

Management of Medical Emergency Patients in Danish Emergency Departments

Activation criteria, training, and composition of trigger teams

Supplementary Material

Appendix 1: Questionnaire

The aim of this study is to investigate differences in the management of high acuity medical emergency patients (MEP) in emergency departments in Denmark.

MEP are often received as "red call", "orange call", "acute medical call" etc.

This questionnaire examines medical trigger team activation criteria, along with training and composition of the trigger teams in Danish hospitals receiving MEP.

Hospital: _____ Department: _____

Role:

- : Head of department
- : Senior physician
- : Physician
- : Head nurse
- : Nurse

Courses you have participated in or are certified in and time since completion (Only physicians asked):

- | | | | | |
|--|------------------------------------|-------------------------------------|--|--|
| <input type="checkbox"/> : ALS (advanced life support) | | <input type="checkbox"/> : <1 year | <input type="checkbox"/> : <2 years | <input type="checkbox"/> : Other _____ |
| <input type="checkbox"/> : AMLS (acute medical life support) | <input type="checkbox"/> : <1 year | <input type="checkbox"/> : <2 years | <input type="checkbox"/> : Other _____ | |
| <input type="checkbox"/> : ATLS (acute trauma life support) | <input type="checkbox"/> : <1 year | <input type="checkbox"/> : <2 years | <input type="checkbox"/> : Other _____ | |
| <input type="checkbox"/> : PHTLS (prehospital trauma life support) | <input type="checkbox"/> : <1 year | <input type="checkbox"/> : <2 years | <input type="checkbox"/> : Other _____ | |
| <input type="checkbox"/> : Other: _____ | <input type="checkbox"/> : <1 year | <input type="checkbox"/> : <2 years | <input type="checkbox"/> : Other _____ | |

Does a medical trigger call exist in your department?

: Yes (If yes: How many types exist (____) and how are they denoted (red call, acute medical call etc.): _____)

- : No
- : Do not know

Are trigger calls received by a trigger team?

: Yes
: No (if no: How do you receive critically ill medical emergency patients: _____)

- : Do not know

Are there multiple trigger teams?

: Yes (If yes: How many types exist (____) and how are they denoted (STEMI, Stroke, Trauma, etc)? _____)

- : No
- : Do not know

Who activates the medical trigger team(s)?

- : Coordinating nurse
- : Secretary
- : Other (_____)
- : Do not know

How many trigger team activations does your department participate in annually?

- : 10-50
- : 50-100
- : 100-200

- : 200-300
- : >300

What is your trigger team experience? (Number of trigger team activations you participated in during the last year):

- : 0
- : 1-10
- : 11 – 30
- : 31-50
- : >50

Does the trigger team composition differ in the evening/night/weekend/holidays?

- : Evenings (How: _____)
- : Nights (How: _____)
- : Weekends (How: _____)
- : Holidays (How: _____)
- : No
- : Do not know

Do you keep a database on trigger team activations?

- : Yes
- : No
- : Do not know

Do you evaluate your trigger team performance?

- : Yes (If yes, how and how often: _____)
- : No
- : Do not know

Do you conduct regular simulation training?

- : Yes
 - : Hands-on (How often: _____)
 - : Video (How often: _____)
 - : Other (How often: _____)
- : No
- : Do not know

On a scale from 1-5 how adequately trained do you feel for your role in the trigger team?

- : 5 I feel very adequately trained
- : 4 I feel somewhat adequately trained
- : 3 I sometimes feel inadequately trained
- : 2 I often feel inadequately trained
- : 1 I never feel adequately trained

Which activation criteria are used for activating this call? (Fill in separately for each trigger call)

Trigger team composition (fill in separate forms if more teams exist):

Type of medical call: _____

Person: leader	Educational level:	Who is trigger team
<input type="checkbox"/> : Emergency physician <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	
<input type="checkbox"/> : Anaesthesiologist <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	
<input type="checkbox"/> : Internal medicine physician <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	
<input type="checkbox"/> : Radiologist <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	
<input type="checkbox"/> : Anaesthesiology nurse	(No: _____)	
<input type="checkbox"/> : ED nurse	(No: _____)	
<input type="checkbox"/> : Laboratory Technician	(No: _____)	
<input type="checkbox"/> : Service ass.	(No: _____)	
<input type="checkbox"/> : Secretary	(No: _____)	
<input type="checkbox"/> : Radiographer	(No: _____)	

Other medical specialties present or on-call:

Present/On-call

<input type="checkbox"/> : _____ <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	<input type="checkbox"/>
<input type="checkbox"/> : _____ <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	<input type="checkbox"/>
<input type="checkbox"/> : _____ <input type="checkbox"/>	<input type="checkbox"/> Junior physician <input type="checkbox"/> Attending physician <input type="checkbox"/> Senior physician	<input type="checkbox"/>

Appendix 2

Table: Overview of interpersonal agreement on key questions on MEP calls

Columns 1 and 5 are general questions. Columns 2-4 are regarding MEP calls.

The MEP trigger calls are underlined.

	Names of all trigger calls of the department	Team leader	Who activates the MEP call	Activations of MEP calls, n	Type and frequency of training
Hospital 1					
Senior physician	<u>Medical emergency call</u> 1 Medical emergency call 2 Bleeder call Trauma Thrombolysis call 1 Thrombolysis call 2 Meningitis call Narcotizing fasciitis call	Emergency physician	Coordinating nurse	>300	Hands-on team training >Every other year
Nurse	<u>Medical emergency call</u> 1 Medical emergency call 2 Bleeder call Meningitis call Narcotizing fasciitis call	Medical senior physician	Coordinating nurse	200-300	Hands-on team training >Every other year
Hospital 2					
Senior physician	<u>Critical call >12</u> Critical call <12 Thrombolysis call Trauma	Medical senior physician	Coordinating nurse	100-200	Hands-on team training Every six months Video training Every six months
Physician	<u>Critical call</u> Thrombolysis call Trauma	Shared leadership	Coordinating nurse	Do not know	Hands-on team training Do not know how often Video training Do not know how often
Nurse	<u>Emergency call adults</u> Emergency call children Thrombolysis Trauma Cardiac arrest call	Medical senior physician	Nurse (other)	>300	Hands-on team training Do not know how often Video training Do not know how often
Hospital 3					
Senior physician 1	<u>Acute call</u> Cardiac arrest call Trauma	Emergency physician	Coordinating nurse	>300	Hands-on team training Every six months
Senior physician 2	<u>Acute call</u> Cardiac arrest call Trauma	Emergency physician	Coordinating nurse	>300	Hands-on team training Every six months
Hospital 4					
Senior physician	<u>Red call</u>	Anesthesiologist	Not stated	50-100	Does not receive training
Nurse	<u>Medical emergency call</u> 1 Cardiac arrest call Trauma	Shared leadership	Triage nurse or flow master (other)	200-300	Does receive training Type and frequency not stated
Hospital 5					
Senior physician	<u>Medical red call</u> Surgical red call Trauma Critically ill pregnant Critically ill baby	Medical senior physician	Coordinating nurse	>300	Not stated

Nurse	Critically ill child Cardiac arrest call Trauma	--- No MEP call stated	--- No MEP call stated	--- No MEP call stated	Does not receive training
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