COncORDE

Cambridge University Hospitals NHS
NHS Foundation Trust

Bridging Differences in Emergency Management

A Patient-Centred Approach

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COncORDE EU Project

Download COncORDE brochure here .
Download COncORDE poster here .
Download COncORDE roll-up here .

This project is co-funded by the European Union

The threat of mass casualty incidents is perceived as being higher than ever before. It is essential for the EU member states to unite in their efforts to be prepared and respond effectively.

At present, no single region-wide Emergency Medical System model exists for EU Member States. Even for one type of emergency, different countries have different triggering bodies and thresholds, which is largely due to locally specific geographic, political, cultural, linguistic, historical and medical settings. Case studies examining the diversity in approaches did not discover drastic differences in effectiveness, efficiency and legitimacy. There is no single best or 'one-size-fits all' model for a national emergency response system, but rather multiple methods of organising the state responsibility which lead to similar outcomes.

NEWS AND EVENTS

MON May 04 2015

New Report from the ICRC on Attacks against Medical Personnel

The ICRC has published a new report analysing incidents of violence against healthcare professionals...

THU Apr 30 2015

eCall Service to Automatically Alert Emergency Services in Case of Accident

On 28th April 2015, the European Parliament

www.concorde-project.eu

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Our Task

Propose existing solutions

in an innovative way

in order to improve coordination

of emergency response

during

health care emergencies

State of the Art should be…..

to have

common mechanisms for communication

and

coordination between member states

to ensure

the highest possible survival rate and improved health outcomes.

The State of the Art should be…..

to have

a Pan – European solution

The Reality is…

that we have

Fragmentation of Everything

Challenges to State of the Art

At present, no single region-wide Emergency Medical System model exists for EU Member States.

Countries have organized differently in their efforts to protect citizens from a variety of threats to their security and well-being.

Even for one type of emergency different countries have different triggering bodies and thresholds.

Challenges

There is lack of uniformity and compatibility of emergency communication systems across different regions in some countries, mainly relating to slow implementation of compatible technology in all regions and/or lack of common operational standards and routines on situation assessments and reports.

The situation of professional medical staff is even more complicated: the role, competencies and educational requirements of nurses and paramedics or technicians are substantially different across countries, to the extent that achieving standardization and quality improvements is unrealistic at the present moment.

Case studies examining the diversity in approaches did not discover drastic differences in effectiveness, efficiency and legitimacy.

While there may be room for improvement in specific areas and technologies, there is no single best or 'one-size-fits all' model for a national emergency response system, but rather multiple methods of organizing the state responsibility which lead to similar outcomes.

At EU level it is inappropriate to look for good systems and bad systems

COncORDE Goal #1 - a Pan-European System

To rise above the differences

such as any disputes about

- differences in preferred systems of triage
- differences in medical protocols
- country specific approaches to first response
- differences in professional training curricula

and similar eternal dilemmas which might pose barriers to problem solving.

In order to achieve state of the art, health care emergency response in the EU needs to build on commonalities

COncORDE Goal #2 – Improve Coordination

Where to start from ?

Multiagency coordination

vs.

Single agency coordination

focus on

Emergency Medical Services first

COncORDE Goal #3 – User Acceptance

The solution should be applicable to small scale emergencies (i.e. business as usual) as well as to large scale emergencies

The solution should be applicable to any type of emergency

What is the Secret

COncORDE's Principle – Follow the Patient

COncORDE – a patient centred approach

COncORDE's Patient-centric Approach

- We have taken a somewhat different approach from most other disaster research projects

- Instead of putting technology or functionality as the point of gravity, we chose to place the affected people in the centre of gravity, i.e. the patients requiring medical care

- We analysed the emergency medical response in relation to what happens to a patient

in every country, organisational system…

in every type and size of incident…

no matter what…

The Common "Anatomy" of Emergency Medical Response

The process of managing a patient has several steps that are always the same.

