3	T	65 y	🔴	1:Hand pain-swelling	0:50					📄				
	F	68 y	🟡		0:44					📄				
4	S	88 y	🔴	1:Hip pain-swelling	0:36	RS		Karle	📄	📄				

1. In the “Activities” column....
2. DOUBLE CLICK (Left click) inside the Activities block for the patient – this will open the “Check-off Box”

Signing Off EKG Orders – Emergency Department & FSED:

ZZTEST, KRISTENA DOB: 12/1... Age: 39 ye... Patient Wt: Sex: Female MRN: 12855 Attending: CERNER, CERNER Cerner...
Allergies: Apple Juice Code Statu...Isolation: Outpatient FIN: FLSR1000082880 [Visit Dt: 10/13/... Loc:FLSR ED; DSTR; A
Opted in the Directory: Not Asked COVID-19 Status: Not Tested / Unsure

MAR  Refresh

- Medications (0)
- Patient Care (0)
- Assessments (1)**
- Other (0)

Assessments (1)

- EKG ED
10/13/20 11:33:00 EDT, STAT, Chest Pain; Electrocardiogram ED

Other (0)

Show completed tasks

Not Done Document Cancel

3. Place cursor in this box and left click.....

Signing Off EKG Orders – Emergency Department & FSED:

ZZTEST, KRISTENA DOB: 12/1... Age: 39 ye... Patient Wt: Sex: Female MRN: 12855 Attending: CERNER, CERNER Cerner...
Allergies: Apple Juice Code Statu...Isolation: Outpatient FIN: FLSR1000082880 [Visit Dt: 10/13/... Loc:FLSR ED; DSTR; A
Opted in the Directory: Not Asked COVID-19 Status: Not Tested / Unsure

MAR  Refresh

 Medications (0)

 Patient Care (0)

 **Assessments (1)**

 Other (0)

Medications (0)

Patient Care (0)

Assessments (1)

EKG ED
10/13/20 11:33:00 EDT, STAT, Chest Pain; Electrocardiogram ED

Other (0)

Show completed tasks

Not Done Document Cancel



4. Now that a “check mark” is in the “EKG ED”
box, **right-click on “Document”**

Signing Off EKG Orders – Emergency Department & FSED:

The screenshot displays a medical software interface with a top navigation bar containing tabs for 'Patient Care (0)', 'Assessments (1)', and 'ERCH ED Look Up'. Below the navigation bar, a window titled 'EKG Completed Date and Time - ZZTEST, KRISTENA' is open. The window's toolbar includes icons for save, print, and other functions. The main content area shows the following fields:

- '*Performed on: 10/13/2020 1133 EDT' with a dropdown arrow.
- 'By: RUPPERT JR, Wayne W Accreditation Coordinator'.
- 'EKG Completed Date and Time' section with a red box around the date and time input fields, indicated by a yellow arrow labeled '5'.
- 'EKG Interpreted by' section with a red box around the provider name input field, indicated by a yellow arrow labeled '6'.

The bottom right corner of the window shows the status 'In Progress'.

5. Enter the date and time.
6. Enter the doctor or mid-level provider's name who "interpreted" the EKG.....

Signing Off EKG Orders – Emergency Department & FSED:

The screenshot shows a medical software interface with a window titled "EKG Completed Date and Time - ZZTEST, KRISTENA". The window contains a form with the following fields:

- *Performed on: 10/13/2020 1133 EDT
- By: RUPPERT JR, Wayne W Accreditation Coordinator
- EKG Completed Date and Time**: 10/13/2020 1139
- EKG Interpreted by**: Santiago-Aponte, Rafael MD

The form is displayed in a light blue header area. The bottom right corner of the window shows "In Progress".

7. Now that the Date, Time and EKG Interpreter's name are present, hit the "ENTER" key.....

Signing Off EKG Orders – Emergency Department & FSED:

Document Activities ×

ZZTEST, KRISTENA DOB: 12/1... Age: 39 ye... Patient Wt: Sex: Female MRN: 12855 Attending: CERNER, CERNER Cerner...
Allergies: Apple Juice Code Statu...Isolation: Outpatient FIN: FLSR1000082880 [Visit Dt: 10/13/... Loc:FLSR ED; DSTR; A
Opted in the Directory: Not Asked COVID-19 Status: Not Tested / Unsure

MAR   Refresh

 Medications (0)	Medications (0)
 Patient Care (0)	Patient Care (0)
 Assessments (0)	Assessments (0)
 Other (0)	Other (0)

**The EKG has been “successfully signed off !”
(It no longer appears in the “check-off box”).**

The “Final Step” – ***you must “SIGN OFF” the Order in Cerner***

If you don’t “sign off” the order in Cerner, after the patient is discharged from the hospital, the EKG “detaches” from the patient’s chart in Cerner. That means it will no longer be available to doctors should the patient return to the hospital at a later date. It also means the hospital cannot bill for the EKG. Every time this happens, it takes a manager approx. 15 minutes to fix the error. The person responsible is determined and notified.

Congrats! **You've signed-off the
EKG Order !** The status now
shows in Cerner as: **“COMPLETE”**

FOUR ESSENTIAL LINKS

for getting every EKG into Cerner:



EKG Order in Cerner (a separate EKG Order for *EVERY* EKG).

MRN Number and Correct Patient Information in EKG machine **NEVER** the **FIN** number!

TRANSFER EKG immediately after it is obtained

"Complete EKG Order" (sign-off from Worklist in Cerner) after EKG has been Transferred.



Just like a chain, if any of the links are broken, the chain will fail. If any of the above items are not completed, or are done incorrectly, the EKG will NOT be a part of the patient's permanent medical record.

For additional information:

Contact Wayne Ruppert at:

wayne.ruppert@bayfronthealth.com