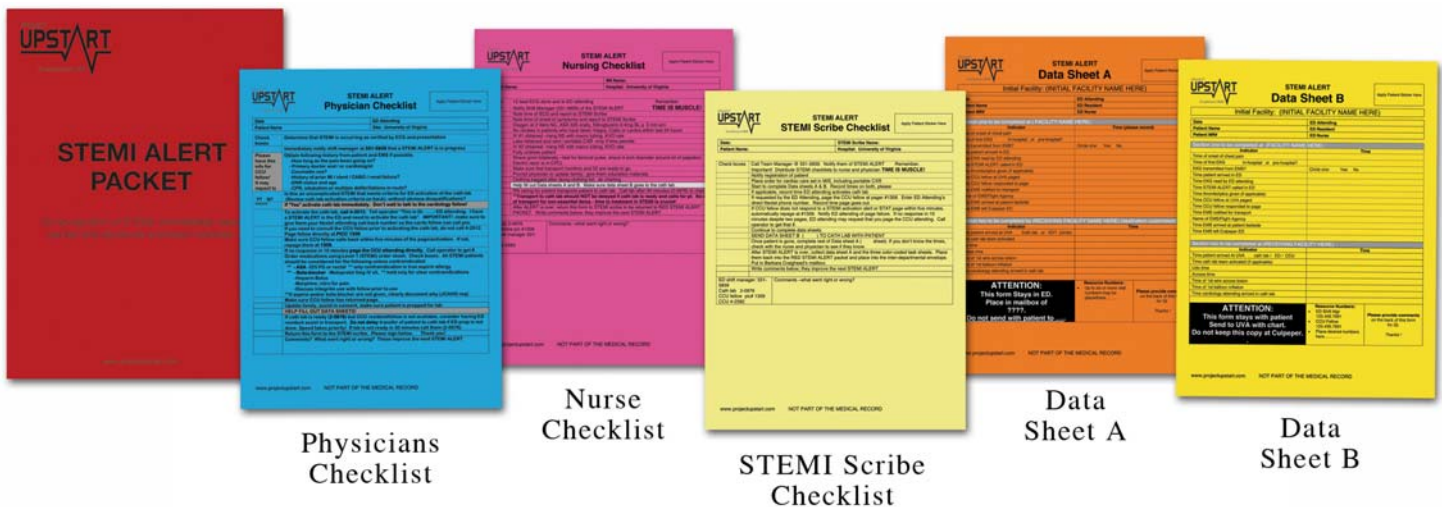


The STEMI ALERT Packet

(At a PCI-capable institution)

- Use of a STEMI ALERT Packet is a key step in optimizing treatment of the STEMI patient. Opening a STEMI ALERT Packet upon first recognition of STEMI acts as the “reperfusion trigger”- shifting the focus from **“early recognition”** to **“immediate reperfusion!”**
- This “if/then” action (**Got STEMI...Open Packet!**) provides ED staff with a concrete response to STEMI recognition.
- Each bright red STEMI ALERT Packet contains color-coded versions of five basic forms:



Packet “installation” is easy.

- First, each form is carefully adapted to your site – whatever details you feel are important for a best-practice STEMI ALERT. These “site customized” STEMI ALERT Packets are then placed in your ED -usually in a highly-visible wall holder. There they sit, waiting for that next STEMI to be recognized!
- Now, whenever a STEMI is recognized, ED staff automatically open a STEMI ALERT Packet. This provides immediate access to the precision checklist and concise data collection sheets that give every STEMI ALERT the potential to run like a well-oiled machine.....plus measure the results!
- The same basic process works for any treatment strategy - PCI, patient transfer, or administration of thrombolytics. Checklists place the details where they need to be –in the hands of the providers!
- At a PCI-capable facility the process focuses on fast decision making, early activation of the cath lab and complete preparation of the patient for PCI –if possible before they leave the ED!

Sample STEMI ALERT Packet (PCI facility)

The next few pages depict a sample STEMI ALERT Packet from a facility that utilizes on-site PCI (angioplasty) for treatment of its STEMI patients.

