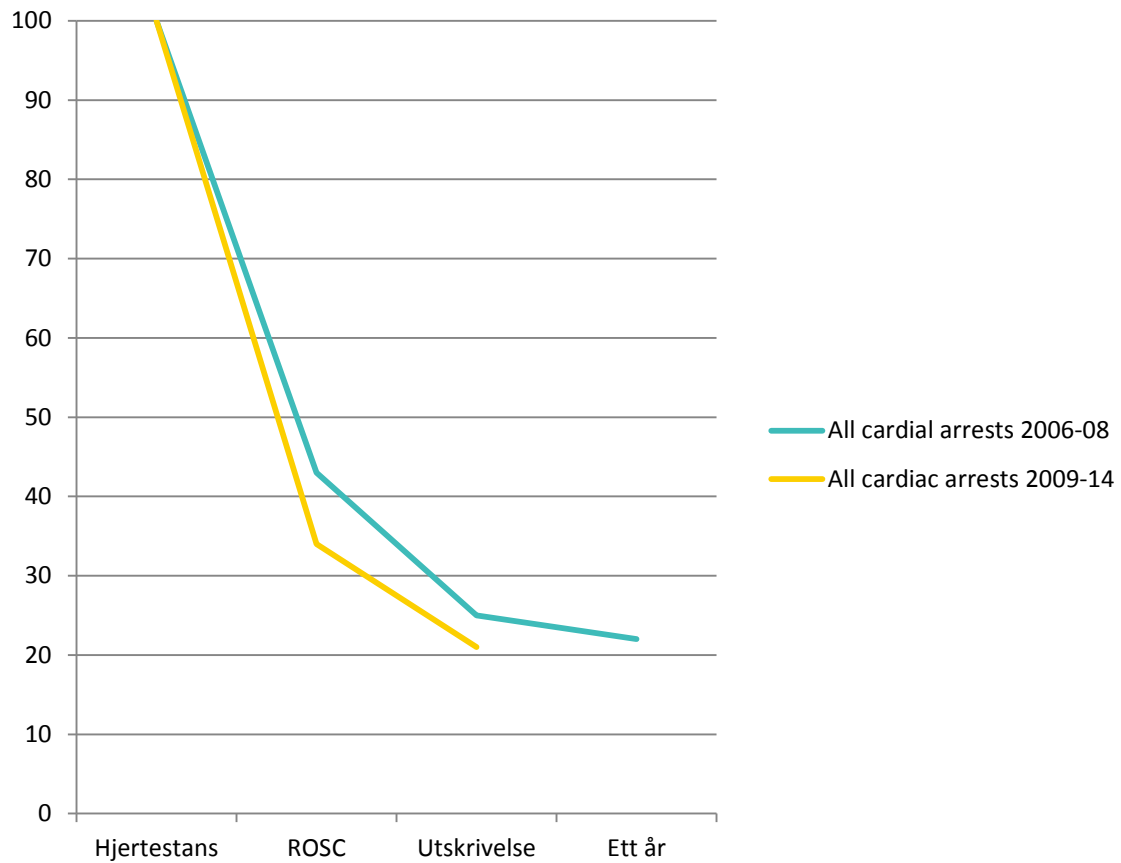


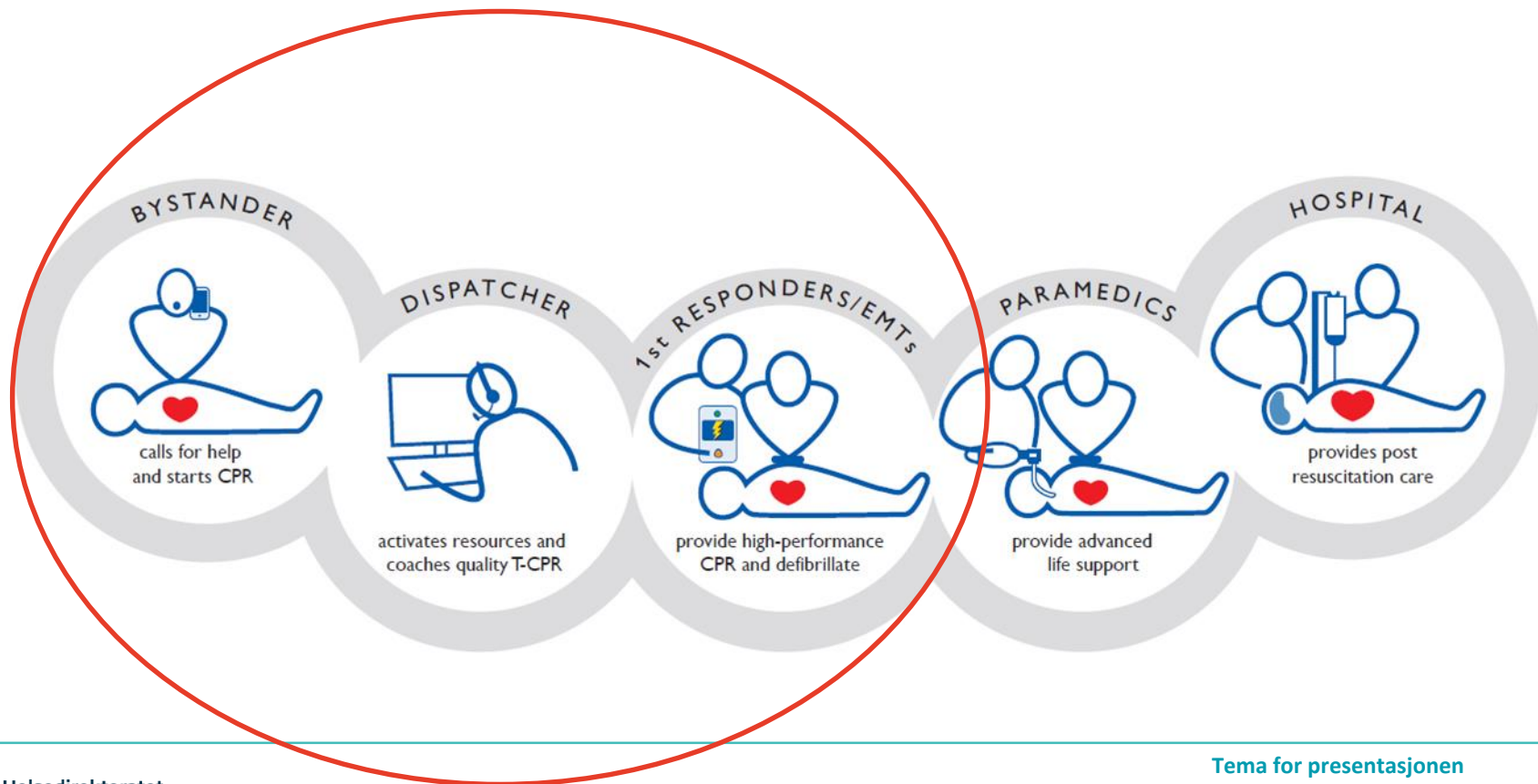




*«It takes a **system** to save a life»*

Mickey Eisenberg

# Kjeden som redder liv





# «*Measure and improve*»

Global Resuscitation Academy



# Telephone CPR (T-CPR) Time Interval Standards

## HIGH-PERFORMANCE SYSTEM

Time between 911 call and Out-of-Hospital Cardiac Arrest (OHCA) Recognition  
**<60 seconds**