The emergency response all across different nations and systems does have a common anatomy – and this is the conceptual level

at which

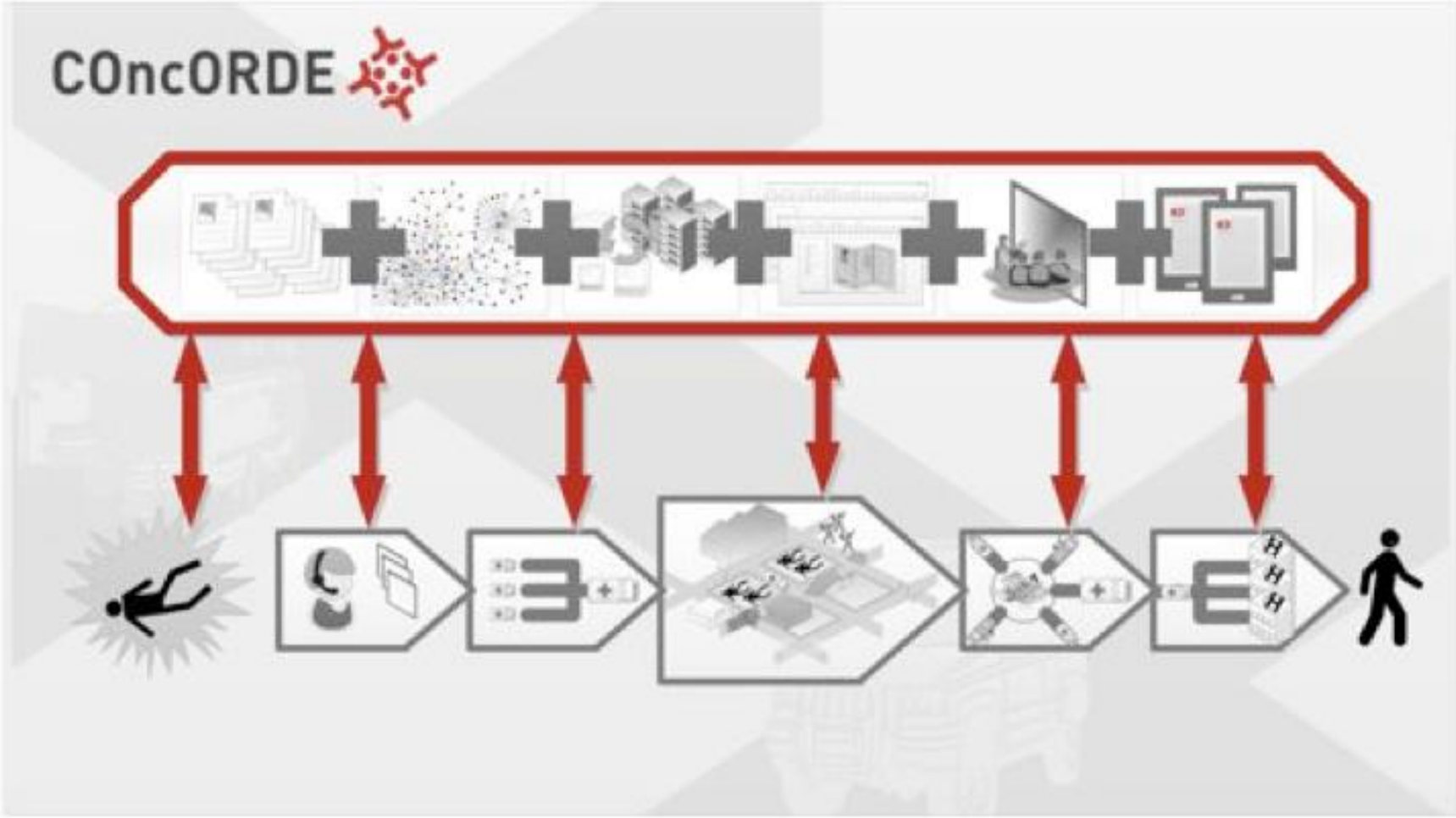
the main actors involved in the response

