


MEDICAL EMERGENCY TEAM = MET


**SHOULD THE EMERGENCY PHYSICIAN
BE PART OF THIS TEAM?**

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Health problem

- Rule of the 3 S's
 - Stuff – infrastructure
 - Staff
 - Structure




Problem: in society

- Solutions
 - Prehospital care
 - Emergency departments
 - Emergency Medicine
 - Trauma care
 - ...




Problem: in hospital

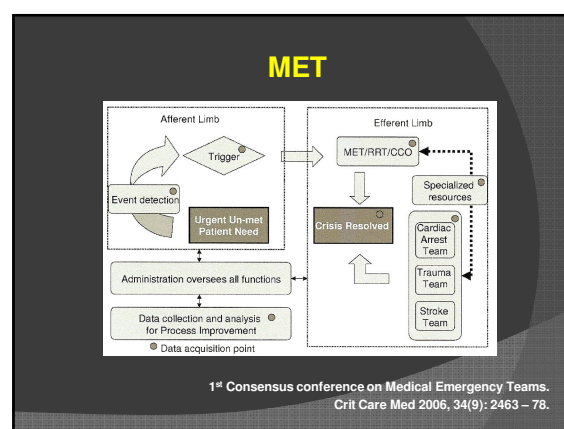
- Resuscitation – upgrade of care
- Solutions
 - ICU
 - MET
 - ...



MET

- Hot topic
 - Safety, adverse events,...
- No clear definition
 - “Cardiac arrest” team
 - “Upgrade of care” team
 - MET
 - In-hospital
 - Standardised alert
 - Exceeding care facilities of a normal ward
 - ...



Which kind of response team in your hospital?

1. Cardiac arrest team
2. Upgrade of care team
3. MET
4. No response team
5. A rapid response team with another definition



Do we need a MET?

- **Studies**
 - Most are observational
 - Limited number of RCT (MERIT study)
 - Bad matching, Hawthorne effect,...
- **Outcomes**
 - Cardiac arrest
 - In hospital mortality
 - Unanticipated ICU admission



Do we need a MET? outcomes

- **Cardiac arrest**
 - Majority of studies demonstrate a difference
- **In hospital mortality**
 - Most studies provide no difference
 - Study limitations!
- **Unanticipated ICU admission**
 - Major difference in RCT (1)

(1) Hillman K, Chen J, Cretikos M, Bellomo R, Brown D, Doig G, et al.; MERIT study investigators. Introduction of the MET system: a cluster-randomised controlled trial. *Lancet* 2005; **365**: 2091-2097.

Composition of the MET in published papers

- **No consensus**
- **Most teams**
 - Nurses
 - Doctors
 - ICU doctors
 - Anaesthesiologists (1)
 - Emergency Physicians



(1) De Vita MA, Braithwaite RS, Mahidhara R, Stuart S, Foraida M, Simmons RL. Use of medical emergency team responses to reduce hospital cardiopulmonary arrests. *Qual Saf Health Care* 2004; **13**(4): 251-4.

MET training

- **Train the Team**
 - ALS (1+2)
 - ...
- **Train the Caller** (3-5)
 - ALERT: acute life threatening events recognition
 - ...

- (1) Salomonson Y, Kariyawasam A, van Heere B, O'Connor C. The evolutionary process of MET implementation: reduction in unanticipated ICU transfers. *Resuscitation* 2007; **49**(2): 135-41.
- (2) Barbetti J, Lee G. Medical emergency team: a review of the literature. *Nursing in critical care* 2008; **13**(2): 80-85.
- (3) Brislaw PJ, Hillman KM, Chey T, Daffurn K, Jacques TC, Norman SL, et al. Rates of in-hospital arrests, deaths and intensive care admissions: the effect of a MET. *Med J Aust* 2000; **173**(5): 236-240.
- (4) Buist MD, Moore GE, Bernard SA, Waxman BP, Anderson JN, Nguyen TV. Effects of a medical emergency team on reduction of incidence and mortality from unexpected cardiac arrests in hospitals: preliminary study. *BMJ* 2002; **324**: 387-390.
- (5) Hillman K, Chen J, Cretikos M, Bellomo R, Brown D, Doig G, et al.; MERIT study investigators. Introduction of the MET system: a cluster-randomised controlled trial. *Lancet* 2005; **365**: 2091-2097.

Is an EP sufficiently trained to perform effective ALS within your training programs?

1. Yes
2. No
3. Do not know



EP & ALS

- Good knowledge & skills of ALS
- Improvement
 - > ICU training period
- Teaching & exposure is mandatory



Noordergraaf GJ, Be WJ, Sabbe MB, Diets RF, Noordergraaf A and Van Hemelrijck J:
Training needs and qualifications of anaesthesiologists not exposed to ALS
Resuscitation: 40(3): 147-160, 1999.

EP & MET

- **Problems**
 - Not responsible for admission in ICU
 - Good collaboration
 - Use of observational unit in ED?
 - Not core business of EM
 - Extra personnel? <=> overcrowding
 - Extra patients consuming large amounts of care

Criteria for MET doctors establishing & responsibilities

- **Trained to provide**
 - Appropriate care
 - Effective & efficient care
- **Availability**
 - immediate
 - 24/24
- **Transfer possibilities**
 - ICU



Criteria for MET doctors: EP establishing & responsibilities

- **Training**
 - Different programs in training
 - ICU training?
- **Availability**
 - What is the core business?
 - What during nights & WE?
- **Transfer possibilities**
 - ICU involvement?



Conclusions

- Patients at risk = hospital problem
- ICU doctors must be involved
- EP
 - Training
 - Exposure
 - Availability
 - Abuse during nights & WE?



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along with the Hellenic Society for Emergency Medicine (HeSEM)

have the pleasure to announce

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