Time between 911 call and Delivery of T-CPR  
**<120 seconds**

15 seconds

STEP 1



15-30 seconds

15 seconds

STEP 2



15-30 seconds

<30 seconds

STEP 3



<60 seconds

<60 seconds

STEP 4†



<60 seconds

Ongoing until EMS arrival

STEP 5



Ongoing until EMS arrival

## MINIMAL ACCEPTABLE STANDARD

Time between 911 call and OHCA Recognition  
**<120 seconds**

*Performance Recommendation #4\**

Time between 911 call and Delivery of T-CPR  
**<180 seconds**

*Performance Recommendation #5\**

### STEP 1

911 call connects to Primary Public Safety Answering Point (PSAP)

### STEP 2

Primary PSAP connects to Emergency Medical Dispatch (EMD) PSAP

### STEP 3

Address acquisition

### STEP 4†

**Recognition of OHCA**  
1. Call taker verbally recognizes OHCA  
2. Instructions started for T-CPR

### STEP 5

Delivery of first T-CPR compression and continued T-CPR support

\*These recommended performance intervals should be as short as possible as described in the "High-Performance System" #s provided are minimal acceptable performance

†As soon as a medical emergency is recognized, dispatch of the 1st due EMS response should occur in parallel with other EMD processes and within 30 seconds of address acquisition.