can be assigned

to the **same function/task** in the incident lifecycle

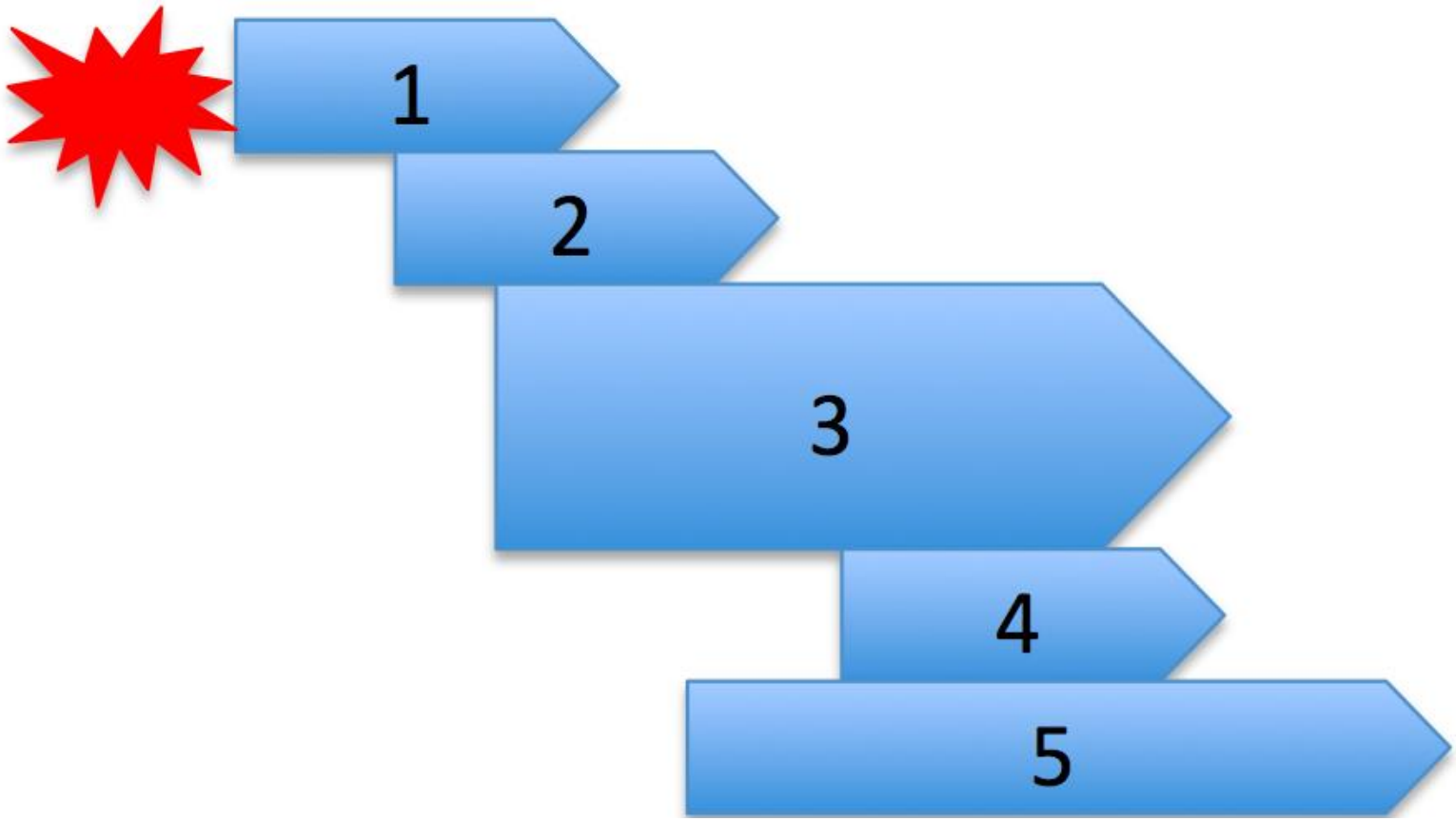
all across the member states

The Emergency Medical Response



The EMS "pipeline"

