CATRAC ML
Protocol & EMS –Sub- Group Meeting
Sept 2009

3 tables: 1st responders, non-PCI hosp, PCI hosp
3 questions: What are needs/desires for each area?
Top 3 areas missing or key things needed to be successful?
How close are you to getting there?

Review RACE Parametic protocols (pg 8) & see how close your institution is.
To have a working Regional plan, it's important to take ACC/AHA guidelines, updates, & many other available guidelines, etc., & integrate and condense them to create one regional STEMI guidelines in a usable form.

EMS activation of cath lab?
Seton - does hybrid (EMS calls or faxes EKG). Currently have 30-45% false STEMI. Instead of "code STEMI", now ask for more detail: "1mm increase in ___, 2mm increase in ___". Although a hassle, it's more accurate.
NAMC – 1/3 false STEMI
Brack – numbers low enough, not seeing as high false +
Wilco – EMS act.
St. D – EMS act.
Westlake – EMS act.
HH – EMS act.

Bring back data on false positive back to meeting.

Looking at Brack, a non-EMS activated system, how does it rate? What are advantages and disadvantages?
Frank Zidar: 8.2 min reduction with EMS activation
- data from Larson paper with Tim Henry (Minnesota experience)
- 9-13% false positive rate
- EMS activated with heavy education component

Define false +. What is a missed call?
Define standard of what activates system.

Nick Burke (Minnesota) – perhaps it would be a good idea to have him come down and speak or just send stuff.
People who activate system have a responsibility to utilize resources.

Sam Roberts: Consistent transmission of EKGs is needed. May be negative cath, but based on symptoms and EKG, it's the right call.

FZ: gets EKG on phone: doesn't know symptoms, but knows what's coming.
Funding issues with smaller counties will prevent consistency, but education is key.
First, need to bring 12 lead to everyone, then education.

Currently, if EMS calls in STEMI verbally – as soon as word "STEMI" comes out, cath lab activated. UA and good story goes to cath lab, but doesn't meet STEMI criteria – but that's ok.

On-going Education & Review of Cases
Heart Hospital – once a month, they look at STEMI cases and review…if doesn't meet criteria, data falls out.
Wilco – Lenis set up monthly review of STEMI cases
NAMC – currently reviews cases; with education false positives decreased, but then came back up.

3 key issues/needs from hospital group:
1. Improved interpretation of EKG
2. Consistent transmission of EKG
3. Define false positive

STEMI definition:
ST increase in 2+ contiguous leads and LBBB
Cardiac symptoms > 15mins, < 12 hours
Can't divorce symptoms from EKG

SR: Pushing staff in ER to expand on atypical symptoms; requests EMS to give specific abnormalities to dispatch to relay to facility.
FZ: Are they all utilizing a uniform system to define STEMI? We should all use project upstart; it's a broad net, but that's ok. Pg 8 of RACE - straw man to start protocol.

Tracy Forister: EMS update & 3 key issues/needs
1. Standardizing dispatch
   - Need better feel for what's being done in area
   - Are they trained, are they doing it, if not, why?
   - One dispatcher doing fire, EMS and police?

2. Standardizing assessment in field
   - Rural, urban, basic, advanced
   - Coming up with guidelines and getting input from ED & cardiology on what they want to see
   - Is it appropriate to request?

3. Standardization treatment protocols
   - What is everyone doing?
   - Break into 4 groups: urban, rural, basic & advanced.
   - Includes activation of cath lab and what's appropriate to do so.

Needs: Feedback loops (for QI group)

Ken Mitchell: Hospital update & 3 key issues/needs
1. Improved accuracy of EKG interpretation in field
   - Need to define criteria to activate cath lab
   - Discovered most hospitals allow EMS activation (exceptions: Seton hybrid, Brack waits)
   - Need to define false positive & get standardization;

current rates: St. David's: 30-35%
Wilco: 5-10%
Seton: 35-40%

2. More consistent electronic transmission of EKG from the field
   - Transmission is spotty even when technology/capabilities exist

3. Define false positive & use as an on-going educational opportunity
   - use Project Upstart and standardize who gets EKG

Louis: - Mission Lifeline criteria defines who gets EKG;
- Performance of provider in field (assessment);
- Clean cath
…Sometimes it's a process issue (the information is there, but just not sent to right person)

* What's creating false positives? Misinterpretation of EKG? Disregarding and looking only at symptoms?

SR: Feedback needed, positive and negative. Did you ask right questions and communicate that? Feedback the ER/EMS used to get was very helpful, but interrupted feedback because of issues with HIPAA.
FZ: Taking a case by case approach will be the most valuable education opportunity.
KM: RACE (page 8) is pretty standard & should be adopted/used

FZ: Who currently loads Plavix on the trucks? Burnet, Hays

911 call:

Dispatch questions -
- Breathing
- Awake
- Changing color
- Clammy
- History
- Meds within 12 hours
- Allergy to ASA
- Vomit, blook within 24 hrs
- Black/bloody stool
- ASA – adult or baby?
- Take 4 baby ASA, chew or under tongue
- Do not eat or drink
- Just rest
- If he becomes less awake/vomits – put on side

33 psaps within Region
- 10 responsible for med dispatch
- 5 use protocol
- 2 or 3 have med div input

The Standard: get them out within 59 seconds.

Cedar Park – call goes to police and then transferred to county dispatch
(Law enforcement PSAP that then transfers call)

What's the solution? Not easy to give up reign of your kingdom. Need buy-in from community.

FZ: Didn't anticipate consistent approach to ASA as an issue.
First, cause no harm. Educate & make sure they know the reasons not to give ASA, etc.

KM: Lots of problems we can't solve, but can try to establish gold standard.
TF: Rural areas may be easier to influence because often it's just a resource issue
PR: Is dispatch an issue to be tackled?
FZ: If so, dispatch issues would be good to be discussed within EMS subgroup.
RW: Med community establishes guidelines based on standard of care and then say "you fix your backyard and get here."

John: CAPCOG provides all training (by national association of emergency dispatchers)
Need to find out who's doing it and who's not.
Currently, not part of survey

Louis: What's optimum protocol for optimal outcome?
FZ: RACE protocol calls for 12 lead EKG within 15 minutes. Is that realistic/appropriate?

EMS:
- Standard Assessment in field & treatment in field
- Who gets 12 lead? Standard evaluation of chest pain patient
- Meetings will be 4th Wednesday of the month
- Share info by e-mail prior to meeting

Mission Lifeline will have social networking site within 2-3 weeks
Wiggio (sp?) as possible document sharing software/site