Note that the Physicians Checklist goes into great detail about assessment of the patient, ED activation of the cath lab, paging of the cardiologist, etc. These things are important at PCI centers where the goals include prompt activation of the cath lab (often the rate-limiting step) and fool-proof communication with the interventional cardiologist on call.

At PCI centers the physician is less concerned about transport issues and evaluation of patient suitability for thrombolytics. These are not usually common issues at PCI centers.

Note the levels of planning (at this site) that are in place to “foolproof” communication to the attending cardiologist and for insuring that the hospital operator hears the correct activation terminology. You can put in whatever details are necessary and important at your facility...

Adjusting the process is easy: Note that medications for ED administration during STEMI are simple and clear at this site. If you change your medication regime for STEMI you merely change the Physician Checklist details-not the entire process!

An actual STEMI ALERT Packet will have color-coded forms to simplify recognition. Two data sheets are used; Data Sheet A is directed to the ED quality improvement person at this facility and Data Sheet B is sent to the director of the PCI lab. That way feedback to ED staff can happen the next day.

The key to an efficient STEMI ALERT Packet is close attention to important details. These details must then be presented in the simplest manner possible.



STEMI ALERT Physician Checklist

Apply Patient Sticker Here
6.30.07

Date	ED Attending / Resident –if applicable
Patient Name	Site: Primary PCI Site.....

Check boxes	Determine that STEMI is occurring as verified by ECG and presentation Immediately notify shift manager at 234.5678 that a STEMI ALERT is in progress
Please have this info for CCU fellow! It may impact tx	Obtain following history from patient and EMS if possible. <ul style="list-style-type: none"> • How long as the pain been going on? • Primary doctor and / or cardiologist • Coumadin use? • History of prior MI / stent / CABG / renal failure ? • Age and DNR status • CPR, intubation or multiple defibrillations in route? • Patient weight • History of dye or contrast allergy? • Brief report of treatments and ECG findings
Y? N?	Is this an uncomplicated STEMI that meets criteria for ED activation of the cath lab (carefully review cath lab activation criteria on back of this sheet)
*****	If “Yes” activate cath lab immediately. Don’t wait to talk to the cardiology fellow!
	To activate the cath lab, call 4-2012 . Tell operator “This is Dr.- ED attending. I have a STEMI ALERT in the ED and need to activate the cath lab”. IMPORTANT! -make sure to give them your Nextel attending call-back number so the CCU Fellow can call you
	If you need to consult the CCU fellow prior to activating the cath lab, do not call 4-2012. Page fellow directly at PICC 1309
	Make sure CCU fellow calls back within five minutes of the page/activation. If not, repage them at 1309 .
	If no response in 10 minutes page the CCU attending directly . Call operator to get #
Customize medications here >	Order medications using Level 1 (STEMI) order sheet. Check boxes. All STEMI patients should be considered for the following unless contraindicated <ul style="list-style-type: none"> ** - ASA -325 PO or rectal ** only contraindication is true aspirin allergy ** - Beta-blocker -Metoprolol 5mg IV x3, ** hold only for clear contraindications -Heparin Bolus -Morphine, nitro for pain -Discuss Integrilin use with Fellow prior to use **If aspirin and/or beta blocker are not given, clearly document why (JCAHO req)
	Update family, assist in consent, make sure patient is prepped for lab
	HELP FILL OUT DATA SHEETS!
Check with the cath lab	If cath lab is ready (2-0976) but CCU resident/fellow is not available, consider having ED resident assist in transport. Do not delay transfer of patient to cath lab if ED prep is not done. Speed takes priority! If lab is not ready in 30 minutes call them (2-0976)
	Return this form to the STEMI scribe. Please sign below. Thank you!
comments	Comments? What went right or wrong? Write on back of this sheet!