RETNINGSLINJER 2015

# Hjerte-lungeredning til voksne

## Se etter tegn til liv



Sideleie:  
Bare hvis n  
i et helt mi

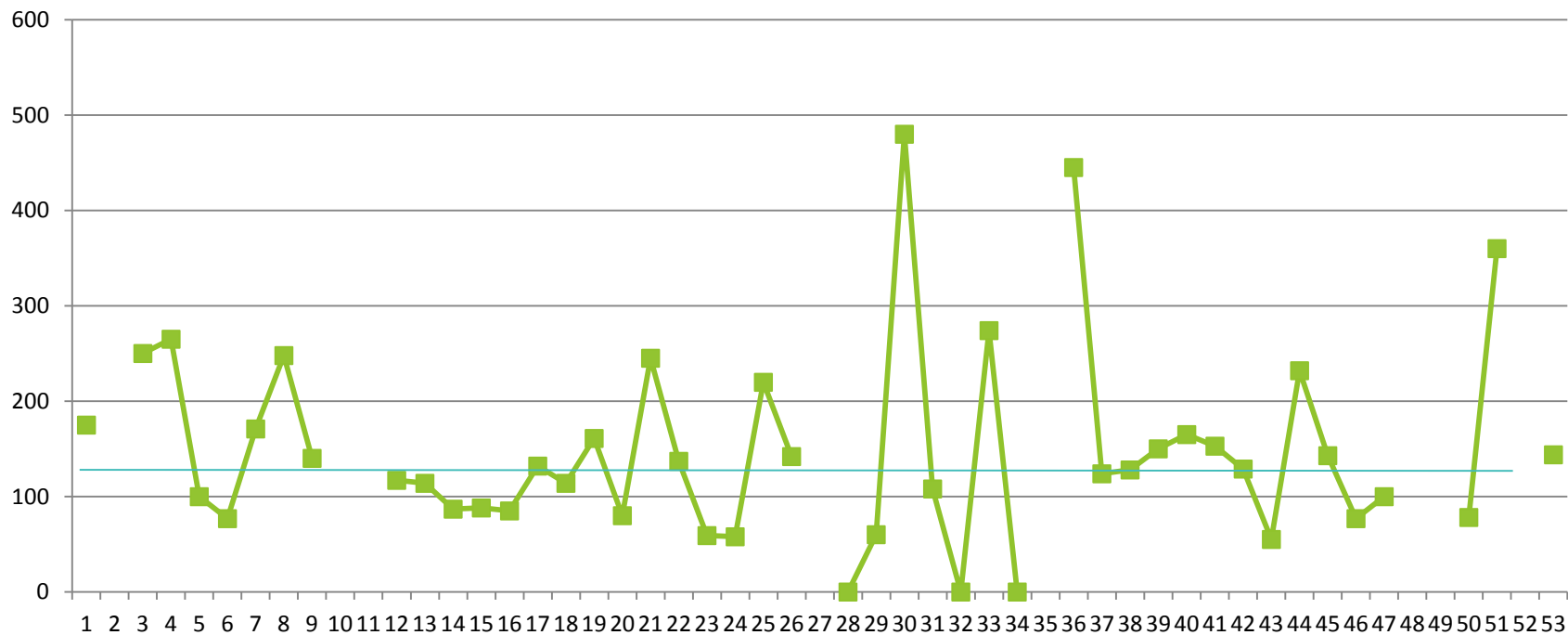
Bevisstløs og puster ikke normalt

Skaft hjelp - Ring 1-1-3

Start HLR 30:2



# Tid til kompresjon





**ORIGINAL RESEARCH:  
EMPIRICAL RESEARCH – QUANTITATIVE**

WILEY **JAN**  
Leading Global Nursing Research

# Public knowledge and expectations about dispatcher assistance in out-of-hospital cardiac arrest

Wenche T. Mathiesen<sup>1,2</sup> | Tonje S. Birkenes<sup>3</sup> | Helene Lund<sup>4</sup> |  
Anastasia Ushakova<sup>5</sup> | Eldar Søreide<sup>1,6</sup> | Conrad A. Bjørshol<sup>6,7,8</sup>

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<sup>2</sup>Department of Research and Development, Norwegian Air Ambulance Foundation, Drøbak, Norway

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<sup>6</sup>Department of Clinical Medicine

## Abstract

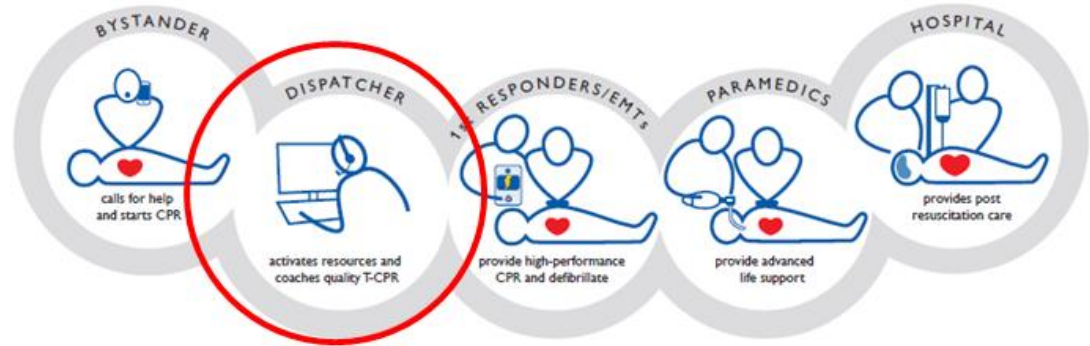
**Aim:** To assess the factors associated with the knowledge and expectations among the general public about dispatcher assistance in out-of-hospital cardiac arrest incidents.

**Background:** In medical dispatch centres, emergency calls are frequently operated by specially trained nurses as dispatchers. In cardiac arrest incidents, efficient communication between the dispatcher and the caller is vital for prompt recognition and treatment of the cardiac arrest.

**Design:** A cross-sectional observational survey containing six questions and seven demographic items.

# Mål

- **Identifisere** > 95% av hjertestans i 113
- Tid < 60 sek
- HLR < **2 min**



# Delmål

- Rask og presis **posisjonering**
- Forstå **agonal** respirasjon
- **Tilbakemelding** om utfall til AMK-operatør