Improved Response



Summary of the Requirements

Phase 1 - Alert/ Activation

PSAPs= Public Safety Answering Points /112 centres

List A - fixed needs

A.1 Identify Caller Location

A.2 Initial Judgement of the Situation

A.3 Decision and Order of Initial Resource Deployment

A.4 Info to Ambulance/Resource on How to Reach Location

A.5 Documentation

List B - variable needs

B.1 Ongoing Contact Until Incident Cleared

B.2 Decision to Upscale

B.3 Dealing with Multiple Calls for Large Scale Emergency

B.4 Bystander Involvement

B.5 Cross-Border Call

B.6 Event recording , QA and Training

B.7 Crisis Function During Failure of Supporting Infrastructure

Phase 2 - EMS on way

EMS/Ambulance vehicles

List C - fixed needs

C.1 Finding Caller Location

C.2 Dealing with Limited and Uncertain Information

List D - variable needs

D.1 Communication Between PSAP and Vehicle

D.2 Communication With Other Emergency Response Services

D.3 Bystander Involvement

D.4 Event Recording , QA and Training

D.5 Cross-Border Dispatch

D.6 Crisis Function During Failure of Supporting Infrastructure

Phase 3 - Field Management

EMS Field Commanders and Search and Rescue Commanders

List E - fixed needs

E.1 Establish Control, Cordon, Command and Safety

E.2 Communications

E.3 Dynamic Situation Assessment

E.4 Triage and Tagging

E.5 Documentation

E.6 Situation Report

E.7 Resource Request and Information

E.8 Treatment (incl. Stabilisation)

E.9 Dispatch of Patients to First Receiver

List F - variable needs

F.1 Search and Rescue

F.2 Decision to Upscale

F.3 Bystander Involvement

F.4 Event Recording , QA and Training

F.5 Crisis Function During Failure of Supporting Infrastructure

Phase 4 - Transport

EMS/Ambulance vehicles

List G - fixed needs

G.1 Finding First Receiver Location

G.2 Monitoring and Treatment of Patient En Route

G.3 Documentation

G.4 Communication with First Receiver En Route

G.5 Handover to First Receiver

List H - variable needs

H.1 Cross-Border Trip

H.2 Bystander Involvement

H.3 Event Recording , QA and Training

H.4 Crisis Function During Failure of Supporting Infrastructure

Phase 5 - First Receiver

Hospital Directors/Health Care Organisation Managers

List I - fixed needs

I.1 Preparing to Take Patient(s)

I.2 Communication with Transport Vehicle

I.3 Taking Over Care

List J - variable needs

J.1 Dealing with Surge

J.2 Bystander Involvement

J.3 Event Recording , QA and Training

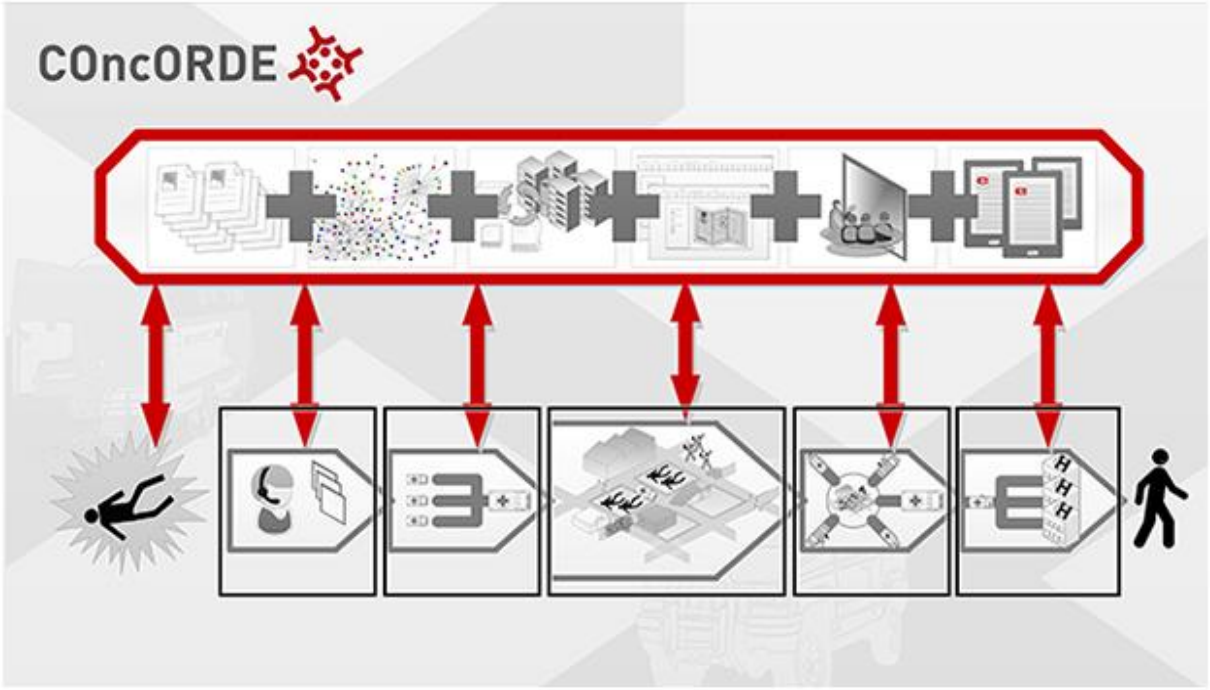
J.4 Crisis Function During Failure of Supporting Infrastructure