ED activation of the cath lab for STEMI

IF

ECG shows definite evidence of STEMI with 1 or more mm of ST elevation in 2 contiguous leads (or a new LBBB) and a story c/w acute MI

AND

Patient does not have any of the following conditions:

- Diagnosis of STEMI uncertain (? pericarditis, etc)
- Age > 80
- Onset of pain >12 hours prior to presentation
- CPR administered en route for >5 minutes
- Currently intubated or in severe clinical shock
- Known to be DNR status
- **Has a known dye or contrast allergy**
- Severe comorbidities (including the following)
 - Renal failure (creatinine > 2.0 on previous record)
 - Severe COPD (patient on home oxygen, etc)
 - Dementia, severe disorientation or inability to cooperate/provide consent
 - Severe bleeding disorder including **any patients on Coumadin**

THEN

The ED physician should activate the cath lab without first waiting to consult cardiology

- ** STEMI patients who don't meet the above criteria still need to go to the cath lab but speak to cardiology before activating cath lab. Make sure to clarify who is activating the cath lab – the ED or Cardiology
- ** All ED activations must be done by the ED attending directly to the operator, NOT by nursing staff or residents; clearly document activation on chart.
- ** If possible attempt to obtain old ECGs, particularly if the diagnosis is uncertain

Comments Section Below-what went right (or wrong) during this STEMI ALERT?

Note: This form provides a guide for the ED physician in determining which patients qualify for emergent automatic activation of the cath lab – and those patients that may not! All details are adjustable. This form is printed on back of the blue Physician Checklist –allowing for instant access when needed!



STEMI ALERT Nursing Checklist

Apply Patient Sticker Here
6/30/07

Date:	RN Name:
Patient Name:	Hospital: PCI CENTER

Template document: customize details as needed

Check boxes	12 lead ECG done and to ED attending Notify Shift Manager (XXXXXXXX) of the STEMI ALERT	Remember TIME IS MUSCLE!
	Note time of ECG and report to STEMI Scribe	
	Note time of onset of symptoms and report to STEMI Scribe	
	Oxygen at 2 liters NC, ASA 325 orally, Nitroglycerin 0.4mg SL q 5 min prn	
	No nitrates in patients who have taken Viagra, Cialis or Levitra within last 24 hours	
	IV #1 obtained –hang NS with macro tubing, KVO rate	
	Labs obtained and sent / portable CXR -only if time permits	
	IV #2 obtained –hang NS with macro tubing, KVO rate	
	Fully undress patient	
	Shave groin bilaterally –feel for femoral pulse, shave 4-inch diameter around sit of palpation	
	Have meds been given? Make sure that transport monitors and O2 are ready to go	
	Prompt physician to update family; give family education materials	
	Make sure transfer paperwork is complete	
	Make sure copy of ECG goes to cath lab with patient	
	Clothing bagged after doing clothing list, do charting	
	Help fill out Data sheets A and B. Make sure data sheet B (yellow) goes to the cath lab.	
	RN caring for patient transports patient to cath lab. Call lab after 30 minutes (2-0976) to check	
	**Transport to cath lab should NOT be delayed if cath lab is ready and calls for pt. No delay of transport for non essential items - time to treatment in STEMI is crucial!	
	After ALERT is over, return this form to STEMI scribe to be returned to RED STEMI ALERT PACKET.	
***Write comments below; they improve the next STEMI ALERT		
Cath lab 2-3333 CCU fellow pic #3333 ED shift manager 33-	Comments below or on back of page –what went right or wrong?	



STEMI ALERT

STEMI Scribe Checklist

Apply Patient Sticker Here

Date:	STEMI Scribe Name:
Patient Name:	Hospital: PCI Center (sample)