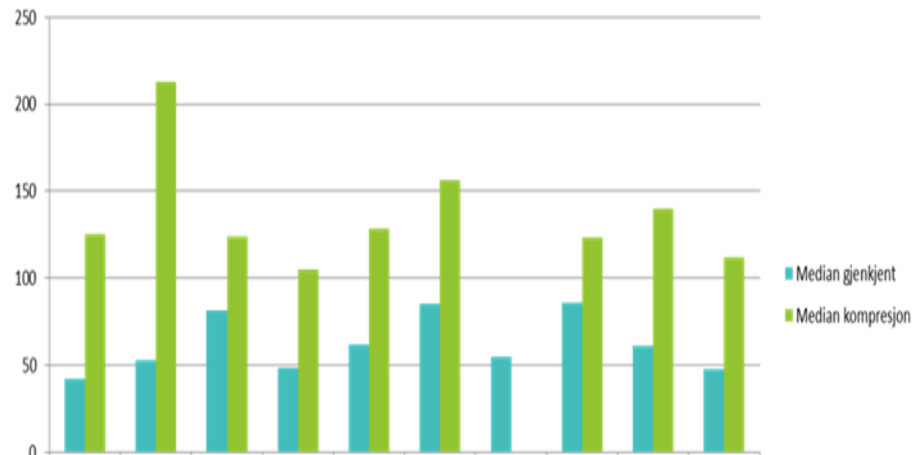


# Tiltak

- Systematisk gjennomgang av lydlogg ved hjerTESTANS

## Foreløpig resultat

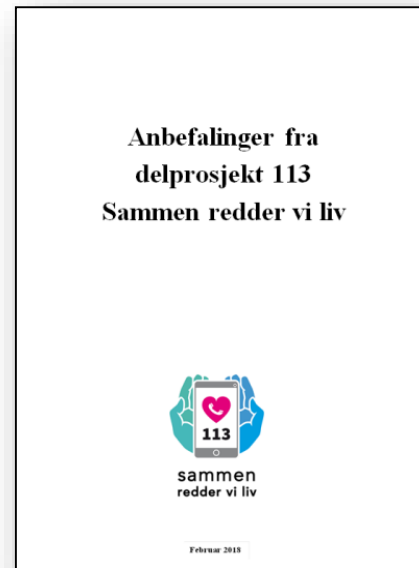
- Redusert tid til gjenkjenning av hjerTESTANS med 35 sek  
— 20 liv





# Oppfølging

- Gjennomgang av **lydlogg** ved alle hjertestans, og utvalg av henvendelser om hjerneslag, hjerteinfarkt, skader
- Utdanne **fasilitatorer** for simulerings-trening
- **Anbefalinger** til RHFene april 2018
- Videreføring av **KOKOM**



## Hjertestansregisteret – forslag nye punkter

- **Mål nr. 1:** *Gjenkjent hjertestans?*
- **Mål nr. 2:** *Forsinket gjenkjenning?*
- **Mål nr. 3:** *Tilbudt telefon-HLR?*
- **Mål nr. 4:** *HLR gjennomført?*
- **Mål nr. 5:** *Ble algoritmen fulgt?*
- **Mål nr. 6:** *Tid for gjenkjent hjertestans*
- **Mål nr. 7:** *Tid til første kompresjon*

# Fasilitatorkurs SAFER juni 2018

- Telefonveiledning
- Simuleringstrening
- Debriefing





# Hvordan måle effekten av simuleringstreningen?

- Hjertestans
- Hjerneslag
- Hjerteinfarkt
- Alvorlige skader



# KIRKPATRICK EVALUATION MODEL

What?

Whether the training has affected process or outcomes, such as increased production, improved quality, reduced adverse events, decreased costs.

Level 4  
RESULT

- Customer satisfaction survey
- Process or practice changes
- Staff satisfaction survey

How?

Whether participants change their behavior back in the workplace as a result of training.

Level 3  
TRANSFER

- Observation of teamwork behaviors

Whether the training results in an increase in knowledge, skills or attitudes.

Level 2  
LEARNING

- Teamwork knowledge test.
- Survey of attitude towards teamwork.
- Survey of self-perceived communication skills

How did participants react to the training?

Level 1  
REACTION

- Post-training reaction survey.



«Ring 113 – du e  
aldri aleina der ute»

**Janne Martinsen**

fagutviklingssykepleier, AMK-sentralen, Bodø