Our Survey

There are 5 main elements of medical emergency response:

1. The initial alert (Phase 1)
2. The emergency medical response (Phase 2)
3. Field management (Phase 3)
4. Patient transport (Phase 4)
5. The first receiver (Phase 5)

You can download the WORD version of the online questionnaires here .



Questions about caller location to PSAP

How do you currently receive information about the caller location? Please select as many answers as apply.

- ❑ Verbal explanation by caller
- ❑ SMS of address by caller
- ❑ The system automatically provides address
- ❑ The system automatically provides map
- ❑ The system automatically provides images
- ❑ Other - please describe _____

Please rate each item below in terms of usefulness for receiving information about caller location

	Very Useless	Useless	Neutral	Useful	Very Useful
Verbal explanation by caller	❍	❍	❍	❍	❍
SMS of address by caller	❍	❍	❍	❍	❍
The system automatically provides address	❍	❍	❍	❍	❍
The system automatically provides map	❍	❍	❍	❍	❍
The system automatically provides images	❍	❍	❍	❍	❍

Please describe briefly what an ideal system should be doing to make identification of caller location fast, safe and easy for you

Question about visibility of situation to Field Commander

On arrival to the scene you need to oversee what is going on and establish control, cordon, command and safety. How do you obtain this initial overview? Please select as many answers as apply:

- ❑ Own visual perceptions
- ❑ Verbal explanations
- ❑ Images - "pushed" to your device – GIS
- ❑ Images - "pushed" to your device – Photos of scene
- ❑ Images - "pulled" by you to your device - GIS
- ❑ Images - "pulled" by you to your device - Photos of scene
- ❑ Other - please describe _____

Please rate each item below in terms of usefulness for obtaining initial overview.

	Very Useless	Useless	Neutral	Useful	Very Useful
Own visual perceptions	❍	❍	❍	❍	❍
Verbal explanations	❍	❍	❍	❍	❍
Images - "pushed" to your device – GIS	❍	❍	❍	❍	❍
Images - "pushed" to your device – Photos of scene	❍	❍	❍	❍	❍
Images - "pulled" by you to your device - GIS	❍	❍	❍	❍	❍
Images - "pulled" by you to your device - Photos of scene	❍	❍	❍	❍	❍

Please describe what an ideal solution should do to give you early situational awareness. If you have practical suggestions how this could be achieved, please share them

Matching Process Analysis with Technology Analysis

The following classifiers are sufficient to describe a use case and to identify technology requirements

The **TASK** in relation to the patient – e.g. Primary Triage, Retrieval, Handover…

The **SPACE** in which the task is being performed – e.g. Field, First Receiver

The **FUNCTIONALITY** that user wants to have in order to do the task better – e.g. case " I want to have a gadget/solution that does function X while I am doing primary triage … e.g. to help me get the results to my commander faster"

These are sufficient to put in a request for a use case to the technology partners.

Does it matter who does the primary triage ? – for our technology…. not much

Does it matter which layout of triage card is used ? – not much… in fact:

Once primary triage is supported as a task by the platform,

it is fully CUSTOMISABLE to national specifics and to the level of expertise of the person who does it in the local context.

Take-home Messages

It is possible to bridge differences if one focuses on the patient and stops seeing the differences as barriers to unity.

The **patients needs in the process are always the same**, no matter where you go, and no matter if there is available resource or not.

Technology that is now totally routinely used in the army, in the air force and the civilian airline industry, even in the fitness industry or as toys for children - is not being used for saving people's lives.

Thank You

Questions ?