Check boxes	Call Team Manager @ 123-4567 . Notify them of STEMI ALERT
	Important! Distribute STEMI checklists to nurse and physician TIME IS MUSCLE!
	Notify registration of patient. If no name, use a STEMI Patient Number
	Place order for cardiac care set in MIS, including portable CXR
	Start Data sheets A & B. Record times on both, please
	If applicable, record time ED attending activates Cath lab
communication	If requested by ED Attending, page CCU fellow at PICC #1309. Enter ED Attending's direct Nextel phone number for the return number. Record time page goes out.
Error prevention	If CCU fellow does not respond to a STEMI activation alert or STAT page within five minutes, automatically re-page them at #1309. Notify ED attending of page failure. If no response in 10 minutes despite two pages, ED attending may request that you page the CCU attending. Call operator to get #.
And Plan B! >	Continue to complete data sheets.
	DATA SHEET B (YELLOW) goes to CATH LAB WITH PATIENT Copy of ECG on chart for cath lab?
	Complete the rest of Data sheet A (ORANGE). If you don't know the times, check with the nurse and physician to see if they know. Complete entire section I of form.
Data for QI >	After the STEMI ALERT, collect the three color-coded checklists and Data sheet A. Place them into the red inter-departmental envelope. Put in mailbox of XXXXX .
	Write comments below; they improve the next STEMI ALERT
	If no response from cath lab 30 minutes after STEMI alert, call at 2-0976
ED shift manager: 123-4567 Cath lab 2-0976 CCU fellow PIC # 1309 CCU 4-2582	Comments –what went right or wrong?



STEMI ALERT Data Sheet A

Apply Patient Sticker Here

West Mercy Health Systems

Date	ED Attending
Patient Name	Cardiologist
Patient MR#	ED Nurse

Section I -completed by ED staff

Indicator	Time
Time of onset of chest pain symptoms:	
1 st ECG done by EMS prior to arrival? Y / N	Time of field ECG:
If so, was that ECG transmitted to the ED? Y / N	Time transmitted:
Time patient arrived in the ED:	
Time of first ECG in the ED:	
Time of first evaluation by ED Physician:	
Time cardiologist paged	
Time cardiologist responded:	
Time cath lab activated:	
Did ED attending activate cath Lab?	Circle one: Yes No
Time cath lab team reported to ED	
Time patient left ED	

Remember, this form stays in ED after alert

Section II -completed by cath lab staff

Indicator	Time
Time patient arrived in cath lab room (table time)	
Physician arrival time	
Lido time	
Access Time	
Time of first wire across lesion	
Time to TIMI 3 flow	
Time of 1st balloon inflation or device	

Signature. (cath lab monitor)

<p align="center">ATTENTION: <u>This form stays in ED after alert. Do not send with Pt! Put in mailbox of Dr. Bryce Johnson after alert</u></p>	<p>Resource Numbers:</p> <ul style="list-style-type: none"> • Charge nurse • Cath lab • CCU • MedCom • Cardiology Fellow 	<p>Cath lab staff: Please provide comments on the back of this form for QI. <i>Thanks !</i></p>
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STEMI ALERT Data Sheet B

Apply Patient Sticker Here

West Mercy Health Systems

Date	ED Attending
Patient Name	Cardiologist
Patient MR#	ED Nurse

Section I -completed by ED staff

Indicator	Time
Time of onset of chest pain symptoms:	
1 st ECG done by EMS prior to arrival? Y / N	Time of field ECG:
If so, was that ECG transmitted to the ED? Y / N	Time transmitted:
Time patient arrived in the ED:	
Time of first ECG in the ED:	
Time of first evaluation by ED Physician:	
Time cardiologist paged	
Time cardiologist responded:	
Time cath lab activated:	
Did ED attending activate cath Lab?	Circle one: Yes No
Time cath lab team reported to ED	
Time patient left ED	

Remember, this form goes to the cath lab with the patient!

Section II -completed by cath lab staff

Indicator	Time
Time patient arrived in cath lab room (table time)	
Physician arrival time	
Lido time	
Access Time	
Time of first wire across lesion	
Time to TIMI 3 flow	
Time of 1st balloon inflation or device	

Signature. (cath lab monitor)

<p align="center">ATTENTION: <u>This form goes to cath lab with pt!</u> <u>Do not keep in the ED. Put in mailbox of</u></p>	<p>Resource Numbers:</p> <ul style="list-style-type: none"> • Charge nurse • Cath lab • CCU • Any other numbers that you may need 	<p align="center">Cath lab staff: Please provide comments on the back of this form for QI. <i>Thanks !</i></p>
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